CINEFORUM
ISSN: 0009-7039
Vol. 65. No. 4, 2025

Are We Heritage Language Learners of Mandarin? A Comparative Study on the Influence of Emotional Attachment on Chinese Language Learning Motivation among Malaysian Chinese

Long Qian
Guilin Tourism University, 26 Liangfeng Road, Yanshan District, Guilin City, Guangxi Zhuang Autonomous Region, China
Email: <vanilla131121@163.com>, ORCID ID: https://orcid.org/0000-0003-1643-6020

Abstract

This study addresses the issue of heritage language learning with psychological attachment among Malaysian Chinese. As a result of the Speak Mandarin Movement in the 60s, the Malaysian Chinese perceived Mandarin as their "mother tongue" rather than their ancestral languages (Southern Chinese dialects). Malaysian Chinese students commonly attend Chinese-medium education at the primary level and may continue with either private Chinese secondary schools (STPC) or national secondary schools (SMK/SMJK). Consequently, they face difficulties in identifying their heritage language (Mandarin or other Chinese varieties) and determining their L1, as well as balancing Mandarin, Malay, English, and other Chinese dialects, which ties into their identity formation. Given the limited research on the relationship between Chinese identity and Mandarin language, this study, using a quantitative survey of 297 Malaysian secondary students, examines how emotional attachment influences motivation to learn Mandarin. The findings reveal that: 1) both SMJK/SMK and STPC students exhibit positive attitudes towards Mandarin and integration-type motivation, with less anxiety about learning; 2) there is a generational divide between emotional attachment to Mandarin and motivation to learn it; 3) for public school students, emotional attachment to Chinese cultural identity is the most significant predictor of attitudes (Beta=0.393) and motivation (Beta=0.436), while in private schools, Malaysian national (Beta=0.231) and Chinese cultural identities (Beta=0.285) are key factors. The results of this study provide significant insights into the factors influencing the emotional attachment and engagement of Malaysian Chinese students with Mandarin language learning, which can inform the development of practical pedagogical strategies and language policy initiatives.

Keywords: Emotional Attachment, Chinese language, Motivation, Malaysian Chinese, Heritage Language Learners

Introduction

The study of Mandarin as a heritage language is a burgeoning area within Applied Linguistics, contrasting with earlier research primarily focused on Mandarin as a second (L2)

or foreign language (FL) (Montrul, 2012; Polinsky & Kagan, 2007). Literature reviews indicate that most studies on Mandarin as a heritage language (HL) or first language (L1) concentrate on educational issues (Samuel & Tee, 2013; Samuel et al., 2014; Lin, 2015), with limited exploration at the micro level, such as language awareness and motivation (Lim & Presmeg, 2010; Sua & Santhiram, 2017). Furthermore, research on Mandarin learning motivation is sparse (Comanaru & Noels, 2009; Sua et al., 2013) and has rarely integrated interdisciplinary approaches from psychology, sociology, and linguistics. Thus, further investigation is needed to understand how motivations and attitudes impact language learning from a heritage language perspective. To investigate the emotional attachment of Chinese heritage language learners, this study adapted a model integrating Lambert & Gardner's (1972) Psychosocial Model and Wang's (2001) Theory of Chinese Multiple Identities to examine HL learners' motivational mechanisms and emotional attachment to their cultural heritage.

The demand for Mandarin and other major languages in Malaysia may also affect the Chinese community's attitudes towards Mandarin. The interaction of Mandarin (and other Chinese dialects) with Malay and English has led to linguistic phenomena such as code-switching, borrowing, and language mixing, which in turn influence Chinese language awareness (Hussain, 2017). The dominance of Malay and English in public contexts, while Mandarin is primarily used in personal and familial settings, raises concerns among the Chinese regarding the erosion of their cultural identity and language (Ong & Troyer, 2022). Despite this, there has been limited sociolinguistic research on the motivations, attitudes, and emotional attachments of Chinese youth towards Mandarin.

This study examines the motivations, attitudes, and emotional attachments to Mandarin among two groups of new-generation Malaysian Chinese students from different types of secondary schools: SMJK (Chinese schools), SMK (national schools), and STPC (private schools). Malaysian National-type Secondary Schools (SMJK, Sekolah Menengah Jenis Kebangsaan) and Private Secondary Schools (STPC, Sekolah Tinggi Persendirian Cina) are primarily attended by Chinese students and provide Chinese language instruction as a First Language (L1) or Mother Tongue (MT). In contrast, Malaysian National Secondary Schools (SMK, Sekolah Menengah Kebangsaan) are Malay-medium institutions serving Malay, Indian, and other ethnic groups, offering Chinese language classes mainly to non-Chinese students through a Second Language (L2) instructional approach (Refer to Table 1). A sociolinguistic perspective and psychosocial approach were employed to compare the attachment characteristics of these two groups.

Table 1. Type of Malaysian Secondary School

	Type of Malaysian Secondary School	**Malay abbreviation**	**Medium of Instruction (MOI)**	**Management**
Public school	National Secondary Schools	SMK, Sekolah Menengah Kebangsaan	Malay	Ministry of Education Malaysia

	National-type Chinese Secondary Schools	SMJK, Sekolah Menengah Jenis Kebangsaan	Chinese for the Chinese curriculum, but Malay for the other curriculum	
Private school	Private Chinese Secondary Schools	STPC, Sekolah Menengah Persendirian	Chinese	Dong Zong

Theoretical Background of the Study

Malaysia Chinese and Chinese Language

The term "Chinese" or "Huaren" refers to Malaysian Chinese without considering linguistic variations. Within their spoken language groups, endonyms such as Hokkienese, Cantonese, Hakka, Foochow, and Henghua reflect historical identities. However, regionalisation has altered this inherited identity, leading the Chinese community in Malaysia to assimilate with other Malaysian societies while preserving a distinct cultural identity. Some have localised to the extent of forming a new perspective on Chinese identity, as noted by Khoo and Loh (2014), particularly concerning the Baba and Peranakan Chinese.

According to Tan, C.B. (1997), the maintenance of any Chinese language use is not a demand for Chinese ethnic identification. A person can identify as "Chinese" even if they are not fluent in any Chinese language. Based on the discourse about the language and identity of Malaysian Chinese, Tan C.B. (1998) classified the Chinese into four distinct groups: Type A, who speak at least one of the Chinese languages, and are literate in Mandarin Chinese, the language of intimacy (henceforth, LOI) is usually a Chinese language and possibly other languages too. The preferred intra-group language (henceforth, IGL) is Mandarin Chinese or another Chinese variant; Type B speaks at least one of the Chinese languages but does not read or write Mandarin Chinese. LOI is usually one of Chinese language. Preferred IGL is a Chinese variant and/or non-Chinese language; Type C, speaks at least one of the Chinese languages but does not read and write Mandarin Chinese or read and write in non-Chinese Languages. LOI is usually non-Chinese. The preferred IGL is usually non-Chinese languages; Type D, LOI is an acculturated Chinese language and one or more non-Chinese languages. They usually read and write in non-Chinese. The preferred IGL is the same as the LOI.

In general, the Chinese in types A and B above refer to themselves as "pure Chinese", while the Chinese in types C and D can be referred to as "baba"—in a descriptive meaning, not as a sub-group like those in Malacca, which contrasts the less and more acculturated—in a descriptive sense. In the early history of Chinese migration, type C and D Chinese were commonly referred as "local-born" Chinese. Indeed, the phrase "local born" is no longer applicable when referring to Chinese in Malaysia because all Chinese are now Malaysian citizens. In terms of language, most of the Type A and Type B Chinese in Malaysia are Mandarin Chinese-educated Chinese. Type C includes the Baba in Melaka and the English-speaking

Chinese who do not speak Chinese, while Type D refers to the Peranakan Chinese in Kelantan (Tan, C.B. 1997). Peranakan Chinese are also known as Cina Kelantan (Kelantan Chinese) or Cina Asli Kelantan (Native Kelantan Chinese) in Kelantan. They live together with the Malays and adopt traditional Kelantan Malay practices (Teo, 2003).

Scholarly interest has primarily focused on the cultural assimilation and identity of the Baba and Peranakan, while studies on "pure Chinese" identity have been less prevalent, possibly due to perceptions of a less distinct identity. Nonetheless, various identity issues exist within the so-called "pure Chinese" community, particularly regarding the use of Mandarin in Chinese-medium schools and as the family language. While Malaysian Chinese traditionally speak ancestral Sinitic languages like Hakka, Hokkien, Cantonese, and Foochow, Mandarin has increasingly supplanted these languages among contemporary Chinese youth, altering the linguistic landscape of Chinese society (Yao, 2017).

Emotional Attachment (EA)

Early research on emotional attachment primarily focused on the infant's instinctive bond with the mother, particularly the desire for nourishment and affection (Bowlby, 1982). Since Bowlby's seminal work, attachment research has evolved through three phases: the 1960s–mid-1970s saw the establishment of the attachment concept and theoretical framework; the mid-1970s–mid-1980s involved developing measurement tools and deepening cross-cultural studies; from the late 1980s onwards, research expanded into the psychological mechanisms of attachment, including longitudinal and neuropsychological studies (Bowlby, 1982).

Emotional attachment to heritage languages refers to an individual's connection to their native language and culture, influencing their motivation to maintain and learn the language (Challenger et al., 2020). This attachment reshapes identity and promotes language preservation (Benrabah, 2007; Hatoss & Sheely, 2009; Gomaa, 2011; Dekeyser & Agirdag, 2021). Limited empirical research exists on emotional attachment to community languages. For instance, Hatoss and Sheely (2009) found a strong attachment to the Dinka language in the Sudanese community of Toowoomba, Australia. Arabic speakers' attachment often stems from their connection to the Qur'an and Islam (Benrabah, 2014), while Egyptian parents in Durham, UK, view their emotional bond with Arabic as key to passing it to future generations (Gomaa, 2011).

Mandarin Chinese exists not only as a linguistic tool but also as an emotional bond between learners and their family, community, and culture, according to research conducted over the past five years on Mandarin Chinese as an HL/L1 in the Malaysian context, particularly the relationship between emotional attachment and language learning motivation (Samuel & Tee, 2013; Wong & Tan, 2017; Carstens, 2018). Nevertheless, previous research has primarily focused on descriptive analyses and has not thoroughly examined the precise processes of emotional attachment and its reciprocal effects on language acquisition. From an empirical research perspective, very few of these studies have integrated emotional attachment with attitudes and incentives for learning heritage languages. Further research is necessary to determine whether language is an expression of one's identity, particularly in multilingual settings where exposure to multiple languages frequently influences one's identification with

and emotional attachment to one's heritage language, and whether this identification and attachment affect the motivation and attitudes of new generations of immigrants towards heritage language learning.

Attachment to a heritage language can evoke a fear of language loss, as it symbolises one's identity (Stoessel, 2002). Overall, the research highlights the significance of emotional attachment in language learning, but further investigation is necessary to understand how multilingual environments influence identification with and motivation towards heritage languages in newer immigrant generations.

Motivational Research of Heritage Language Learners (HLLs)

The motivation of heritage language learners (HLLs) is more complex than that of general foreign language learners due to their unique cultural backgrounds. Research categorizes heritage language learning motivation into two types: integration motivation, driven by ethnic and cultural identity, and instrumental motivation, focused on practical benefits (Oh & Nash, 2014; O'Rourke & Zhou, 2016).

HLLs generally exhibit greater interest in language learning than non-HLLs, viewing it as central to their self-identity and personal responsibility (Comanaru & Noels, 2009). For Chinese heritage language learners (CHLLs), Wang (2001) found that Chinese identity and cultural affiliation are key motivators, emphasizing the importance of integration motivation in preserving ethnic identity. CHLLs prioritize cultural inheritance and development in their learning. Similarly, Cho et al. (1997) demonstrated that Korean American HLLs are motivated by family and career considerations, including improving communication with relatives, engaging with the Korean community, and enhancing job prospects. Wang (2001) also noted that for Chinese learners in Indonesia, vocational and practical motivations are closely linked with identification with Chinese identity and culture. These studies highlight the complexity of HLL motivations, which include both integration-oriented goals, such as ethnic and cultural identity, and instrumental aims, like career opportunities. Further exploration of these motivations is needed.

Studies on Mandarin Chinese as a first or heritage language (L1/HL) in Malaysia have primarily examined the overall educational environment, including resources, school settings, curricula, and teacher roles (Samuel & Tee, 2013; Samuel & Kin, 2014). These studies focus on Mandarin Chinese's status in the education system but often overlook individual factors, such as emotional attachment and learning motivation. Research by Lim and Presmeg (2011), Sua and Santhiram (2017), and Shih and Lee (2017) highlights the impact of teaching resources and classroom practices; however, few studies address how emotional and motivational factors shape students' attitudes and motivation toward Mandarin Chinese.

Mandarin as a Heritage Language in Malaysia

The development of Mandarin Chinese education has a significant correlation with historical factors that contribute to language transition and the construction of Chinese identity (especially the young generation). This transition not only indicates the shift of their mother

tongue throughout generations, but it also broadens the definition of "mother tongue". Figure 5.2 illustrates a bird's-eye view of the Chinese community's historical transition of their mother tongue. According to this figure, the majority of Chinese born before the 1970s use their parents' first language as their mother tongue. Following the implementation of the "Mandarin Chinese Speaking Campaign" in the 1980s, Mandarin Chinese was designated as the H language in this campaign, while other Chinese varieties had been designated as the L language. During this period, the Chinese NGOs and organizations played a role in disseminating the propaganda claiming that Mandarin Chinese is the "mother tongue" of the Chinese. This campaign has increased the Chinese community's positive attitude towards learning Mandarin Chinese. As a result, Mandarin Chinese gradually replaced the native Chinese languages and became the language in the family domain. The children born in the late 1990s, who are part of Generation Z (including the participants investigated in this thesis), are now considered to have Mandarin Chinese as their mother tongue.

In terms of the definitions of the term "mother tongue", before the 1970s, its definition was coherent with the sociolinguistic definition; from the 1980s to the late 1990s, its meaning has diverged from the sociolinguistic definition; and in the generation Z period, the sense of "mother tongue" has been restored to its initial meaning, but the languages that formerly played the roles as the mother tongue, are replaced by another language, i.e., Mandarin Chinese. This has additionally redefined the concept of heritage language learners, since Mandarin Chinese has replaced other Chinese language varieties as the heritage language among the young generation.

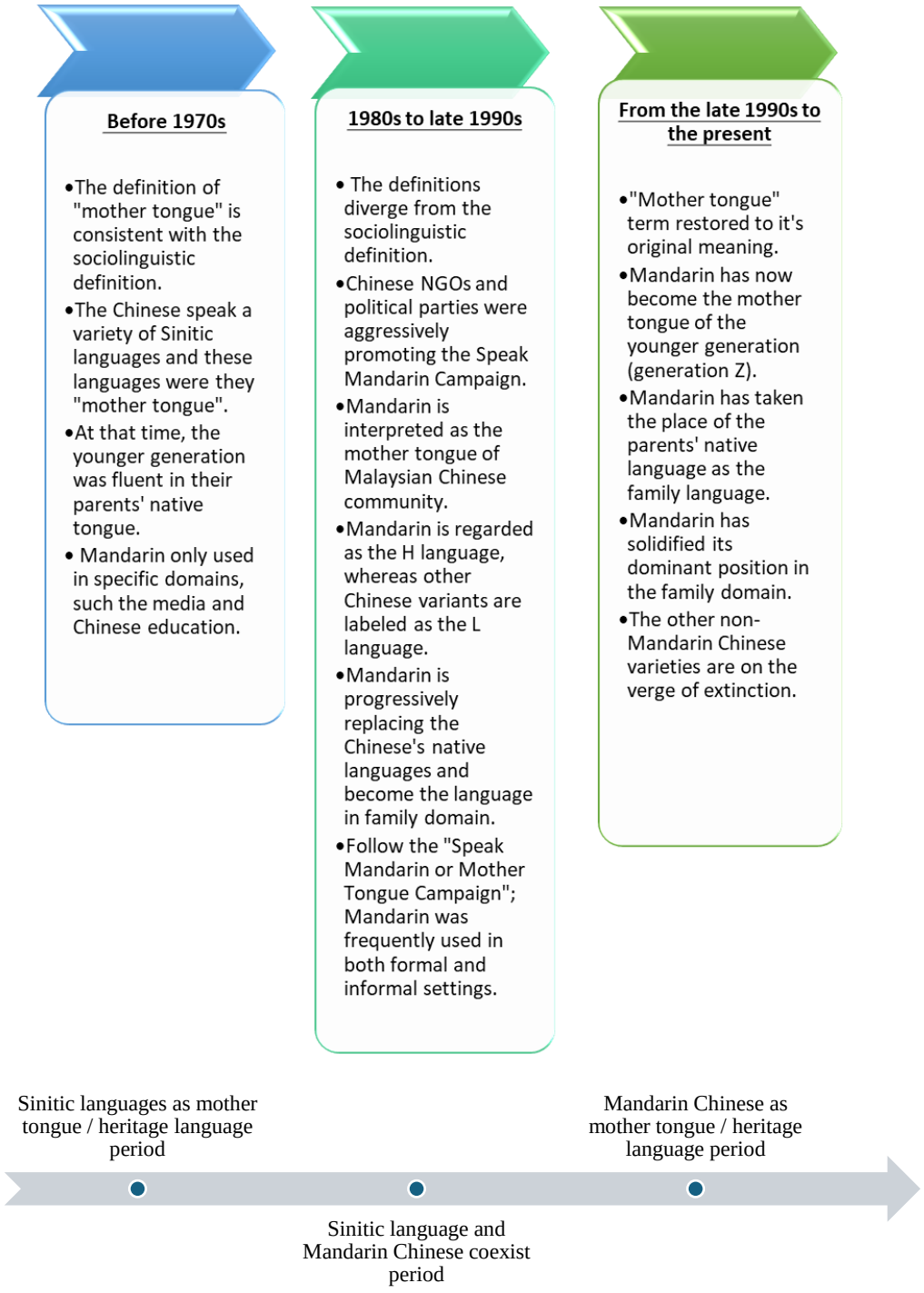

Figure 1. An overview of the historical evolution of the mother tongue among the Chinese in Malaysia

From the perspective of Mandarin Chinese as a heritage language, this study has examined sociocultural factors beyond classroom learning and explained how these factors affect

motivation and attitudes towards language learning through the socio-psychological model of language learning motivation theory. From both the academic perspective of sociolinguistics and the perspective of heritage language learners, identifying these factors contributes to the improvement of theories of language learning motivation. By considering these theoretical implications, a comparative analysis of Malaysian Chinese's motivation, emotional attachment, and attitudes towards Mandarin Chinese can enrich the theoretical framework and contribute new knowledge to the fields of language learning, identity, motivation, and sociolinguistics. Finally, the study found that the native and traditional languages of immigrant communities undergo long-term changes as the projection of their cultural and ethnic identities expands.

Methodology

Design of the Study and Research Questions

To investigate the influence of emotional attachment on Malaysian heritage language learners'(HLLs) Chinese language learning motivations, we conducted a quantitative questionnaire study to be able to infer statistically from the sample to the population. The research questions were as follows:

1. What are the differences in the emotional attachment toward Mandarin and the attitudes and motivations to learn Mandarin among Malaysian CHLLs between public and private secondary schools?
2. Is there a divergence between emotional attachment to Mandarin and the motivation to learn Mandarin among Malaysian CHLLs? If so, what are the underlying factors contributing to this phenomenon?
3. How does emotional attachment influence the Mandarin learning attitudes and motivations of Malaysian CHLLs between public and private secondary schools?

Sample Criteria, Size and Location

The participants in this study are 16- to 18-year-old students learning Mandarin as their mother tongue (L1). The inclusion criteria for selecting participants were: (a) Heritage Language Learners (HLL) who have taken the UPSR examination[1], and (b) students who have been enrolled in Chinese schools since Year 1 of primary education. The exclusion criteria were: (a) non-Chinese students, (b) junior secondary-level Chinese students, (c) Chinese students whose L1 is not Mandarin, and (d) students who have not taken the UPSR exam. After applying these criteria, a final sample of 297 respondents was used for data analysis, from an initial pool of 320.

[1] The Primary School Sixth Form Review (Malay: Ujian Pencapaian Sekolah Rendah; English: Primary School Achievement Test; abbreviated as UPSR) is a nationally standardised examination in Malaysia, jointly conducted annually by the Ministry of Education and the Malaysian Examinations Syndicate (MES). The UPSR is the most important examination for primary school students and is intended to determine the academic qualifications, academic performance and achievement of all Primary 6 students in public and state primary schools and their eligibility for promotion to Form 1 (first year) of secondary school.

Participants were selected through purposive sampling based on predefined criteria. Teachers in national and private schools in Pulau Pinang, Johor, and Sarawak, who were acquaintances of the researcher, were responsible for recruiting participants. They distributed and collected online survey questionnaires in accordance with the guidelines provided by the researcher. Participants typically spent approximately 30 minutes completing the questionnaire, which was administered offline.

The Instruments

1. The Demographic Section

Section A includes demographic questions designed to identify the various participant groups in this study. Specifically, questions Q1-Q16 gather data on each participant's age, ethnicity, gender, residence, and grade level. As noted by Park (1997), self-reported demographic questionnaires offer several advantages, as they can collect information from a large number of participants and facilitate objective comparison and interpretation through statistical analysis.

2. Language Attitudes, Motivations Test Battery (AMTB) Questions

Section B investigates the learning motivations and attitudes of Mandarin as a Heritage Language (MHL) learners using Gardner and Lambert's (1972) "Attitude Motivation Test Battery (AMTB)" framework. AMTB was chosen due to its extensive use in studies examining affective factors influencing second/foreign language learning (Masgoret & Gardner, 2003; Kristmanson, 2000; Williams et al., 2002). In addition to its application in second/foreign language research, AMTB has also been used to study the motivation and attitudes of Heritage Language (HL) learners. For instance, Noels (2005) found that HL learners show strong intrinsic and instrumental motivation, with higher intrinsic motivation compared to L2 learners. Gardner and Lambert (1972) divide the AMTB into three sections: (a) attitudes, motivation, and classroom anxiety; (b) motivational intensity; and (c) teacher and curriculum. The questions developed for this study focus on sections (a) and (b). The Cronbach's alpha values for attitude and motivation are 0.913 and 0.943, respectively, exceeding the recommended threshold of 0.70 by Nunnally (1978).

3. Identity and Emotional Attachment Questions

Section C is primarily based on Zhang's (2011) Questionnaire on the Ethnic Identity of Filipino-Chinese Secondary School Students and the national identification scale developed by Von Scheve et al. (2014). These questionnaires assess dimensions of symbolic, civic, and solidary identification, forming a multidimensional scale for measuring national identification. The items from Zhang (2011) and Von Scheve et al. (2014) have been adapted to the Malaysian context, incorporating insights from qualitative surveys. The Cronbach's alpha value for the Emotional Attachment (EA) scale is 0.938.

Research Results

The quantitative data were analyzed using Microsoft Excel and SPSS Version 26. The researcher first used an Excel Spreadsheet to input the basic information of the participants and

divided them into two groups, namely the Chinese students from (i) SMK & SMJK and (ii) STPC, as well as create a language profile for each participant. The following analysis steps were based on these two groups. Following that, descriptive statistics and inferential statistics were used to analyze the data. The descriptive statistics included frequencies, percentages, means, and standard deviations, while the inferential statistics included correlation analysis, Multivariate Analysis of Variance (MANOVA), Analysis of Variance (ANOVA), and t-tests.

Demographic Information and Language Background of the Participants

Table 2. Demographic of the Participants

Category		Frequency	Percent
Gender	Male	105	35.35
	Female	192	64.65
Age	16	99	33.33
	17	185	62.29
	18	13	4.38
Types of Primary School	SJKC	287	96.63
	SK	6	2.02
	International School	4	1.35
Chinese language study years in Primary School	2-5 years	11	3.70
	6 years (and above)	286	96.30
Types of Secondary School	SMJK	88	29.63
	SMK	63	21.21
	STPC	146	49.16
Current Grade	SMJK Form 4	43	14.48
	SMJK Form 5	107	36.03
	SMK Form4	24	8.08
	SMK Form5	39	13.13
	STPC Senior1	35	11.78
	STPC Senior2	49	16.5
Chinese language study years in Secondary School	2-5 years	252	84.85
	6 years (and above)	45	15.15
Total		297	100.0

Note. * SJKC= National Chinese Primary School; SK= National Primary School; SMJK= National-type Secondary School; SMK= National Secondary School; STPC= Chinese Independent Secondary School.

As can be seen from Table 2, more than half of the 297 respondents are female; all of the 297 respondents are between the ages of 16 and 18; and their ethnic background is Chinese. This distribution indicates that the sample fulfilled the age level and ethnic background distribution requirements for conditional sampling. The 297 participants were from 11 different secondary schools in Malaysia, which comprise: 3 national-type secondary schools (SMJK), 7

national secondary schools (SMK), and 1 Chinese independent secondary school (STPC). The number of subjects in the three different school types was almost evenly split, with 88 for SMJK, 63 for SMK, and 146 for STPC, indicating that the sample is broad-ranging and representative. Additionally, most of the subjects (96.6%) completed their primary education in Chinese schools and had studied Mandarin Chinese for a substantial period, with 96% of them having studied Mandarin Chinese for more than six years in primary school.

Table 3. The percentage of participants' can speak languages and their first language, and the most-used family language

		Type of Secondary school (%)		
	Language	**Public (*n*=151)**	**Private (*n*=146)**	**Total (*n*=297)**
Languages they can speak	Mandarin Chinese	151 (100.00)	146 (100.00)	297 (100.00)
	English	147（97.35）	121（82.88）	268（90.24）
	Malay	148（98.01）	113（77.40）	261（87.88）
	Tamil	0（0.00）	0（0.00）	0（0.00）
	Cantonese	62（41.06）	35（23.97）	97（32.66）
	Hokkien	79（52.32）	29（19.86）	108（36.36）
	Hakka	16（10.60）	13（8.90）	29（9.76）
	Teochew	41（27.15）	5（3.42）	46（15.49）
	Hainanese	3（1.99）	0（0.00）	3（1.01）
	Foochow	4（2.65）	52（35.62）	56（18.86）
	Japanese	1（0.66）	3（2.05）	4（1.35）
	Xinning dialect	1（0.66）	0（0.00）	1（0.34）
	Korean	0（0.00）	2（1.37）	2（0.67）
	Iban	0（0.00）	1（0.68）	1（0.34）
	Guangxi	0（0.00）	1（0.68）	1（0.34）
	French	0（0.00）	1（0.68）	1（0.34）
	Thai	0（0.00）	1（0.68）	1（0.34）
First Language	Mandarin Chinese	146（96.69）	142（97.26）	288（96.97）
	English	43（28.48）	21（14.38）	64（21.55）
	Malay	17（11.26）	12（8.22）	29（9.76）
	Tamil	0（0.00）	0（0.00）	0（0.00）
	Cantonese	10（6.62）	9（6.16）	19（6.40）
	Hokkien	16（10.60）	4（2.74）	20（6.73）

	Hakka	1（0.66）	2（1.37）	3（1.01）
	Teochew	5（3.31）	1（0.68）	6（2.02）
	Hainanese	0（0.00）	0（0.00）	0（0.00）
	Foochow	0（0.00）	11（7.53）	11（3.70）
	Japanese	0（0.00）	1（0.68）	1（0.34）
	Korean	1（0.66）	0（0.00）	1（0.34）
	Iban	0（0.00）	1（0.68）	1（0.34）
	Mandarin Chinese	136(90.07)	124(84.93)	260(87.54)
	English	2(1.32)	3(2.05)	5(1.68)
	Malay	0(0.00)	1(0.68)	1(0.34)
The most-used	Cantonese	4(2.65)	7(4.79)	11(3.70)
family language	Hokkien	6(3.97)	3(2.05)	9(3.03)
	Teochew	3(1.99)	0(0.00)	3(1.01)
	Foochow	0(0.00)	7(4.79)	7(2.36)
	Iban	0(0.00)	1(0.68)	1(0.34)

Chi-square (math.) test：χ^2=135.919 p=0.000

As seen in the above table, the results of the data from the two groups of respondents are very similar, which demonstrates that: Both groups can speak Mandarin Chinese (100%), and the percentage of participants whose first language is Mandarin Chinese exceeded 96% of the total number of participants in each group (SMJK & SMK = 96.69%, STPC = 97.26%). Both the public-school group (97.35% and 98.01%) and the private school group (82.88% and 77.40%) participants have about equivalent percentages of subjects who could speak English and Malay. In comparison to Malay (11.26% and 8.22%), a higher percentage of participants in both groups claimed that English is their first language (28.48% and 14.38%).

This demonstrates that the languages spoken by both groups, as well as the first languages they spoke, are ranked as follows: Mandarin Chinese > English > Malay > Other languages. In terms of differences, the two groups of participants examined showed that the percentage of participants in the public school group who declared using English as their first language is more than twice that found in the public school group (N=149), i.e., 28.48%. The statistics also show that almost half of the participants in the private-school group (N=146) speak Foochow (35.62% and 7.3%), either as their fluent language or as their first language (compared to 2.65% and 0% in the public-school group). This is because the majority of the participants who speak Foochow are from a private high school in Sibu, Sarawak. In this area, Foochow currently constitutes the largest Chinese language group in Sibu, specifically, and Sarawak, generally (Ling & Thock, 2015). The Foochow variety certainly dominates informal communication in Sibu, outnumbering the use of Mandarin Chinese and other Chinese languages in daily conversations. In addition to being the native tongue of the Foochow Chinese, the Foochow language is also widely spoken by other Chinese ethnic groups. Therefore, it is not surprising that this survey found that many students in Chinese schools (Sibu) are using Foochow.

Examining the overall characteristics of the participants in both groups, Mandarin Chinese is the most commonly used language at home by both groups, followed by other Chinese languages. This indicates that respondents in both groups have switched from other Chinese variations to Mandarin Chinese. However, there is still no tendency to switch to Bahasa Melayu (the national language) and English (the international language).

RQ1. Differences in Emotional Attachment, Motivations and Attitudes between Public and Private School Students

Tables 4 and 5 present the overall profile of attitudes, motivations, and emotional attachments for the two groups of participants, including the maximum, minimum, mean, and standard deviation values.

Table 4. Descriptive Statistics and T-Test of the Participants' Attitudes and Motivations

	Type of Secondary school (Mean ± SD)		*t*	*p*
	Public (*n*=151)	Private (*n*=146)		
Attitudes toward Malaysian Chinese	4.22±0.57	3.98±0.58	3.568	0.000**
Attitudes toward mainland Chinese	3.57±0.72	3.44±0.86	1.341	0.181
Attitudes toward other races	4.06±0.59	3.66±0.71	5.199	0.000**
Attitudes toward learning Mandarin (Positive)	4.28±0.70	4.19±0.69	1.134	0.258
Attitudes toward learning Mandarin (Negative)	2.03±0.87	2.09±0.89	-0.516	0.606
Parental Encouragement	3.65±0.74	3.38±0.71	3.160	0.002**
Mandarin Class Anxiety	2.29±0.79	2.60±0.82	-3.264	0.001**
Instrumental Orientation	3.99±0.63	3.82±0.66	2.207	0.028*
Integrative Orientation	4.23±0.67	4.08±0.67	2.002	0.046*
Motivational Intensity	2.35±0.26	2.20±0.26	4.833	0.000**
Desire to Learn Chinese	2.51±0.28	2.45±0.26	1.884	0.061

* $p<0.05$ ** $p<0.01$

* 1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree.

The first seven dimensions consist of five-point scale questions, while the last two are option-based scoring questions. A comparison between the two groups shows the following results: (1) Both groups exhibit the highest mean scores for positive attitudes towards learning Mandarin (M=4.28 and M=4.19) and the lowest for negative attitudes (M=2.03 and M=2.09). (2) The public-school group generally has more favorable attitudes towards Malaysian Chinese, mainland Chinese, and other racial groups in Malaysia (except for mainland Chinese), while the private school group shows moderate attitudes (M=3.66–3.98). (3) Both groups show a stronger orientation toward integrative motivation (both scoring above 4), with the public-

school group showing higher integrative and instrumental motivation compared to the private school group. (4) The public-school group has slightly lower classroom anxiety about learning Mandarin (by 0.31 points) and higher parental encouragement (by 0.27 points) than the private school group. (5) The public-school group demonstrates a higher overall motivation and desire to learn Mandarin (M=2.51) compared to the private school group, though both groups exhibit moderate motivation levels.

Table 5. Descriptive Statistics and T-Test of Participants' Emotional Attachment

	Type of Secondary School (M±SD)		*t*	*p*
	Public (*n*=151)	Private (*n*=146)		
National identity	4.03±0.58	3.69±0.63	4.778	0.000**
Malaysian cultural identity	4.17±0.66	3.76±0.65	5.378	0.000**
Chinese cultural identity	4.20±0.61	3.93±0.67	3.552	0.000**
Tionghua traditional values	4.12±0.60	3.82±0.66	4.221	0.000**
EA to Customs and Traditions	4.06±0.60	3.68±0.64	5.137	0.000**
EA to Artistic Appreciation	3.96±0.67	3.65±0.74	3.801	0.000**
EA to Traditional attire, food, sites in China	4.03±0.62	3.76±0.69	3.570	0.000**
Bloodline and regional affinities attachment	3.72±0.66	3.43±0.65	3.804	0.000**
EA embodied in Cultural Promotion	3.87±0.78	3.35±0.94	5.104	0.000**
EA to Malaysian customs	4.21±0.56	3.74±0.68	6.487	0.000**

* $p<0.05$ ** $p<0.01$

Table 5 presents the maximum, minimum, mean, and standard deviation for nine dimensions, excluding personal, religious, and ethnic identities. Overall, emotional attachment is significantly higher in the public-school group (M=3.72-4.21) compared to the private-school group (M=3.35-3.93). Within the public-school group, the highest emotional attachment is to Malaysian customs (M = 4.21), while the lowest is to bloodline and geography (M = 3.72). In contrast, the private-school group exhibits the highest attachment to Chinese cultural identification (M = 3.93) and the lowest attachment to cultural promotion (M = 3.35).

RQ2. The Divergence of Emotional Attachment and Attitudes & Motivations

In order to further understand each participant's Chinese language learning motivations, attitudes and emotional attachment scores, we calculated the mean scores of the 297 participants on the five-point Likert AMTB scale and the emotional attachment scale respectively, and made the following comparisons between the two groups:

Table 6. Distribution of Mean Scores for Participants' Emotional Attachment, Motivation and Attitudes

Mean Scores	Public (*n*=151)	Private (*n*=146)	Total (*n*=297)

Motivation & Attitude	Below 3	32 (21.19%)	56 (38.36%)	88 (29.63%)
	3-4	119 (78.81%)	87 (59.59%)	206 (69.36%)
	Above 4	0 (0%)	3 (2.05%)	3 (1.01%)
Emotional Attachment	Below 3	5 (3.31%)	12 (8.22%)	17 (5.72%)
	3-4	59 (39.07%)	91 (62.33%)	150 (50.51%)
	Above 4	85 (56.29%)	39 (26.71%)	124 (41.75%)
	Full 5	2 (1.32%)	4 (2.74%)	6 (2.02%)

As shown in Table 6, participants' motivation and attitude towards learning the Chinese language in both groups were generally lower than their emotional attachment to the Chinese language and culture. Most participants scored in the middle to low range for motivation and attitude (with almost none scoring above 4, except for 3 private school students), while emotional attachment was in the middle to high range (43.77% scored above 4). Additionally, a greater proportion had low motivation and attitude towards learning Chinese (29.63% scored below 3), nearly five times more than those with low emotional attachment (5.72%). This indicates a disconnect between the motivation to learn Mandarin and cultural identity, as participants recognise the importance of learning Mandarin as Malaysian Chinese, but their motivation remains insufficient. The reasons behind this were explored in the discussion section.

Notably, public school participants (57.61% scoring above 4) displayed a much stronger emotional attachment to the Chinese language and culture compared to private school participants (29.45%), with nearly double the difference. Moreover, the motivation and attitude towards learning Chinese were higher in the public-school group, where 78.81% scored in the moderate range (3-4), compared to 61.61% in the private school group. Almost half of the private school participants (38.36%) showed low motivation.

RQ3. Emotional Attachment in Correlation with Attitudes and Motivations

EA in Correlation with Attitudes and Motivations

The subsection focuses on the presentation and analysis of the two groups of participants' emotional attachment in correlation with attitudes and motivation toward learning Mandarin:

Table 7. Correlation between Participants' Emotional Attachment with Attitudes

	NI	MCI	CCI	TTV	CT	AA	TAFS	BRAA	CP	MC	MEA
						Public (n=151)					
AMC	0.378**	0.355**	0.472**	0.406**	0.402**	0.256**	0.345**	0.411**	0.362**	0.275**	0.445**
AC(M)	0.091	0.075	0.374**	0.338**	0.368**	0.256**	0.312**	0.389**	0.194*	0.049	0.299**
ATOR	0.572**	0.559**	0.452**	0.416**	0.333**	0.359**	0.332**	0.295**	0.408**	0.574**	0.519**
ATLM(P)	0.450**	0.385**	0.680**	0.552**	0.551**	0.529**	0.547**	0.451**	0.395**	0.408**	0.598**
ATLM(N)	-0.264**	-0.241**	-0.454**	-0.386**	-0.406**	-0.380**	-0.370**	-0.260**	-0.234**	-0.213**	-0.387**
MA	0.398**	0.365**	0.501**	0.435**	0.409**	0.329**	0.383**	0.439**	0.373**	0.356**	0.484**

	Private (*n*=146)										
AMC	0.429**	0.392**	0.577**	0.474**	0.484**	0.408**	0.467**	0.435**	0.296**	0.450**	0.556**
AC(M)	0.233**	0.248**	0.549**	0.542**	0.508**	0.490**	0.541**	0.464**	0.347**	0.298**	0.537**
ATOR	0.636**	0.596**	0.372**	0.376**	0.384**	0.446**	0.415**	0.340**	0.371**	0.592**	0.573**
ATLM(P)	0.377**	0.354**	0.657**	0.526**	0.425**	0.557**	0.554**	0.386**	0.254**	0.323**	0.556**
ATLM(N)	0.183*	0.156	-0.111	-0.021	0.105	-0.047	0.006	0.224**	0.211*	0.176*	0.117
MA	0.592**	0.557**	0.638**	0.605**	0.615**	0.589**	0.634**	0.607**	0.490**	0.588**	0.751**

* $p<0.05$ ** $p<0.01$

Note. * NI=National identity, MCI=Malaysian cultural identity, CCI=Chinese cultural identity, TTV=Tionghua traditional values, CT= Customs and traditions, AA=Artistic appreciation, TAFS=Traditional attire, food, sites in China, BRAA= Bloodline and regional affinities attachment, CP=Cultural promotion, MC=Malaysian customs, MEA=Mean of Emotional Attachment; AMC=Attitudes toward Malaysian Chinese, AC(M)=Attitudes toward Chinese (mainland), ATOR=Attitudes toward other races, ATLM(P)=Attitudes toward learning Mandarin (positive), ATLM(N)=Attitudes toward learning Mandarin (negative), MA=Mean of Attitudes.

Table 7 shows the following for the public-school group: (1) Except for national identity, Malaysian cultural identity, and attachment to Malaysian customs (which do not correlate with attitudes toward mainland Chinese, p>0.01), all other emotional attachment dimensions (Chinese cultural identity, traditional Chinese values, attachment to customs, art, attire, food, Chinese sites, and cultural promotion) significantly correlate with attitudes toward learning Mandarin (p<0.01). (2) All dimensions of emotional attachment negatively correlate with "negative attitudes toward learning Mandarin". (3) All emotional attachment dimensions strongly correlate with "positive attitudes toward learning Mandarin," with Chinese cultural identity and traditional values also correlating strongly with attitudes toward Chinese Malaysians (correlation coefficient = 0.4–0.7). (4) Emotional attachment to national identity, Malaysian cultural identity, and Malaysian customs is strongly related to attitudes toward friends from other ethnic groups (correlation coefficient = 0.4-0.7).

In the private-school group: (1) Emotional attachment is significantly and positively correlated (p<0.01) with attitudes toward Malaysian Chinese, mainland Chinese, friends from other ethnic groups, and learning Mandarin (correlation coefficients = 0.4-0.7). (2) National identity, Malaysian cultural identity, and attachment to Malaysian customs are also strongly correlated with attitudes toward friends from other ethnic groups (correlation coefficients = 0.4-0.7).

Table 8. Correlation between Participants' EA with Motivations

	NI	MCI	CCI	TTV	CT	AA	TAFS	BRAA	CP	MC	MEA
					Public (*n*=151)						
Int-O	0.441**	0.432**	0.739**	0.589**	0.596**	0.512**	0.539**	0.508**	0.458**	0.403**	0.632**
Ins-O	0.401**	0.389**	0.610**	0.572**	0.532**	0.473**	0.473**	0.469**	0.417**	0.397**	0.574**
MCA	-	-	-	-	-	-	-	-	-	-	-
	0.305**	0.244**	0.424**	0.277**	0.323**	0.338**	0.338**	0.262**	0.294**	0.287**	0.375**
PE	0.443**	0.364**	0.568**	0.518**	0.507**	0.459**	0.479**	0.488**	0.453**	0.392**	0.568**
MI	0.281**	0.184*	0.406**	0.376**	0.448**	0.384**	0.359**	0.372**	0.387**	0.232**	0.419**
DLC	0.319**	0.256**	0.536**	0.444**	0.492**	0.459**	0.455**	0.324**	0.408**	0.333**	0.489**
MM	0.421**	0.386**	0.645**	0.604**	0.586**	0.498**	0.512**	0.517**	0.469**	0.389**	0.611**
					Private (*n*=146)						
Int-O	0.309**	0.284**	0.648**	0.494**	0.423**	0.481**	0.525**	0.410**	0.332**	0.351**	0.540**
Ins-O	0.296**	0.305**	0.557**	0.489**	0.503**	0.467**	0.549**	0.466**	0.376**	0.351**	0.555**
MCA	0.106	0.040	-0.048	0.073	0.230**	-0.015	0.000	0.244**	0.201*	0.044	0.116
PE	0.339**	0.316**	0.499**	0.466**	0.472**	0.489**	0.520**	0.512**	0.372**	0.327**	0.549**
MI	0.246**	0.200*	0.405**	0.260**	0.241**	0.360**	0.350**	0.231**	0.211*	0.221**	0.346**
DLC	0.246**	0.200*	0.405**	0.260**	0.241**	0.360**	0.350**	0.231**	0.211*	0.221**	0.346**
MM	0.414**	0.364**	0.642**	0.570**	0.611**	0.557**	0.612**	0.611**	0.488**	0.411**	0.673**

* $p<0.05$ ** $p<0.01$

* NI=National identity, MCI=Malaysian cultural identity, CCI=Chinese cultural identity, TTV=Tionghua traditional values, CT= Customs and traditions, AA=Artistic appreciation, TAFS=Traditional attire, food, sites in China, BRAA= Bloodline and regional affinities attachment, CP=Cultural promotion, MC=Malaysian customs, MEA=Mean of Emotional Attachment; Int-O=Integrative orientation, Ins-O=Instrumental orientation, MCA=Mandarin

class anxiety, PE=Parental encouragement, MI=Motivational intensity, DLM=Desire to learn Mandarin, MM=Mean of Motivation.

Table 8 shows the following for the public-school group: (1) A significant positive correlation ($p<0.01$) between emotional attachment and all dimensions of motivation to learn Mandarin. (2) A negative correlation between emotional attachment and classroom anxiety in Mandarin learning. (3) A very strong relationship between Chinese cultural identity and integrative motivation (correlation coefficient >0.7). (4) A strong correlation between emotional attachment dimensions and instrumental motivation, integrative motivation, parental encouragement, and desire to learn Mandarin (correlation coefficients = 0.4-0.7). (5) A moderate relationship between emotional attachment dimensions and classroom anxiety, as well as motivational intensity (most correlation coefficients <0.4).

For the private-school group: (1) Except for national identity, Malaysian cultural identity, and Chinese cultural promotion, there is (i) a significant positive correlation ($p<0.01$) between emotional attachment and motivations to learn Mandarin, and (ii) a negative correlation with classroom anxiety. (2) Six emotional attachment dimensions strongly correlate with integrative motivation, instrumental motivation, and parental encouragement (correlation coefficients = 0.4-0.7), while the relationships with motivational intensity and desire to learn Mandarin are moderate ($p<0.01$, correlation coefficient = 0.4-0.7).

Regression Analysis of Attitudes and Motivations

We analyzed the data using scatter and p-p plots, finding that both emotional attachment and attitude factors, as well as emotional attachment and motivation factors, exhibited linear correlations and followed normal or nearly normal distributions. Thus, linear regression was applied to establish regression equations, using emotional attachment as the independent variable. Attitude and motivation were set as dependent variables to determine whether emotional attachment significantly influenced the attitudes and motivations of both groups.

Table 9. Attitude Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	*t*	*p*	95% CI	VIF
	B	Std. Error	Beta				
			Public (*n*=151)				
Constant	2.240	0.216	-	10.394	0.000**	1.818 ~ 2.662	-
NI	0.009	0.094	0.014	0.093	0.926	-0.176 ~ 0.193	4.780
MCI	0.002	0.074	0.004	0.025	0.980	-0.144 ~ 0.148	3.899
CCI	0.243	0.091	0.393	2.676	0.008**	0.065 ~ 0.422	4.271
TTV	0.058	0.076	0.099	0.773	0.441	-0.090 ~	3.262

	Unstandardized Coefficients		Standardized Coefficients	*t*	*p*	95% CI	VIF
	B	Std. Error	Beta				
CT	-0.121	0.104	-0.206	-1.164	0.247	-0.324 ~ 0.083	6.248
AA	-0.103	0.075	-0.194	-1.370	0.173	-0.251 ~ 0.044	3.992
TAFS	0.041	0.084	0.073	0.488	0.627	-0.124 ~ 0.207	4.427
BRAA	0.134	0.065	0.261	2.069	0.040*	0.007 ~ 0.261	3.170
CP	0.037	0.047	0.083	0.799	0.426	-0.054 ~ 0.129	2.136
MC	0.040	0.080	0.063	0.496	0.621	-0.118 ~ 0.197	3.208
R^2				0.295			
Adjusted R^2				0.244			
F				F (10,140) =5.845, p=0.000			
D-W values				1.827			
			Private (n=146)				
Constant	1.032	0.185	-	5.590	0.000**	0.670 ~ 1.393	-
NI	0.165	0.062	0.231	2.670	0.009**	0.044 ~ 0.286	2.465
MCI	0.019	0.062	0.027	0.303	0.762	-0.103 ~ 0.140	2.673
CCI	0.105	0.076	0.150	1.386	0.168	-0.044 ~ 0.254	3.881
TTV	0.110	0.065	0.162	1.692	0.093	-0.017 ~ 0.237	3.017
CT	-0.018	0.076	-0.026	-0.235	0.814	-0.168 ~ 0.132	3.931
AA	-0.010	0.064	-0.017	-0.161	0.872	-0.136 ~ 0.115	3.682
TAFS	0.056	0.081	0.086	0.690	0.492	-0.102 ~ 0.214	5.172
BRAA	0.140	0.059	0.211	2.350	0.020*	0.023 ~ 0.256	2.667
CP	0.027	0.037	0.056	0.734	0.464	-0.045 ~ 0.098	1.936
MC	0.067	0.061	0.102	1.108	0.270	-0.052 ~ 0.186	2.819
R^2				0.591			

	Unstandardized Coefficients		Standardized Coefficients	*t*	*p*	95% CI	VIF
	B	Std. Error	Beta				
Adjusted R^2	0.560						
F	*F* (10,135) =19.483, *p*=0.000						
D-W values	2.092						

Note: Dependent variable = mean of attitudes
* $p<0.05$ ** $p<0.01$

According to Table 9, the R^2 value for the public-school group is 0.295, indicating that Emotional Attachment accounts for 29.5% of the variance in Chinese language learning attitudes. Only two factors, Chinese cultural identity ($p = 0.008 < 0.01$) and attachment to bloodline and regional affinities ($p = 0.04 < 0.05$), show a significant positive relationship with attitudes toward learning Chinese, while the other eight factors do not. The standardized beta coefficient indicates that Chinese cultural identity (Beta=0.393) has the most significant influence on learning attitudes in the public-school group.

For the private-school group, Emotional Attachment explains 59.1% of the variance in Chinese language learning attitudes (R^2=0.591). National identity ($p = 0.009 < 0.01$) and attachment to bloodline and regional affinities ($p = 0.02 < 0.05$) have a positive influence on attitudes, while the remaining eight factors do not. National identity (Beta = 0.231) has the most significant effect on attitudes in the private school group.

Table 10. Motivation Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	*t*	*p*	95% CI	VIF
	B	Std. Error	Beta				
	Public (*n*=151)						
Constant	1.643	0.168	-	9.765	0.000**	1.313 ~ 1.972	-
NI	-0.088	0.073	-0.162	-1.196	0.234	-0.232 ~ 0.056	4.780
MCI	0.021	0.058	0.044	0.359	0.720	-0.093 ~ 0.135	3.899
CCI	0.242	0.071	0.436	3.406	0.001**	0.103 ~ 0.381	4.271
TTV	0.135	0.059	0.256	2.287	0.024*	0.019 ~ 0.250	3.262
CT	0.014	0.081	0.027	0.176	0.861	-0.145 ~ 0.173	6.248

	Unstandardized Coefficients		Standardized Coefficients	*t*	*p*	95% CI	VIF
	B	Std. Error	Beta				
AA	0.029	0.059	0.061	0.496	0.621	-0.086 ~ 0.144	3.992
TAFS	-0.018	0.066	-0.036	-0.273	0.785	0.019 ~ 0.250	4.427
BRAA	0.029	0.051	0.063	0.569	0.570	-0.070 ~ 0.128	3.170
CP	0.033	0.036	0.081	0.896	0.372	-0.039 ~ 0.104	2.136
MC	-0.029	0.063	-0.051	-0.458	0.648	-0.152 ~ 0.094	3.208
R^2				0.463			
Adjusted R^2				0.425			
F				*F* (10,140) =12.091, *p*=0.000			
D-W values				2.273			
		Private (*n*=146)					
Constant	1.553	0.153	-	10.135	0.000**	1.252 ~ 1.853	-
NI	0.078	0.051	0.142	1.526	0.129	-0.022 ~ 0.179	2.465
MCI	-0.066	0.051	-0.123	-1.276	0.204	-0.167 ~ 0.035	2.673
CCI	0.154	0.063	0.285	2.441	0.016*	0.030 ~ 0.277	3.881
TTV	0.051	0.054	0.098	0.949	0.344	-0.054 ~ 0.157	3.017
CT	0.000	0.063	0.001	0.007	0.995	-0.124 ~ 0.125	3.931
AA	-0.021	0.053	-0.045	-0.400	0.690	-0.126 ~ 0.083	3.682
TAFS	0.078	0.067	0.157	1.167	0.245	-0.053 ~ 0.209	5.172
BRAA	0.127	0.049	0.249	2.574	0.011*	0.030 ~ 0.224	2.667
CP	0.059	0.030	0.160	1.948	0.054	-0.000 ~ 0.119	1.936
MC	-0.033	0.050	-0.065	-0.651	0.516	-0.131 ~ 0.066	2.819

	Unstandardized Coefficients		Standardized Coefficients	*t*	*p*	95% CI	VIF
	B	Std. Error	Beta				
R^2			0.527				
Adjusted R^2			0.492				
F			*F* (10,135) =15.051, *p*=0.000				
D-W values			1.847				

Note: Dependent variable = Mean of motivations
* $p<0.05$ ** $p<0.01$

According to Table 10, the R^2 value for the public-school group is 0.463, indicating that Emotional Attachment accounts for 46.3% of the variance in Chinese language learning motivation. Only Chinese cultural identity ($p = 0.001<0.01$) and Tionghua traditional values ($p = 0.024<0.05$) show a significant positive relationship with motivation. Chinese cultural identity (Beta = 0.436) has the most significant influence on motivation in this group.

For the private-school group, Emotional Attachment explains 52.7% of the variance in motivation ($R^2 = 0.527$). Chinese cultural identity ($p = 0.016 < 0.05$) and bloodline and regional affinity attachment ($p = 0.011 < 0.01$) positively influence motivation, with Chinese cultural identity (Beta = 0.285) having the most significant effect on motivation in this group.

Discussion

In terms of the characteristics of Mandarin learning attitudes and motivations, the survey results indicate that participants from both groups exhibit positive attitudes toward Mandarin language learning, experience lower levels of classroom anxiety, and demonstrate a stronger tendency toward integration-type motivation. Public school students display a broader emotional attachment and identification compared to their private school counterparts, encompassing a wider range of dimensions such as identification with Chinese culture, traditional values, and daily customs. In contrast, private school students primarily identify with Chinese culture and customs related to daily life.

Although the new generation of Malaysian Chinese regards Mandarin as a key symbol of identity, their motivation to learn the language is declining. According to the *Oriental Daily News*, the number of applicants for the Mandarin SPM[2] exam decreased from 52,754 in 2018 to 48,420 in 2020. This decline is more pronounced in private schools where Mandarin is the medium of instruction. Two key factors contribute to this trend: first, private school students have a stronger grasp of Mandarin due to its use as the medium of instruction, but they also face stress as the Mandarin syllabus is perceived to be challenging for exams. Second, Mandarin

[2] The Malaysian Certificate of Education (Sijil Pelajaran Malaysia, SPM) is a diploma equivalent to the International GCE O-Level. Administered by the Malaysian Examination Syndicate and overseen by the Ministry of Education, this nationally standardized examination evaluates the learning outcomes, academic qualifications, and performance of Form 5 students at the end of their five-year compulsory secondary education.

instruction in public schools is less intensive, with fewer hours per week (three hours compared to six in private schools), leading students to value the limited opportunities to engage with the language. Additionally, the diverse linguistic environment in public schools may enhance students' appreciation for Mandarin by exposing them to multiple languages. The multicultural context fosters a greater awareness of the need to preserve and transmit their mother tongue.

Correlation analysis reveals that in the public-school group, the most influential factors affecting attitudes and motivation toward Mandarin learning are linked to Chinese cultural identity (Beta=0.393, Beta = 0.436). In the private school group, Malaysian national identity (Beta = 0.231) and Chinese cultural identity (Beta = 0.285) play significant roles, with bloodline and regional affinities (Beta = 0.211, Beta = 0.249) also influencing attitudes and motivation. These findings suggest that a broader range of factors influences emotional attachment in private school students, while public school students' attitudes and motivations are predominantly shaped by Chinese cultural identity. This can be attributed to the increased interaction of public school students with other ethnic groups, which enhances their acceptance of other cultures and, in line with social comparison and categorisation theory, deepens their appreciation for their own Chinese culture. In contrast, private school students, immersed in a predominantly Chinese-speaking environment, are more influenced by external factors such as national identity, family language policies, and community dialect practices.

The above findings of this study corroborate existing literature in several respects. For instance, Comanaru & Noels (2009) observed that traditional Chinese language learners (HLL) typically perceive language acquisition as integral to their self-identity, exhibiting stronger intrinsic motivation. The findings that students from both public and private schools demonstrated robust motivation stemming from identification with Chinese culture align with previous research (Comanaru & Noels, 2009). Wang (2001) and Cho et al. (1997) also emphasised the influence of group cultural affiliation on learning motivation. This study observed a similar phenomenon in the public school sample: Chinese cultural identity predicted the highest proportion of motivation for learning Mandarin. Furthermore, this study found that national identity attachment among private school students also influenced learning motivation, suggesting the possibility of multiple coexisting attachments, where students hold affiliations to several groups simultaneously. Social identity theory (Routh & Burgoyne, 1998; Schatz & Lavine, 2007) posits that identity commitment becomes more enduring when cultural attachment and functional attachment are mutually reinforcing (Routh & Burgoyne, 1998; Yu, 2024). This aligns with our findings: private school students' attachment to Chinese culture and Malaysian national identity jointly propelled their learning motivation.

Furthermore, this study reveals the impact of generational differences on affective attachment and motivation. Previous case studies (e.g., Hatoss & Sheely, 2009; Benrabah, 2014) indicate that cultural backgrounds and religious factors can lead to differing degrees of linguistic attachment across groups. Our quantitative findings suggest that the stronger traditional cultural environment and more unified linguistic educational background in private schools may have mitigated the pure effect of affective attachment on motivation. Conversely, within the diverse environment of public schools, where individuals must navigate choices

between their ethnic and mainstream cultures, cultural attachment appears particularly crucial for their motivation.

Theoretical implications of this study highlight the pivotal roles of emotional attachment and cultural identity in language learning. This provides fresh evidence for the theory of integrative motivation: it is not merely learners' attachment to the local Chinese community that drives learning, but rather emotional attachment to broader cultural symbols. Findings indicate that in multilingual societies, traditional linguistic and identity factors intertwine to shape learning motivation. This underscores the need for greater emphasis on affective and identity dimensions within language acquisition research.

From a pedagogical perspective, these results suggest that Chinese language education should address students' cultural identity needs. Within public school settings, enhancing students' emotional engagement with Chinese culture (e.g., through Chinese cultural courses or cultural events) may boost learning motivation. In private schools, teaching strategies should also consider students' national identity and social responsibility (e.g., exploring the role of Chinese Malaysians in society) to enhance the practical relevance of learning Chinese. Educational policymakers can thus optimise curriculum design, balance language policies, and support students' sense of multicultural belonging.

Conclusion

From the perspective of Mandarin as a heritage language, this study explores sociocultural factors beyond classroom learning and explains their impact on motivation and attitudes through the socio-psychological model of language learning motivation. By combining insights from sociolinguistics and research on heritage language learners, the study contributes to the improvement of language learning motivation theories. A comparative analysis of Malaysian Chinese learners' motivation, emotional attachment, and attitudes towards Mandarin adds to the theoretical framework, offering new insights into language learning, identity, motivation, and sociolinguistics.

The main limitations of this study are its limited scope and sample size. Additionally, due to the dynamic nature of motivation, attitudes, and identities, the study's time constraints prevented long-term participant monitoring, resulting in one-time data collection. Future research could expand the sample size, explore additional factors influencing emotional attachment across regions, and develop a more comprehensive scale for measuring emotional attachment. The theoretical development of Chinese emotional attachment can be enhanced by integrating approaches from anthropology, sociology, history, and linguistics.

Reference

Benrabah, M. (2007). Language maintenance and spread: French in Algeria. *International Journal of Francop* (1), pp. 193–215. https://doi.org/10.1386/ijfs.10.1and2.193_1

Benrabah, M. (2014). Language and politics in Algeria. In Safran, W., & Laponce, J. A. (Eds.), *Language, Ethnic Identity and the State* (1st ed., pp. 127). Routledge. https://doi.org/10.4324/9781315874135

Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry, 52*(4), 664–678. https://doi.org/10.1111/j.1939-0025.1982.tb01456.x

Carstens, S. (2018). Multilingual Chinese Malaysians: The global dimensions of language choice. *Grazer Linguistische Studien*, 89, 7-34. https://unipub.uni-graz.at/gls/periodical/titleinfo/3284221

Challenger, C. D., Duquette, K., & Pascascio, D. (2020). "Black Boys: Invisible to Visible": a psychoeducational group fostering Self-Efficacy, empowerment, and sense of belonging for African American boys. *The Journal for Specialists in Group Work*, *45*(3), 257–271. https://doi.org/10.1080/01933922.2020.1797444

Cho, G., Cho, K., & Tse, L. (1997). Why ethnic minorities want to develop their heritage language: The case of Korean-Americans. *Language Culture and Curriculum*, *10*(2), 106–112. https://doi.org/10.1080/07908319709525244

Comanaru, R., & Noels, K. A. (2009). Self-determination, motivation, and the learning of Chinese as a heritage language. *Canadian Modern Language Review/ La Revue Canadienne Des Langues Vivantes*, *66*(1), 131–158. https://doi.org/10.3138/cmlr.66.1.131

Dekeyser, G., & Agirdag, O. (2021). Determinants of emotional language use preferences of ethnolinguistic minority children in Antwerp, Belgium. *International Journal of Bilingual Education and Bilingualism*.

Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and Motivation in Second-Language Learning*. http://catalog.lib.kyushu-u.ac.jp/en/recordID/1000499942

Gomaa, Y. A. (2011). Language maintenance and transmission: The case of Egyptian Arabic in Durham, UK. *International Journal of English Linguistics*, 1(1). https://doi.org/10.5539/ijel.v1n1p46

Hatoss, A., & Sheely, T. (2009). Language maintenance and identity among Sudanese-Australian refugee-background youth. *Journal of Multilingual and Multicultural Development*, 30(2), 127–144. https://doi.org/10.1080/01434630802510113

Hussain, I. (2017). The distinction between Language Acquisition and Language Learning: A Comparative study. *Journal of Literature, Languages and Linguistics*, *39*, 1–5. https://iiste.org/Journals/index.php/JLLL/article/view/39826/40944

Khoo, K., & Loh, F. (2014). Democracy in Malaysia: Discourses and practices. In *Routledge eBooks*. https://researchrepository.murdoch.edu.au/id/eprint/49340/

Kristmanson, P. (2000). Affect in the second language classroom: How to create an emotional climate. *Reflexions*, 19(2), 1-5.

Lee, D. P., & Ting, S. (2016). Tracing ethnic socialisation of Chinese in Malaysia to Chinese-medium school. *Global Chinese*, *2*(2), 163–187. https://doi.org/10.1515/glochi-2016-0016

Lim, C. S., & Presmeg, N. (2011). Teaching mathematics in two languages: a teaching dilemma of Malaysian Chinese Primary schools. *International Journal of Science and Mathematics Education*, 9(1), 137–161. https://doi.org/10.1007/s10763-010-9225-4.

Lin, X. (2015). On Malaysian Mazu Temples and Chinese Education. *Journal of Putian*

University, *22*(01), 22-26+38. https://kns.cnki.net/kcms2/article/abstract?v=sTAINAsmd8-_25bGufj6OezmsqN0JC51JzBG3dQ9cXgWp3O-h_A9UmJi3iBzCdbPQq-f244FUTQipiUyHng_-KDB6BtfoR600hW1EQL6aCiw-yWdI9QKa4FPFtCSrDsHQJhmp1vuAu-NIUPRl_PHzqJTC8tA-sALyQMHW7XGNdOppSKOhn-C3w==&uniplatform=NZKPT&language=CHS

Ling, H. Y., & Thock, K. P. (2015). The Economic Activities of Foochow in Sibu: Development and Transformation. *Journal of Chinese Literature and Culture 马大华人文学与文化学刊*, *3*(2), 20–31. https://jpmm.um.edu.my/index.php/JCLC/article/view/13204

Masgoret, A., & Gardner, R. C. (2003). Attitudes, Motivation, and Second Language Learning: A Meta-Analysis of Studies Conducted by Gardner and Associates. *Language Learning*, 53(1), 123–163. https://doi.org/10.1111/1467-9922.00212

Montrul, S. (2012). Bilingualism and the heritage language speaker. In Bhatia, T. K., & Ritchie, W. C. (Eds.), *The handbook of bilingualism and multilingualism*, (pp.168-189). John Wiley & Sons. https://doi.org/10.1002/9781118332382.ch7

Noels, K. A. (2005). Orientations to learning German: heritage language learning and. motivational substrates. Canadian Modern Language Review-revue Canadienne Des Langues Vivantes, 62(2), 285–312. https://doi.org/10.3138/cmlr.62.2.285

Nunnally, Jum C. (1978), *Psychometric Theory*, 2d ed., New York: McGraw-Hill.
P. S. (Ed), *Education in South-East Asia* (1st ed., pp. 137–155). London. https://doi.org/10.3102/0013189X004010007

Oh, J. S., & Nash, B. A. (2014). Attitudes and motivations of adult Spanish language learners: A comparison of heritage language learners and second language learners. *Heritage Language Journal*, *11*(1), 29-44. https://brill.com/view/journals/hlj/11/1/article-p29_2.xml

Ong, T. W. S., & Troyer, R. A. (2022). The double-edged sword of Mandarin: Language shift and cultural maintenance among middle-aged Chinese-Malaysians. *Manusya: Journal of Humanities*, *25*(1), 1-20. https://brill.com/view/journals/mnya/25/1/article-p1_009.xml

O'Rourke, P., & Zhou, Q. (2016). Heritage and second language learners: different perspectives on language learning. *International Journal of Bilingual Education and Bilingualism*, *21*(8), 994–1003. https://doi.org/10.1080/13670050.2016.1228598

Polinsky, M., & Kagan, O. (2007). Heritage languages: In the 'wild' and in the classroom. *Language and linguistics compass*, 1(5), 368-395. https://doi.org/10.1111/j.1749-818X.2007.00022.x

Routh, D.; Burgoyne, C. (1998). Being in two minds about a single currency: A UK perspective on the euro. J. Econ. Psychol. 19, 741–754. https://www.sciencedirect.com/science/article/abs/pii/S016748709800035X

Samuel, M., & M. Y. Tee. (2013). Malaysia: Ethnocracy and Education. In Lorraine, P. S. (Ed.), *Education in South-East Asia* (pp.137-155), Bloomsbury Academic.

Samuel, M., Khan, M. H., Ng, L. L., & Cheang, K. W. (2014). Articulation of the medium of instruction politics in the Malaysian Chinese press. *Journal Discourse: Studies in the Cultural Politics of Education,* 35(2), 206-218. https://doi.org/10.1080/01596306.2012.745731

Schatz, R. T., & Lavine, H. (2007). Waving the flag: National symbolism, social identity, and political engagement. *Political Psychology*, *28*(3), 329-355. https://doi.org/10.1111/j.1467-9221.2007.00571.x

Stoessel, S. (2002). Investigating the role of social networks in language maintenance and shift. *International Journal of the Sociology of Language,* 2002(153). https://doi.org/10.1515/ijsl.2002.006

Sua, T. Y., Ngah, K., & Darit, S. M. (2013). Parental choice of schooling, learning processes and inter-ethnic friendship patterns: The case of Malay students in Chinese primary schools in Malaysia. *International Journal of Educational Development*, *33*(4), 325–336. https://doi.org/10.1016/j.ijedudev.2012.09.002

Sua, T.Y., & Santhiram, R. (2017). Race-Based Policies and Practices in Malaysia's Education System. In Samuel, M., Tee, M., & Symaco, L. (Eds), *Education in Malaysia: Developments and challenges* (1st ed., pp.17-32). Springer, Singapore. https://doi.org/10.1007/978-981-10-4427-4_2

Tan, C. B. (1997). Chinese identities in Malaysia. Asian Journal of Social Science, 25(2): 103-116. https://doi.org/10.1163/030382497X00194

Teo, K. S. (2003). The process of assimilation: A socio linguistic approach to the study of the Peranakan Chinese in Kelantan, Malaysia (a preliminary study). *Kuala Lumpur, Malaysia: Universiti Malaya (UM)*, 898-907. http://sealang.net/sala/archives/pdf8/teo1992process.pdf

Von Scheve, C., Kozłowska, M., Ismer, S., & Beyer, M. (2014). National identification: a multidimensional scale based on a three-country study. Berlin Studies on the Sociology of Europe (BSSE), 29(1), 1-32. https://www.ssoar.info/ssoar/bitstream/document/40308/1/ssoar-2014-scheve_et_al-National_identification_a_multidimensional_scale.pdf

Wang, A. P. (2006). Chinese Language Use and Chinese Identity: A Survey Study of Over 400 Chinese Indonesian Students 汉语言使用与华人身份认同——对 400 余名印尼华裔学生的调查研究. *Journal of Fuzhou University (Philosophy and Social Sciences Edition) (04)*,86-90.

Wang, G. W. (1988). The study of Chinese identities in Southeast Asia. In Jennifer, C. & Wang, G. W. (Eds.), *Changing Identities of the Southeast Asian Chinese since World War II* (pp. 1-22). Hong Kong University Press. https://books.google.com.hk/books?id=USbxAQAAQBAJ&dq=Study+of+Chinese+identities+in+Southeast+Asia&lr=&source=gbs_navlinks_s

Wang, G. W. (2001). *Don't Leave Home: Migration and the Chinese.* Times Academic Press.

Wong, K. Z. H., & Tan, Y. Y. (2017). Modernisation and the Construction of Chinese Ethnicity

in Singapore. *Chinese Language and Discourse*, 8(1), 18-50.https://doi.org/10.1075/cld.8.1.02won

Williams, M., Burden, R., & Lanvers, U. (2002). 'French is the Language of Love and Stuff': Student perceptions of issues related to motivation in learning a foreign language. *British Educational Research Journal*, 28(4), 503–528. https://doi.org/10.1080/0141192022000005805

Yao, M. (2017). The Impact of the Evolution of China's Official Language on Overseas Chinese Language Education. *Journal of Overseas Chinese History Studies* (02).64-70. https://kns.cnki.net/kcms2/article/abstract?v=sTAINAsmd8_8XM4qrU-zOPkB75X-xhmSH5cd1kHqHNsTG3zZJB76-4GzQDn4adxYm65fX8jcYsFVO4FJhf9biKtAK0jO7ZCqRUsx4f-dnvEQGt1Tnj7CfzFDlzrFsYER1wR0ki2dvxlnONkM8s-9tRhCoZhWBiGI2TD_N2VW-Nr4BP35KeGsJA==&uniplatform=NZKPT&language=CHS

Yu, H.T. (2024, September 25). The Psychological Structure of Overseas Chinese Sentiments. Towards Their Homeland. *Social Sciences in China.* https://www.cssn.cn/skgz/bwyc/202409/t20240925_5786635.shtml

Zhang, S. F. (2011). The development of mother tongue education among Chinese immigrants in the Philippines: Chinese immigration in the context of ethnic cultural identity [Unpublished PhD thesis]. Fujian Normal University. https: //kns.cnki.net/kcms/detail/detail.aspx? Dbname = CDFD1214 & Filename = 1012266386.nh