

INFLUENCE OF PERSONAL FACTORS IN MANDARIN LANGUAGE LEARNING

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Received: 11 March 2025

Accepted: 29 May 2025

ABSTRACT

Language learning is influenced by both internal and external factors, with personal characteristics playing a crucial role in deciding the success or failure of learning. This study aims to explore the influence of personal, behavioural, and environmental factors on undergraduate language acquisition. The study used a quantitative survey, focusing on four key areas: demographic details, cognitive strategies, metacognitive strategies, and resource management. A total of 156 undergraduates took part in this study. The results reveal that cognitive strategies (such as rehearsal and organization), metacognitive self-regulation, and resource management were closely linked to the improvement of language proficiency. This study emphasizes the importance of integrating various learning strategies into teaching methods and proposes that a strategy-centred personalized teaching approach can significantly improve the effectiveness of language acquisition. Additionally, future research could explore how learning strategies transfer across diverse languages and academic fields.

Keywords: Learning Strategies, Personal Influences, Behavioural Factors, Environmental Issues

1.0 INTRODUCTION

Language learning is well recognized as a complicated process that is affected by various internal and external factors. Globalization has made interactions between people more frequent and has also increased the movement of people. This has raised the importance of language learning, also leading to an increase in related research. It has also indirectly contributed to the development of foreign language teaching, including improvements in teaching methods, learning materials, technological tools, and more. However, students' learning outcomes remain variable, even with the same teacher and materials, different learning results may still emerge.

1.1 Background of Study

Research in applied linguistics and psychology has emphasized the important role of personal factors such as learning motivation, personality traits, cognitive styles, and learning

strategies in language learning. These internal characteristics may be key factors contributing to the differences in learning outcomes among learners, even under the same external conditions.

Therefore, this study derived from Bandura's (1986) Social Cognitive Theory and the learning strategies framework proposed by Wenden and Rubin (1987), aiming to explore how personal, behavioural, and environmental issues influence language learning, and how the interaction among these factors shapes the language learning process.

Through this study, we hope to help educators gain a deeper understanding of their learners and adopt more learner-centred teaching approaches. In addition, curriculum developers will be able to develop more personalized learning materials and provide researchers with a more comprehensive understanding of the Mandarin learning process.

1.2 Statement of Problem

Language acquisition involves complicated processes at various levels and requires the support of teaching strategies, suitable teaching materials and technological resources. These processes span affective, cognitive and behavioural aspects. In turn, the ability to implement sustainable learning methods is important in the learning process. The ability to communicate effectively with native speakers is the ideal condition for language acquisition.

Since the emergence of online learning during the pandemic plus the subsequent development of hybrid learning models that blend online and offline instruction, language teaching tools have experienced continuous enhancement and refinement. Educators have been diligently creating more personalized and customized instructional materials. The involvement in numerous workshops and the unrestricted exchange of information online have resulted in an increase of innovative and captivating pedagogical methods. Nonetheless, the proficiency levels among learners remain inconsistent, presenting a challenge that both language instruction and acquisition have faced, despite the optimization of external factors over time. Students' performance levels will differ even under identical learning conditions and environments. Numerous factors associated with learners' personalities are thought to influence these variations, with some being significant and others less so. Andi (2022) research indicates that personality factors influence the selection of language learning strategies for the development of speaking skills. Lin (2017) examined correlations between the Chinese language and personality traits. Turg'unboyeva (2022) has examined personality factors as significant variables in second language acquisition from an Islamic perspective.

The purpose of this article is to examine how an individual's personality traits affect their ability to acquire a new language. Researchers are striving to enhance the efficacy and efficiency of learning by creating more individualized recommendations tailored to the unique characteristics of each learner. This will enable learner to surmount challenges encountered during the learning process and ultimately attain academic success. Furthermore, the researcher anticipate that language educators will leverage this research to offer more refined recommendations for expanding their perspectives and fostering innovative methodologies in language instruction. This will subsequently result in the improvement of language proficiency.

1.3 Objective and Research Questions

This study aims to investigate learners' perceptions regarding their use of learning strategies. Specifically, the study seeks to answer the following questions:

- To what extent do learners utilize behaviour in their Mandarin language learning?
- To what extent do learners perceive personal factors in their Mandarin language learning?
- To what extent do learners perceive the environmental factors in their Mandarin

- language learning?
- Is there a relationship among all the Mandarin learning strategies?

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Social Cognitive Learning Theory

Social Cognitive Theory, proposed by Stanford University psychologist Bandura in the 1970s, emphasizes the interconnected relationship between behaviour, environment, and personal or cognitive factors through the concept of "triadic reciprocal determinism" (Santrock, 2009), and has become a fundamental framework widely applied in education and various other fields.

Scholars in the field of Social Cognitive Learning Theory (SCLT), such as Betz (2007) and Green & Peil (2009), endorse Bandura's view. They describe human behaviour as being shaped by the continuous and reciprocal interplay between personal and cognitive factors, behaviour, and environmental issues. This perspective highlights the complexity and fluidity of learning and development within educational contexts.

Cognitive factors reflect how learners perceive their success or failure in learning. Their behaviour is shaped by the environment. Positive or negative outcomes depend on the quality of the environment. In brief, a learner's behaviour results from the interaction between their environment and cognitive perception of the learning process.

Yi (2020) stressed that learners' writing behaviour is influenced by classroom teaching and self-perception, which aligns with the impact of students' writing self-efficacy on their writing performance. Writing is seen as a challenging task, often due to a lack of confidence from negative classroom experiences. The study shows that writing self-efficacy is linked to accuracy, fluency, and complexity. A positive classroom environment and effective feedback can boost self-efficacy, reduce writing anxiety, and thus improve overall performance.

Social Cognitive Theory views learning as an active, reciprocal process between the learner, their thoughts, and the environment. It emphasizes on creating a supportive environment that boost self-confidence and personal agency, while developing self-regulating strategies. By addressing cognitive and environmental factors, , educators can help students build the self-efficacy they need to succeed.

2.1.2 Learning Strategies

Research on learning strategies cannot be conducted without mentioning Rubin's contribution. Rubin (1981) proposed three fundamental strategies that aid in language acquisition. The first being learning strategies, which comprise of cognitive and metacognitive strategies. Cognitive strategies involve processes like analysing, transforming, or synthesizing learning materials, while metacognitive strategies focus on regulation and self-directed learning, such as planning, goal setting, and self-management. Both strategies directly contribute to language learning. The second type is communication strategies, which have a less direct impact on learning but important to help learners overcome communication barriers. The third type is social strategies, which learners use when interacting with others, applying and practicing their knowledge in collaborative contexts.

Oxford (1990) argues that language acquisition is supported by six key strategies used by learners. These strategies include cognitive, metacognitive, memory, compensatory, affective, and social approaches.

It is generally believed that high-achieving students are adept at employing metacognitive strategies, cognitive strategies, and socio-affective strategies (Cohen,1998; O'Malley & Chamot, 1990; Wenden,1998). Although scholars have conducted some research on these strategies, studies focusing on the strategies of Chinese language learners in Malaysia remain insufficient.

Syed Abdul Rahman et al. (2015) conducted a study examining the impact of language learning strategies on reading comprehension among learners. It also examined the perceived reading difficulties faced by adult learners. The findings revealed that strategies such as cognitive, metacognitive, and social strategies significantly impact learners' reading comprehension.

According to Rahmat (2018), knowledge of educational psychology can contribute to language studies in many ways. She emphasizes how theories from educational psychology can help readers understand the ways learning strategies affect reading ability. Language learning strategies employed by learners can either facilitate or hinder learning.

In conclusion, learning strategies are dynamic and adaptive tools that enable learners to navigate the complexities of language learning. Each person is a different individual, and the effectiveness of strategies lies in their targeted application in the individual learning context. Combining cognitive, metacognitive and social dimensions ensures that learners can approach language learning with confidence, flexibility and resilience.

2.2 Past Studies

In the past decade, multiple studies have explored the learning strategy model of Mandarin as a foreign language.

A study investigating the use of language learning strategies among Mandarin as a foreign language (MFL) learners in a public university in Malaysia was conducted by Ghee et al. (2010). The study focuses on differences between genders and academic levels. A total of 165 diploma and degree students from eight Mandarin classes participated in the study and completed a questionnaire based on Oxford(1990) Strategy Inventory for Language Learning (SILL version 7). The data were analysed by frequency counts, means, standard deviations, independent sample T-tests, and analysis of variance, and discovered that female students used more learning strategies than male students. Additionally, there were notable differences between high-performing and low-performing learners, especially in the use of compensatory strategies. These findings are consistent with previous studies showing that females use strategies more and that there is a relationship between strategy use and academic level. This study emphasizes the different preferences for language learning strategies across gender and academic level groups, offering insights into how learners adopt strategies to fulfil academic demands.

Chin (2021) conducted a study on 171 Level 3 Mandarin learners at Universiti Sains Islam Malaysia (USIM), investigating their vocabulary size and use of vocabulary learning strategies (VLS). The study used a questionnaire to examine learners' use of learning strategies and to identify commonly used techniques within each strategy category. The findings showed that cognitive strategies (such as note-taking, using vocabulary lists, and repetitive writing) were the most frequently used. In addition, learners also employed memory, determination, and social strategies to tackle challenges like homophones and complex character structures. However, metacognitive strategies were the least utilized and were mainly applied for exam preparation rather than long-term language development.

2.3 Conceptual Framework

One key element that impacts successful learning is the learner's personal characteristics. Personal factors include learners' beliefs, self-perception, goals and their metacognitive skills. In learning, learners use a combination of strategies such as personal factors, learners' behaviour and their environment to gain success in learning. The use of strategies helps learners manipulate learning materials to facilitate their learning (Rahmat, 2018). This study (figure 1) is rooted from Bandura's (1986) social cognitive theory and Wenden and Rubin (1987) learning strategies. To begin with, learners' personal factors play an important role as a strategy. This is done by using metacognitive self-regulation strategies. Next, learners' behaviour is an important role to make learning succeed. Behaviour is seen using cognitive components. Finally, the environment play a vital role as a learning strategy. This is done through resource management.

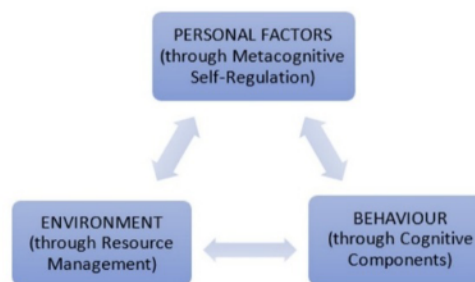


Fig. 1 Conceptual Framework of the Study The Impact of Personal Factors on Language Learning (Bandura, 1986; Wenden & Rubin, 1987)

3.0 METHODOLOGY

This quantitative study explores the motivational factors of language learning among undergraduate students, with 156 participants selected through purposive sampling to respond to the survey. This approach allows for the efficient and in-depth collection of data relevant to exploring the learning strategies that influence students' Mandarin language learning (Thomas, 2022). The instrument utilized was a 5-point Likert scale survey, grounded in the work of Bandura (1986) and Wenden and Rubin (1987), designed to assess the variables shown in Table 1 below.

Table 1. Survey Distribution (Bandura, A. 1986, Wenden A and Rubin J 1987)

	COMPONENT IN SOSIAL COGNITIVE THEORY	STRATEGY (KEYWORD)		SUB-STRATEGY			
B	BEHAVIOURAL	COGNITIVE COMPONENTS	(a)	Rehearsal	4	19	.917
			(b)	Organization	4		
			(c)	Elaboration	6		
			(d)	Critical Thinking	5		
C	PERSONAL	METACOGNITIVE SELF-REGULATION				11	.848
D	ENVIRONMENT	RESOURCE MANAGEMENT	(a)	Environment Management	5	11	.726
			(b)	Effect Management	4		
			(c)	Help-Seeking	2		
						41	.939

Table 1 also presents the reliability of the survey. The analysis reveals a Cronbach's alpha of .917 for Behavioural components, .848 for Personal components, and .726 for Environmental components. The overall reliability for all 41 items is .939, indicating strong

reliability of the chosen instrument. Additional analysis was performed using SPSS to provide findings that address the research questions of this study.

4.0 FINDINGS

4.1 Demographic Profile

This section presents the demographic profile of the participants, including gender, hometown, discipline, study levels, Mandarin proficiency levels, and their Mandarin scores from the last semester.

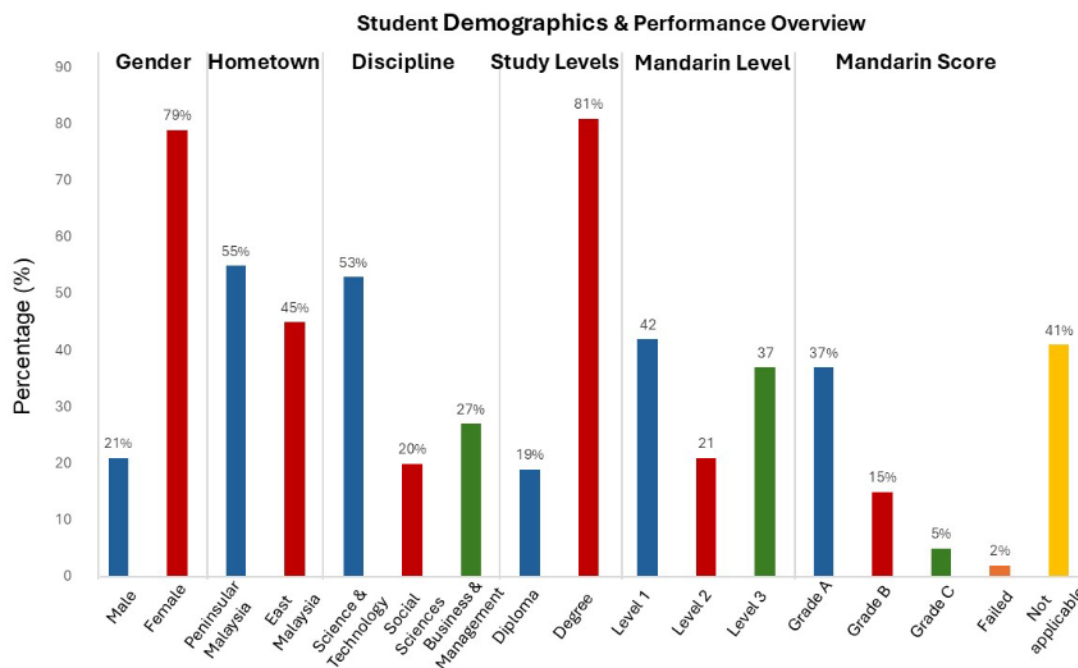


Fig. 1. Percentage for Q1- Gender

The study involved a diverse group of participants, with 21% male and 79% female, highlighting a higher proportion of female participants. Geographically, 55% were from Peninsular Malaysia and 45% from East Malaysia, indicating a balanced national representation. Academically, participants came from various disciplines: 53% from Science & Technology, 27% from Business & Management, and 20% from Social Sciences, reflecting a well-rounded mix of science and non-science backgrounds. In terms of study level, 19% were diploma students and 81% were pursuing degrees.

Regarding their Mandarin learning background, the university categorizes Mandarin classes into three levels: 42% of the participants were beginners (Level 1), 21% intermediate (Level 2), and 37% advanced (Level 3), with the largest group being beginners. Based on their previous academic records, 37% achieved Grade A, 15% obtained Grade B, and only 7% scored below a C, indicating generally strong academic performance. Additionally, 41% were taking Mandarin for the first time, with no previous Mandarin scores, further emphasizing the presence of many new learners in the study.

4.2 Behaviour

This section presents data to examine how learners use behaviour as a strategy in their learning, as addressed in Research Question 1. In this study, it is assessed through cognitive components such as (i) rehearsal, (ii) organization, (iii) elaboration and (iv) critical thinking.

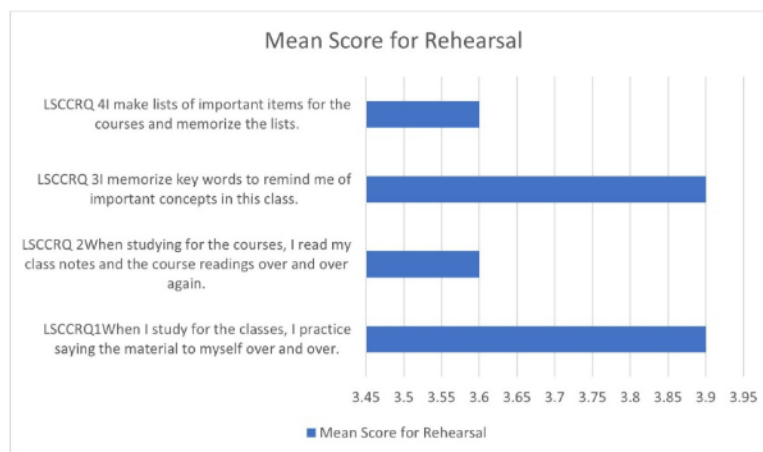


Fig. 2. Mean for (i) Rehearsal (4 items)

Rehearsal is a crucial component of the learning process, particularly in language acquisition. It serves as a method to consolidate foundational information before the learner progresses to new knowledge. Figure 2 showed that learners exhibit a greater inclination towards practicing by repetitively verbalizing the material and memorizing key terms prior to the commencement of a new class. (Q1 and Q3 = 3.9) Repeated reading of class notes and course materials, along with the creation of lists of significant items for the courses, is somewhat less favoured (Q2 and Q4 = 3.6) than the strategies of memorization and list-making. No matter how, it is proved that with or without rehearsal before class or throughout learning processes would then bring to a significant difference in mandarin language learning.



Fig. 3. Mean for (ii) Organization (4 items)

Figure 3 indicates that reviewing readings and class notes is a prevalent method for learners to identify key concepts. This item possesses the highest mean, which is 3.9. The creation of charts, diagrams, or tables to assist in organizing course materials is less favoured by students, as the time spent on drawing these visuals during the learning process does not significantly aid in the organization of course materials within this program. Both outlining the reading materials to help organize thought is a famous tactic among learners as it has a mean score of 3.6. Things are the same when it comes to outlining important concepts as the mean of Q4 is 3.6. The results show that the majority of students are less utilizing smart charts for material organization in the program as they are not visual learners but more to read/write learners also known as verbal-linguistic learners. They will continue to favour the method of highlighting essential materials or key concepts because they are able to absorb information quickly through reading and taking extensive notes.

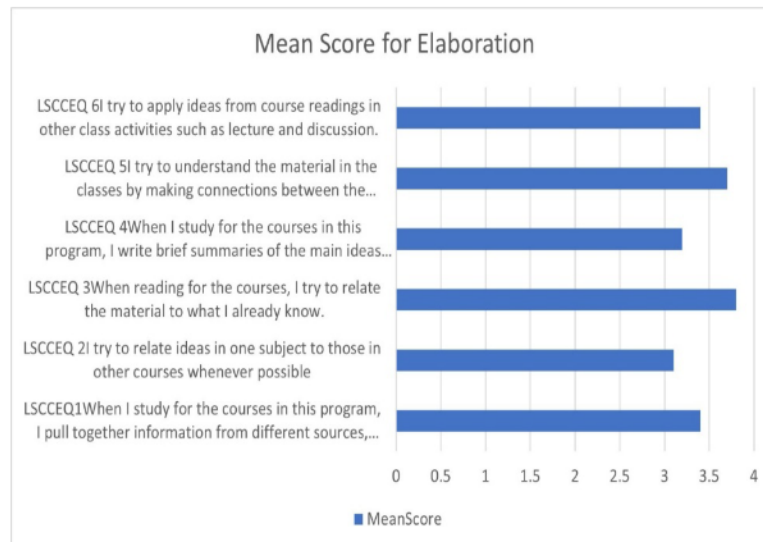


Fig. 4. Mean for (iii) Elaboration (6 items)

Relate learning materials to the prior knowledge in helping elaboration is the famous way chosen (Q3=3.8). Furthermore, numerous learners will establish linking between the readings and the concepts from the lectures during the elaboration process. The mean for Q5 (Q5=3.7) is slightly lower than Q3 (Q3=3.8). Students will select a method for applying concepts from course readings to other class activities, as well as a method for synthesising information from various sources, given that the average score for both methods is 3.4. Connect concepts from one subject to those in other disciplines and compose concise synopses of the key concepts, which are less commonly utilised for the elaboration skill in language acquisition. The mean score for Q4 is 3.2. The mean score for Q2 is 3.1.

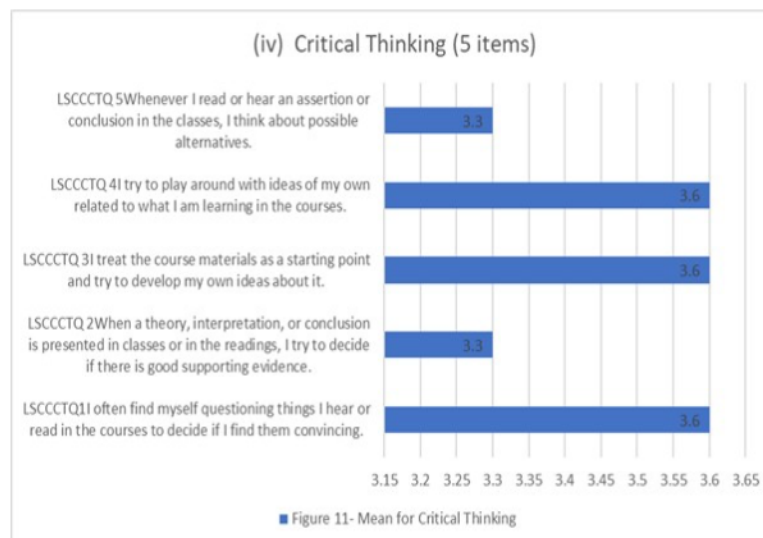


Fig. 5. Mean for (iv) Critical Thinking (5 items)

Effective learning strategies enhance students' critical thinking skills. The data appears more normalized in comparison to the above charts. Figure 5 shows that students possess a high level of critical thinking skills when confronted with what they have learnt in the course and are able to ensure that what they have learnt is persuasive (Q1=3.6). When confronted with theories, explanations, or conclusions presented in the course or reading materials, most students try to determine if they are well supported by evidence (Q2=3.3). Students are able to develop their own ideas from the materials and learning content and even try to come up with their own ideas (Q3, Q4=3.6). However, the level of development of students' critical thinking when considering possible alternatives could be enhanced (Q5=3.3). In summary,

although students demonstrated some critical thinking skills during the course, there is still room for improvement in searching for evidence and considering alternatives, which can be strengthened through more systematic learning strategies in the future.

4.3 Personal factors

This section presents data to examine how learners perceive personal factors as a strategy in their learning, as outlined in Research Question 2. In the context of this study, this is measured by metacognitive self-regulation.

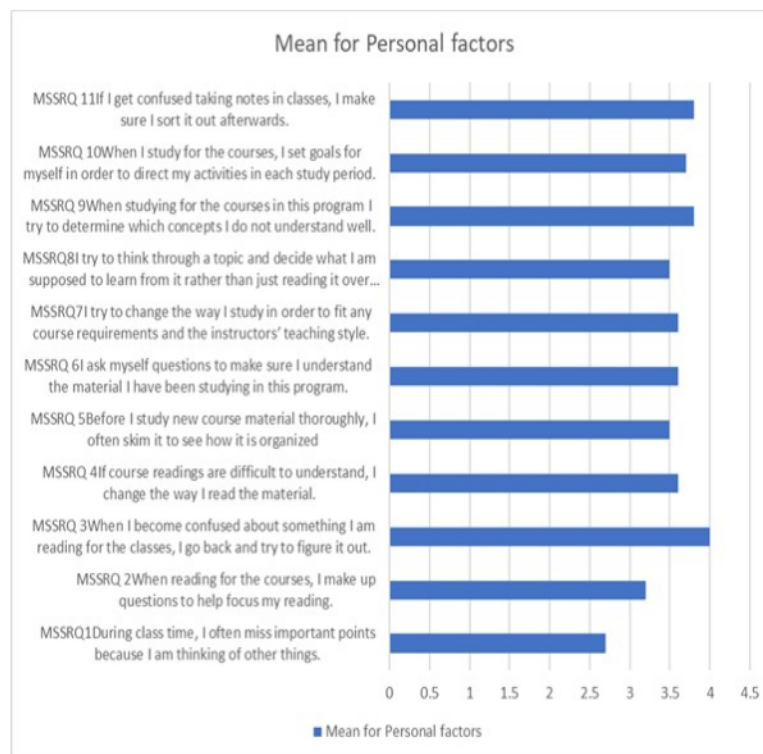


Fig. 6. Mean for Personal factors

Figure 6 presents data on personal factors as learning strategies, enabling researchers to evaluate learners' metacognitive self-regulation, which reflects their ability to manage their thinking and learning processes. The results indicate that learners' mean scores vary significantly, ranging from 2.7 to 4.

A key concern is learners missing important points in class due to distractions (Q1 = 2.7), indicating insufficient focus. Additionally, some learners struggle to use questioning effectively to enhance reading concentration (Q2 = 3.2). However, learners generally show strong self-regulation when facing difficulties, adapting reading strategies to understand challenging materials (Q3 = 4, Q4 = 3.6). They also tend to preview learning materials (Q5 = 3.5) and ask themselves questions (Q6 = 3.6) to aid understanding, showcasing strong self-monitoring skills.

Learners adapt their study approaches based on course demands and teaching styles (Q7 = 3.6), showing adaptability. They focus on understanding key themes rather than rote repetition (Q8 = 3.5), identify unclear concepts (Q9 = 3.8), and set study goals to improve efficiency (Q10 = 3.7). After class, they resolve confusion by organizing notes (Q11 = 3.8), indicating strong responsibility. In summary, learners demonstrate effective self-regulation in reviewing content, goal-setting, and strategy adjustments, but classroom distraction remains a critical area for improvement.

4.4 Environment

This section presents data to examine how learners perceive the environment as a strategy in their learning, as addressed in Research Question 3. In this study, resource management is assessed through factors such as (i) environment management, (ii) effort management, and (iii) help-seeking.

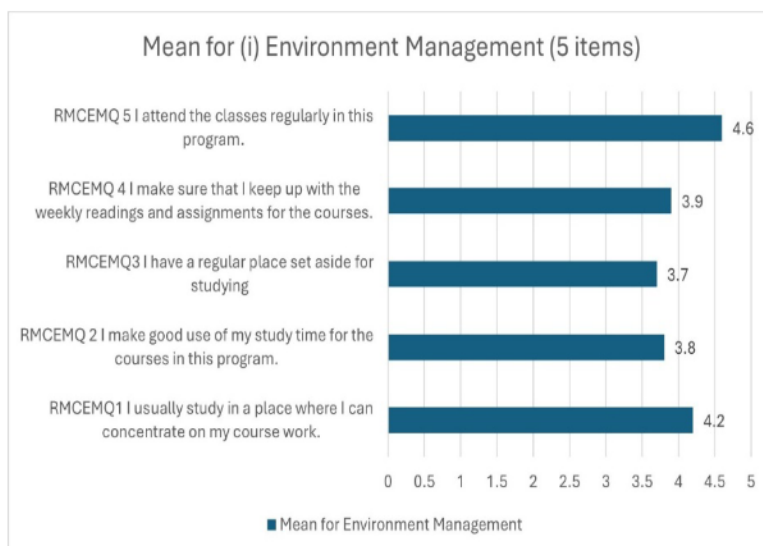


Fig. 7. Mean for (i) Environment Management (5 items)

Figure 7 presents the mean scores for 5 items of “environment management” within the resource management component. The highest score, 4.4, was recorded for the statement, “I attend the classes regularly”, followed by 4.2 with the statement “I usually study in a place where I can concentrate on my coursework”. The item with the lowest mean score, 3.7, represents participants set aside a regular place for studying. In summary, data shows that learners understand the significance of environment management, to support them in language learning process.

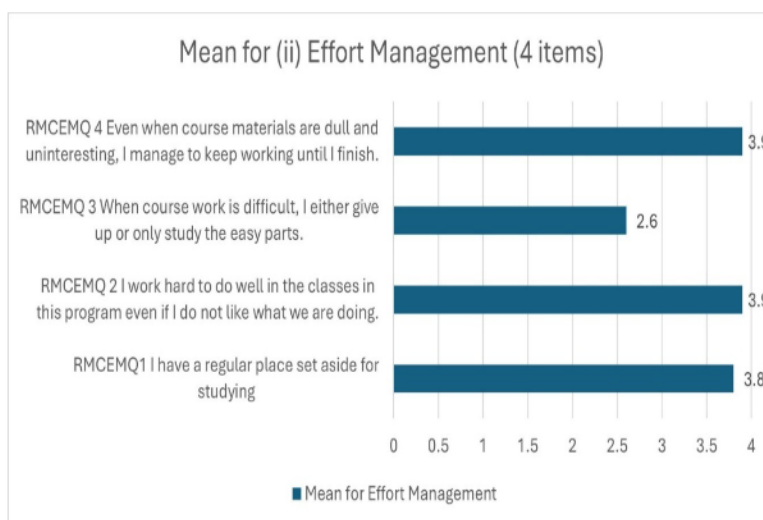


Fig. 8. Mean for (ii) Effort Management (4 items)

Figure 8 shows four items are included under “Effort Management” category and intriguingly, three items (Q1, Q2 and Q4) recorded the similar mean scores which are 3.8 (Q1) and 3.9 (Q2 & Q4). Item 1 touches on having a regular studying environment, Item 2 is on

working hard despite having less interest in the courses and Item 4 is similar with Item 3 where learners managed to keep working to finish the course regardless of having less interest. The lowest mean score recorded is 2.6 with the statement “When course work is difficult, I either give up or only study the easy parts”. In summary, learners show strong intension and effort in their learning, unlikely give up regardless of less interest or difficulties.

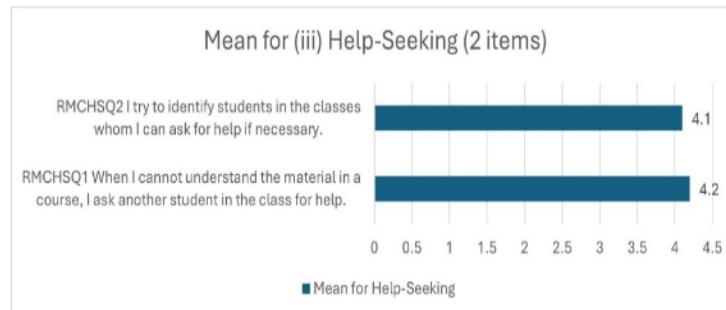


Fig. 9. Mean for (iii) Help-Seeking (2 items)

As shown in figure 9, there are two data included under the category of “Help-Seeking”, which present a similar mean score of 4.2 and 4.1. Data shows learners strongly agreed that whenever they are in need of assistance to understand classroom materials, they will reach out for support with their peers (M=4.2), while they also preferred towards identifying peers who are able to assist them (M=4.1). In summary, learners show strong intention of help-seeking, when they face challenges in course learning, especially in reaching out with their peers.

4.5 The Relationships Among All Mandarin Learning Strategies

This section presents data to examine the relationship between all learning strategies, as outlined in Research Question 4. The data were analysed using SPSS for correlation analysis, and the results are stated separately in Tables 2, 3, and 4 below.

Table 2. Correlation between Personal factors and Behaviour

		Correlations	
		PERSONAL	BEHAVIOURAL
PERSONAL	Pearson Correlation	1	.766**
	Sig. (2-tailed)		.000
	N	156	156
BEHAVIOURAL	Pearson Correlation	.766**	1
	Sig. (2-tailed)	.000	
	N	156	156

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

Table 2 indicates a significant correlation between personal and behaviour factors. The correlation analysis reveals a strong, statistically significant positive relationship ($r = .766$, $p < .001$), as values above 0.5 are considered strong according to Jackson (2015). Therefore, the results suggest a strong positive relationship between personal factors and behaviour.

Table 3. Correlation between Behaviour and Environment

		Correlations	
		BEHAVIOURAL	ENVIRONMENT
BEHAVIOURAL	Pearson Correlation	1	.615**
	Sig. (2-tailed)		.000
	N	156	156
ENVIRONMENT	Pearson Correlation	.615**	1
	Sig. (2-tailed)	.000	
	N	156	156

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

Table 3 reveals a significant correlation between behaviour and environmental factors. The correlation analysis shows a strong positive and statistically significant relationship ($r = .615$, $p < .001$), as values above 0.5 are considered strong according to Jackson (2015). Therefore, the results suggest a strong positive relationship between behaviour and environment issues.

Table 4. Correlation between Environment and Personal factors

		Correlations	
		ENVIRONMENT	PERSONAL
ENVIRONMENT	Pearson Correlation	1	.622**
	Sig. (2-tailed)		.000
	N	156	156
PERSONAL	Pearson Correlation	.622**	1
	Sig. (2-tailed)	.000	
	N	156	156

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

Table 4 shows a significant correlation between environmental and personal factors. . The correlation analysis shows a strong positive relationship ($r = .622$, $p < .001$), as values above 0.5 are considered strong according to Jackson (2015). Therefore, the results suggest a strong positive relationship between environmental and personal factors.

5.0 CONCLUSION

5.1 Summary of Findings and Discussions

In terms of behavioural factors, learners were found to employ a range of cognitive strategies, including rehearsal, organization, elaboration, and critical thinking. The results indicate that rehearsal strategies, such as memorization and repetition, play a key role in reinforcing foundational knowledge, particularly in language learning. For organizational strategies, students tend to review text-based course materials and notes rather than use visual aids. While elaboration strategies (such as connecting new information to prior knowledge) are used, students show limited application of these strategies across disciplines. Critical thinking appears to be a moderately developed skill, with students showing room for growth in evaluating evidence and considering alternative perspectives. These findings are consistent with the study by Fakhrudin et al. (2024) on Malaysian undergraduates learning English. Despite differences in the target language, the research suggests that cognitive strategies used by university students in language learning follow similar patterns across different contexts.

The results show that personal factors, especially self-regulation, play a crucial role in how students learn. Many students can adjust their reading strategies and set goals effectively. However, they often struggle to stay focused in class, particularly during lectures. Students may need to adjust their learning strategies to better manage distractions and enhance their concentration.

Learners recognize that a conducive environment supports effective learning. They tend to attend classes regularly and prefer to study in places where they can focus. However, many students do not have a consistent study space. Students show a certain level of perseverance in their studies. Despite the material being boring or difficult, they are still willing to continue learning. When encountering difficulties, they are also proactive in seeking help from their peers.

The results of the study indicate strong correlations between various learning strategies, highlighting their combined impact on language proficiency. Metacognitive self-regulation and cognitive strategies exhibit the most substantial positive relationship, suggesting that students who engage in planning, monitoring, and evaluating their learning processes tend to show enhanced cognitive involvement and improved language performance. Furthermore, efficient resource management plays an essential role in supporting cognitive learning efforts. These findings suggest that the inclusion of diverse learning strategies in educational curricula can significantly boost students' engagement and overall effectiveness in learning Mandarin.

The overall findings of this study align with the research conducted by Fakhrudin et al. (2024), who utilized a quantitative survey method to examine the learning strategies of 221 participants from various faculties, focusing on Malaysian undergraduates learning the English language.

5.2 Pedagogical Implications and Suggestions for Future Research

The findings show that all Mandarin learning strategies having high mean scores, indicating that students are effectively utilizing these strategies in their learning processes. Based on these results, teachers might consider offering pre-class assignments that match students' learning patterns. Teachers can try to design engaging classroom activities and games to help students stay focused and reduce the problem of distraction. In the classroom, more group activities can be incorporated to encourage interaction among learners, as research shows that students generally tend to seek help from their peers.

In addition, future studies could explore whether the learning strategies commonly used by Malaysian students when learning Mandarin are transferable to other language learning or subjects. It would also be worth examining whether students who perform well in one language are able to apply those same strategies when learning additional languages.

Another interesting avenue for future research would be to explore the relationship between academic performance and the use of learning strategies. Given that the participants in this study generally exhibited strong academic results, further studies could investigate whether high-achieving language learners share common learning strategy traits. This would provide valuable insights into the potential strategies employed by successful language learners and could help identify best practices for enhancing language learning outcomes.

CO-AUTHOR CONTRIBUTION

The authors affirmed that there is no conflict of interest in this article. Author1 carried out the fieldwork, prepared the framework and overlook the write-up of the whole article. Author3 wrote the literature review and search for future research suggestion. Autor4 done the research methodology and did the data entry. Author5 carried out the statistical analysis and interpretation of the results.

ACKNOWLEDGEMENTS

The completion of this research paper would not have been possible without the support and guidance of Professor Dr Noor Hanim Rahmat. Her dedication and overwhelming attitude towards helping 5 of us is solely responsible for completing this research paper. The encouragement and insightful feedback were instrumental in accomplishing this task.

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