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Mandarin Pronunciation Learning Strategies of MFL Learners in Malaysia

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Abstract

Pronunciation is the fundamental step in learning a second language (L2) or a foreign language (FL). This is a crucial step that cannot be excluded from the process of L2 or FL teaching and learning. Apart from that, pronunciation is not only an indicator to measure learners' acquisition of a second language, but also a tool to ensure the effectiveness of communication between the speaker and listener. However, pronunciation instruction has been absent from second language classrooms for a long period, because it has long been believed that pronunciation is not crucial and can be learned by students. Consequently, learners have to pick up pronunciation learning on their own in order to achieve the learning goal. The literature review showed that a large number of existing studies revealed that MFL learners utilized MPLS, however, MPLS utilized by non-native learners of Mandarin in Malaysia are previously unstudied. Thus, this quantitative study seeks to explore the Mandarin language learning strategies (MPLS) employed by Mandarin as a foreign language (MFL) learner in Malaysia. A questionnaire namely "Strategy Inventory for Mandarin Pronunciation Learning" that was designed based on taxonomies presented by Oxford (1990); Peterson (2000) was used as the main instrument in this study. 151 students from Universiti Teknologi MARA (UiTM), Rembau campus who enrolled in a Mandarin language course were invited to participate in this study. The findings revealed that the level of the use of MPLS among MFL learners is at moderate level which indicated that MFL learners in Malaysia were opportunely aware of the use of pronunciation learning strategies while learning Mandarin pronunciation. Social strategies were the most frequently used strategies as compared to other MPLS. It was followed by cognitive strategies, affective strategies, memory strategies, metacognitive strategies, and compensation strategies. Findings from this study can help MFL instructors better understand the need to close the gap between their students' selection of teaching approaches and language learning strategies. However, there were several limitations need a greater exploration in future research, such as factors affecting the selection of MPLS, individual differences and so on.

Keywords: Mandarin Pronunciation, Learning Strategies, Mfl Learners, Foreign Language Learning

Introduction

Learning a foreign language is an important commodity nowadays. Several foreign languages such as Spanish, French, German, Mandarin etc. have been offered in the university in order to help learners to become proficient in a foreign language. Because of the rapid economic development of China, most of the people showed their desire to learn Mandarin as a foreign language. However, majority of past studies showed that learning Mandarin is a difficult task even among the Chinese community (Ting & Sunarti, 2022; Ting et al., 2020; Ting et al., 2021). The major arduous task in learning Mandarin included Chinese character and pronunciation.

Mandarin is one of the well-known tonal languages in the world. According to Ting and Jacqueline (2018), Mandarin pronunciation is considered as an arduous task for non-native Mandarin learners in Malaysia. Mandarin learners, especially those who acquire a non-tonal language as their mother tongue (Malay or English language) may face difficulties in learning Mandarin pronunciation. The difficulties in learning Mandarin pronunciation could extinguish learners' aspiring to learn Mandarin. Nevertheless, some scholars (Eskstein, 2007; Vitanova & Miller, 2002; Derwing & Rossiter, 2001; Celce-Murcia, 1996) claimed that pronunciation is an essential element in learning a foreign/second language which cannot be excluded from foreign/second language learning.

Language learning strategies defined as "specific actions taken by learners to make learning easier, faster, more enjoyable, more self-directed, more efficient and more transferable to a new situation" (Oxford, 1990). Much of the literature on language learning strategies pay particular attention to the field of learning English as a second language (ESL) or English as a foreign language (EFL) and other foreign language (German, French, Spanish), yet pronunciation learning strategies (PLS) has received less attention, including Mandarin (Ibrahim-Bell & Lee, 2009; Tan et al., 2010). However, exploring the studies on the regular pattern of language learning strategies has important implications for classroom practice. Thus, the primary goal of the research study, in relation to the demands of the students, is to support learners' autonomy by assisting students in becoming aware of the types of tactics they actively adopt in learning pronunciation.

Statement of Problem

Pronunciation is perceived as a fundamental element in foreign/second language acquisition (Eskstein, 2007). Thus, pronunciation cannot be ignored in a foreign language learning as it helps learners to be proficient in communication of a foreign language. Nonetheless, pronunciation is often at a low level of emphasis in foreign language teaching and learning due to the limited class hours. As a result, learners have to come up with a way of learning pronunciation in order to improve their performance in pronunciation. However, the studies exploring how students employ learning strategies in pronunciation was limited. Since language learning strategies and pronunciation learning are two major fields in foreign/second language learning studies, thus, it is essential to conduct more studies on these topics in order to serve as a guide for language instructors to determine the PLS used by students to tackle the difficulties in their learning.

Research Objectives and Research Questions

This study is proposed with the aim to determine the pronunciation learning strategies employed by non-native Mandarin learners and further explore the most and least frequently used pronunciation learning strategies by non-native Mandarin learners. This study addressed several research questions as following:

- a) Do MFL learners use learning strategies while learning Mandarin pronunciation?
- b) What kind of Mandarin pronunciation learning strategies (MPLS) are used frequently by MFL learners?

Literature Review

This section reviews the key literature connected with pronunciation learning strategies. It began with the definition of pronunciation learning strategies (PLS) and followed by past studies related to PLS and the conceptual framework of this study.

Pronunciation learning strategies (PLS)

Based on the pioneering work of Peterson (2000), PLS is a specific step taken by learners to enhance their performance in pronunciation. A qualitative method was used in Peterson's (2000) study on PLS. 11 learners of Spanish from The Ohio State University were taking part in the PLS study. They were then divided into two groups. Six participants participated in the self-report diary, while another five participants participated in the interview session. Based on the taxonomy presented by Oxford (1990), Peterson's study reported 12 strategies which are shown in Table 1.

Table 1

Taxonomy of Pronunciation Learning strategies based on Oxford (1990)

Oxford's taxonomy of strategy group	Pronunciation Learning Strategies	
Direct strategies	Memory strategies	Representing sounds in memory
	Cognitive strategies	Practicing naturalistically
		Formally practicing with sounds
		Analysing the sound system
Compensation strategies	Using proximal articulations	
Indirect strategies	Metacognitive strategies	Finding out about TL pronunciation
		Setting goals and objectives
		Planning for a language task
		Self-evaluating
	Affective strategies	Using humor to lower anxiety
	Social strategies	Asking for help
Cooperating with peers		

(Source: Peterson, 2000)

A study by Eskstein (2007) which involved 183 adult ESL learners in an Intensive English Program found that strong pronunciation learners used PLS frequently as compared to poorer pronunciation learners. From the findings of Eskstein's (2007) study, a different taxonomy of PLS has been proposed. Referring to the study done by Kolb (1984); Eskstein (2007) classified PLS into input/ practice, noticing/feedback, hypothesis forming, and hypothesis testing. strategies, practice strategies, attention, and feedback strategies. This present study utilized

the taxonomies presented by (Oxford, 1990; Peterson, 2000). The basis of choosing these taxonomies were discussed in 2.3.

Past studies on Mandarin pronunciation learning strategies (MPLS)

Past studies have been carried out to examine Mandarin Pronunciation Learning Strategies (MPLS). According to the search result from CNKI database, Liu (2008) is the first to carry out the research on MPLS through a questionnaire and open-ended question. Liu's study on MPLS among 114 beginner learners of Mandarin in China found that the most frequently used MPLS are social strategies and cognitive strategies. It is followed by metacognitive strategies and memory strategies. Meanwhile, the least frequent use of MPLS is affective strategies and compensation strategies.

Another study of MPLS by Liu (2009) which involved 56 foreign students at the intermediate level of Mandarin at East China Normal University (ECNU) revealed that affective strategies is the most frequently used strategy among respondents. This strategy also has the most impact on the individuals' self-evaluation. Similarly, Cao's (2015) study on 37 American students who participate in the IES Beijing program revealed that the use of MPLS is at a moderate level with a preference towards the use of affective strategies. Cognitive strategies, social strategies and memory strategies seemed to be the frequently used strategy after effective strategies.

In addition, Moon (2012) conducted MPLS study among 90 Korean Mandarin learners from different levels of proficiency through a questionnaire. The findings showed that Korean Mandarin learners tend to use compensation strategies as this strategy ranked highest preference of learners as compared to other strategies. It was followed by affective strategies, metacognitive strategies, cognitive strategies, and social strategies. On the other hand, the most frequently used MPLS employed by Korea advanced level learners of Mandarin are affective strategies and compensation strategies.

In an attempt to explore MPLS of beginner Mandarin learners in Hungarian, Jia (2017) conducted a study on 42 beginner learners of Mandarin at Eötvös Loránd University (ELTE) by employing a mix-method approach (questionnaire and interview). The results revealed that Hungarian learners of Mandarin generally less frequently used MPLS in their learning of pronunciation. Nevertheless, it was also found that cognitive strategies, social strategies, memory strategies are relatively frequently used strategies as compared to other MPLS. The findings also showed that metacognitive strategies, compensation strategies and emotional strategies are relatively least used by Hungarian beginner learners of Mandarin.

Zhang (2019) conducted a study on MPLS in the form of e-questionnaires in Russian. 42 Russian learners of Mandarin involved in Zhang's (2019) study. The result of the study portrayed that majority of Russian learners of Mandarin are at a moderate level of usage on PLS in their Mandarin pronunciation learning with a mean score of 3.20 which represent "sometimes strategy use". Social strategies were reported as the most frequently used strategies, while affective strategies were reported as the least frequently used strategies.

In another recent study exploring MPLS, Zhou (2021) conducted a descriptive analysis of 63 Mandarin learners to examine the most and least frequently used of MPLS. Respondents of Zhou's (2021) study were those who majored in Chinese Western translation at Ricardo Palma University. Findings showed that Peruvian learners display a moderate level of use on MPLS. Therefore, it is recommended language instructors are urged to support the use of MPLS among learners in their upcoming instruction. Nonetheless, it can still be found from

the findings, cognitive strategies, metacognitive strategies, and social strategies were the relatively highly used strategies as compared to others MPLS strategies.

To date, aforementioned studies revealed a number of gaps and shortcomings on the studies of pronunciation learning strategies, and more study still needed to establish what pronunciation learning strategies receive the highest preference from learners. Majority of past studies reflected on MPLS employed by Mandarin learner from Korea Moon (2012), United State Cao (2015), Hungarian Jia (2017), Russian Zhang (2019), Peruvian Zhou (2021) and those who studying Mandarin in China (Liu, 2008; Liu, 2009). Furthermore, cognitive strategies and metacognitive strategies were found to be the frequently used strategies as compared to others MPLS. Past studies mentioned above, thus far, MPLS among the non-native learners of Mandarin in Malaysia are previously unstudied. Therefore, to fill the literature gap, it is deemed to identify Malaysia non-native learners' frequent use and least use of MPLS.

Conceptual Framework

The major conceptual framework of this study was constructed on Oxford's (1990) second language learning strategies (SLLs) and Peterson's (2000) pronunciation learning strategies. Both conceptual frameworks were chosen in this study because they were judged to be more consistent with learner strategy usage than other tested models. Oxford's efforts on language learning strategies were the most significant contribution to the idea of language learning strategies in the field of second/ foreign language learning. The two primary categories of language acquisition strategies identified by Oxford (1990) are direct strategies and indirect strategies. Memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, social strategies, and social strategies were the six other groups that language acquisition strategies were split into. Direct strategies include memory strategies, cognitive strategies, and compensation strategies; metacognitive strategies, affective strategies, and social strategies are subgroups of direct strategies.

Peterson (2000) was able to fit almost every pronunciation learning strategy she could find or discover into Oxford's (1990) categorization system. This made Oxford's (1990) taxonomy the system best able to account for learner variability. Peterson's selection of this particular taxonomy seems to be based more on convenience than a solid theoretical grounding. In addition, Oxford's taxonomy had never been applied to categorise pronunciation learning strategies, therefore it's possible that this association is entirely natural. However, Oxford's taxonomy does not essentially coordinate with the learning strategies inherent in pronunciation. Therefore, it is better to employ both conceptual frameworks, to best represent the proposed pronunciation acquisition process thereby allowing us to apply specific strategies to specific areas of pronunciation acquisition.

Methodology

The descriptive quantitative approach was utilized in this study in order to achieve the research objectives of this study. A questionnaire, "Strategy Inventory for Mandarin Pronunciation Learning" based on taxonomies presented by Oxford (1990); Peterson (2000) was used as an instrument to collect the data for this present study. The questionnaire consists of 44 items and it was in the form of five-point Likert scale with the description categories of "1= Never or almost never true of me", "2= Usually not true of me", "3= Somewhat true of me", "4= Usually true of me", "5= Always or almost true of me". Table 2 displayed the main sections in the questionnaire in which section A were made up of

respondents' demographic background, whereas Section B and C were made up of two main MPLS strategies, which are direct strategies and indirect strategies. Direct strategies contained 8-item of memory strategies, 16-item of cognitive strategies, 2-item of compensation strategies. Indirect strategies contained 8-item of metacognitive strategies, 6-item of affective strategies, and 4-item of social strategies.

Table 2

Items distribution in the questionnaires

Section	Strategies		Numbers of items
B	Direct strategies	Memory strategies	8
		Cognitive strategies	16
		Compensation strategies	2
C	Indirect strategies	Metacognitive strategies	8
		Affective strategies	6
		Social strategies	4
Total numbers of items			44

Reliability and validity of the instrument used in this study was confirmed through an analysis of Cronbach's Alpha Coefficient $\alpha = .938$, which indicated that the items in MPLS questionnaire used in this study was highly reliable. Statistical data of this present study was analysed using SPSS version 26.

Table 3

Reliability statistics of the instrument

Cronbach's Alpha Coefficient	Number of items
.938	44

Findings and Discussions

Demographic background of respondents

Participants of this study were made up of 151 degree and diploma students enrolled for Mandarin language classes at Universiti Teknologi MARA (UiTM). They were randomly selected from various faculties such as Faculty of Business Studies and Management, Faculty of Information Management, and School of Communication and Media in UiTM, Negeri Sembilan, Rembau campus. They were asked to rate how frequently they employed PLS under six classification that included memory, cognitive, compensation, metacognitive, affective, and social strategies. Figure X showed that 120 of participants were female, while 31 of participants were male. They ranged in age from 17-year-old to 24-year-old. They were mostly students of Malay ethnicity with 97.4%. 1.3 percent were Iban and Iun Bawang ethnicity respectively.

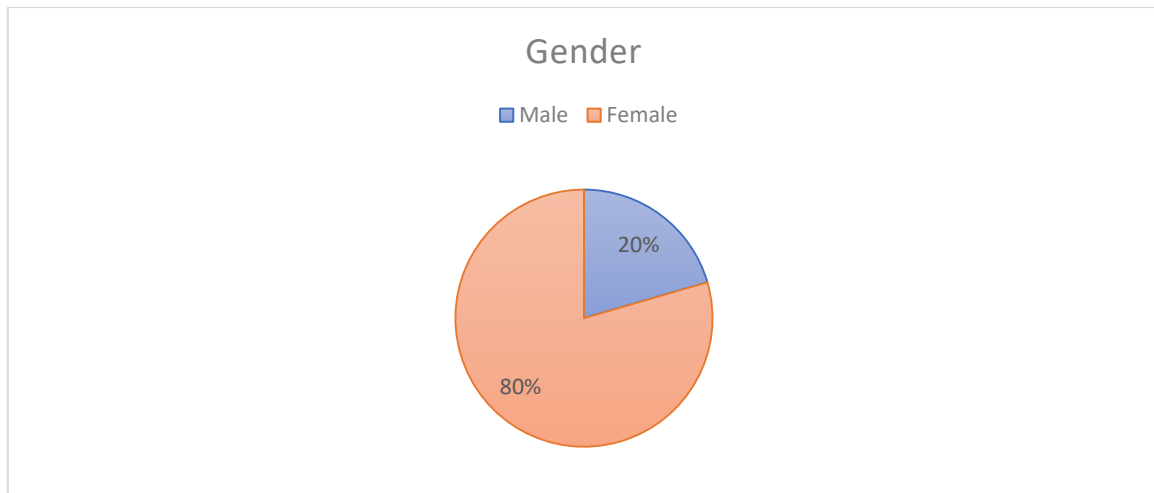


Figure 1- Gender distribution of respondents

Figure 2 demonstrated that 101 of respondents in this study were students enrolled for Introductory Mandarin Language (Level I). The other participants were students enrolled for Introductory Mandarin Language (Level III).

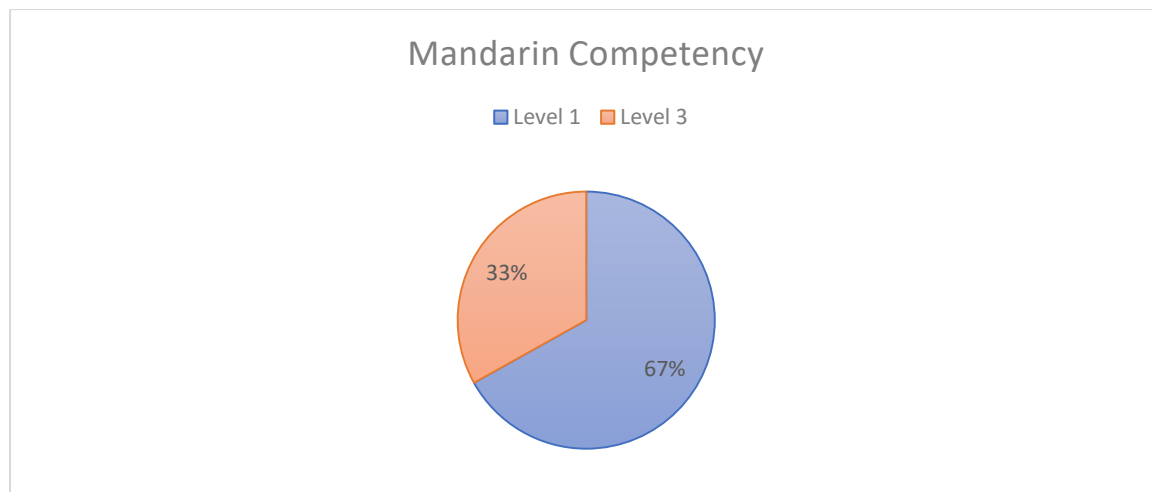


Figure 2- Mandarin competency of respondents

4.2 MPLS utilized by non-native Mandarin learners in Malaysia

As manifested in Figure 3, the most frequently used pronunciation learning strategies among MFL learners are social strategies ($M=3.51$, $SD=.807$) followed by cognitive strategies ($M= 3.42$, $SD=.524$), affective strategies ($M=3.37$, $SD=.687$), memory strategies ($M= 3.03$, $SD=.575$), metacognitive strategies (Mean= 3.03 , $SD=.596$), and compensation strategies ($M= 2.97$, $SD=.764$). According to the Oxford's (1990) classification, learners were categorised as high strategy users if their mean was 3.5 or higher, low strategy users if their mean was below 2.4, and medium strategy users if their mean was between 2.4 and 3.4. As displayed in Figure 3, the use of pronunciation learning strategies by MFL learners was moderate, as the mean of overall strategy use is 3.22.

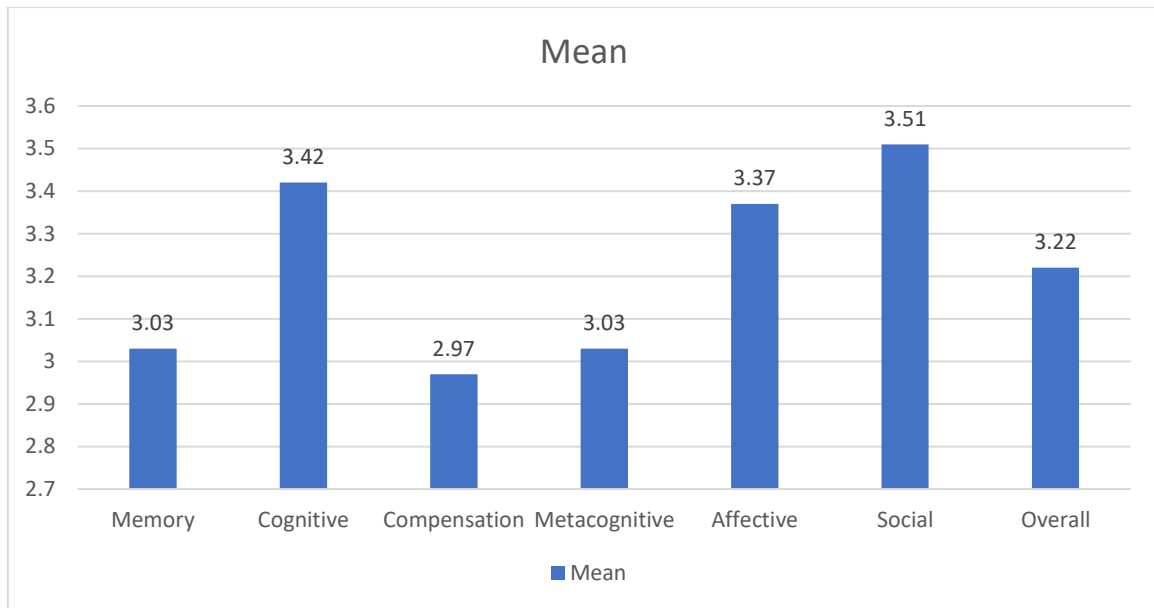


Figure 3- Mean of the major pronunciation learning strategies of MFL learners

Memory Strategies

Figure 4 shows that the most frequently used tactic in the categories of memory strategies is thinking of similar sounds to memorize Mandarin pronunciation (Mean= 3.37, SD= .853). MFL learners also go through their understanding of Mandarin pronunciation (Mean= 3.31, SD= .857) and duplicate pinyin to recall the pronunciation of Mandarin characters and words (Mean= 3.31, SD= .947). Furthermore, they often refer to the International Phonetic Alphabet (IPA) or pinyin while pronouncing Mandarin words and characters (Mean= 3.11, SD= .976). This finding indicated that diverse methods were employed by MFL learners to memorise Mandarin pronunciation. However, flash cards were the least frequently used method in learning Mandarin words and characters (Mean= 2.54, SD= .892).

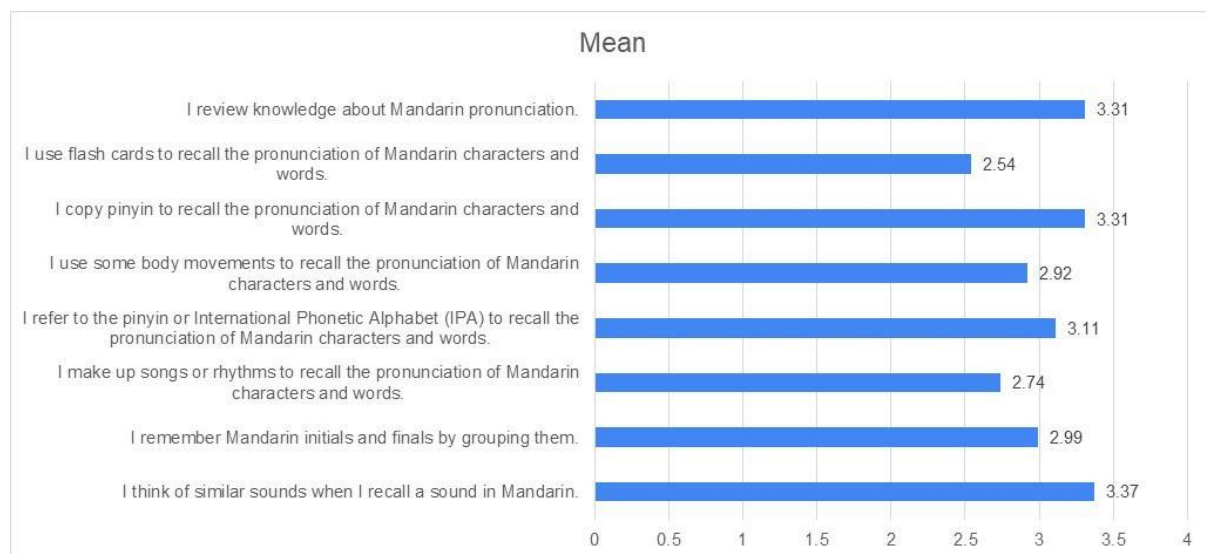


Figure 4- Memory strategies

Cognitive Strategies

Figure 5 demonstrates the tactic in terms of cognitive strategies. The tactic of cognitive strategies often used by MFL learners was “I try to recall and imitate how teachers or Chinese native speakers pronounced”, as the mean of score ranked the highest (Mean= 3.88, SD= .868). The second tactic of cognitive strategies frequently used by MFL learners was “I speak slowly to get the pronunciation right”, with the mean score of 3.84 (SD= .885). MFL learners also try to recall and imitate the mouth movements of teachers or Chinese native speakers while learning Mandarin pronunciation (Mean= 3.79, SD= .904). They also mentally rehearse before speaking (Mean= 3.78, SD= .893). Repetition of a difficult sound and concentrating intensely on pronunciation while listening Mandarin is also considered as the tactic of cognitive strategies that MFL learners used frequently, each tactic has the mean score of 3.69 (SD= .959) and 3.68 (SD= .819) respectively. These tactics used highlight the awareness of students in learning Mandarin pronunciation. The least frequently used tactic of cognitive strategies was trying to talk with others in Mandarin as much as possible (Mean= 2.81, SD= .897) and avoiding the sound that they cannot pronounce accurately (Mean= 2.84, SD= 1.004). These findings indicated that MFL learners tend to encourage oneself while learning Mandarin pronunciation instead of employ avoidance strategies.

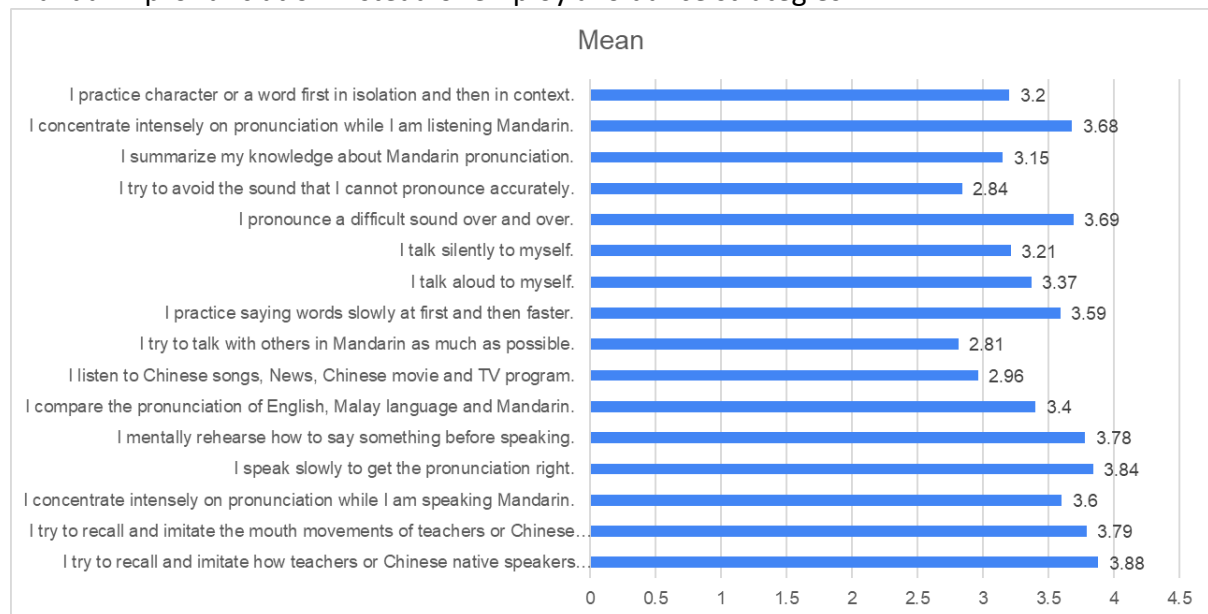


Figure 5- Cognitive strategies

Compensation strategies

As shown in Figure 6, in terms of compensation strategies, MFL learners used tactics of similar sound from other languages to replace the pronunciation of Mandarin words or characters which they cannot pronounce accurately (Mean= 3.07, SD= .852). This finding shows that language transfer occurs when MFL learners learn Mandarin pronunciation. MFL learners did not often avoid pronouncing a sound which they are not sure about (Mean= 2.86, SD= 1.039).

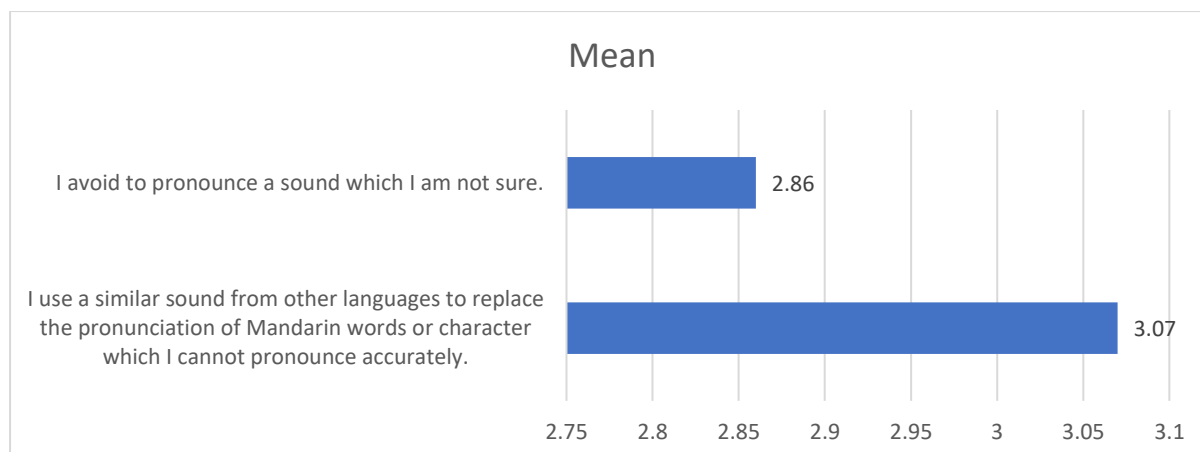


Figure 6- Compensation strategies

Metacognitive Strategies

Referring to Figure 7, the most frequently used tactic in terms of metacognitive strategies is acquiring a general knowledge of Mandarin phonetics (Mean= 3.33, SD= .767). MFL learners also prepare for an oral presentation by marking difficult-to-pronounce words (Mean= 3.26, SD= .0932). Furthermore, they also record their pronunciation in order to find their pronunciation problems (Mean= 3.24, SD= 1.019). Sometimes, they also evaluate their own pronunciation and find improved methods (Mean= 3.10, SD= .863). The findings demonstrate that MFL learners mostly decoded, checked, planned and evaluated while they learn Mandarin pronunciation. Nonetheless, the least frequently used tactic was “concern some of the special Mandarin pronunciation” as this tactic rated descriptively lower than the rest of the tactic in terms of metacognitive strategies (Mean= 2.71, SD= .884).

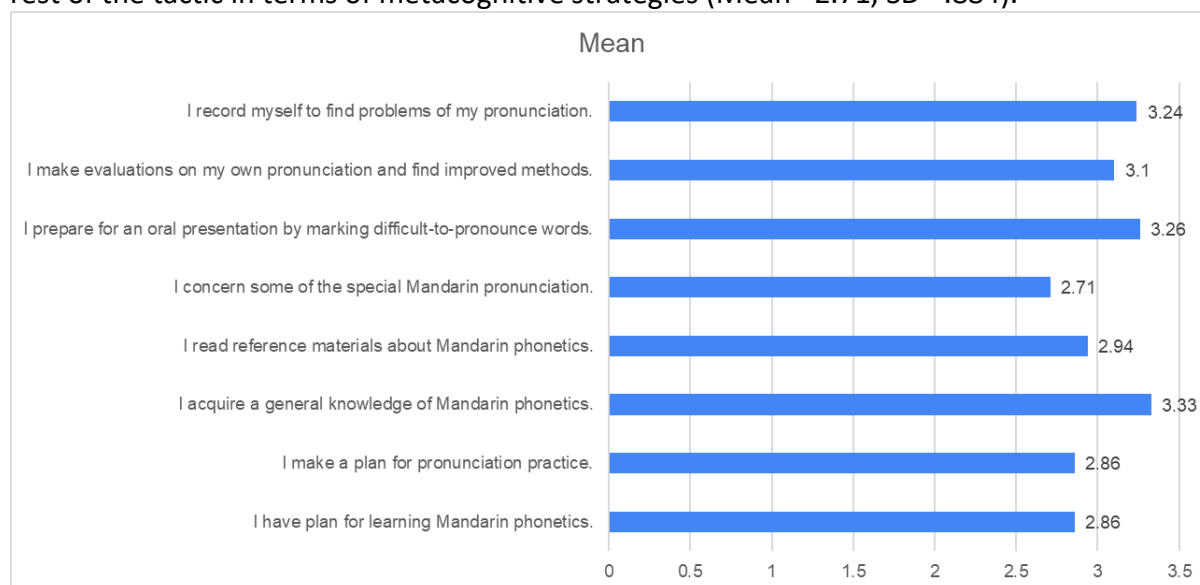


Figure 7- Metacognitive strategies

Affective Strategies

As displayed in Figure 8, in terms of affective strategies, all tactics were used comparably by MFL learners. From six tactics of affective strategies, encouraging oneself when they felt learning pronunciation is hard was rated the highest (Mean= 3.67, SD= .868) as compared to other tactics. This was followed by encouraging oneself to speak Mandarin (Mean= 3.65, SD= .839), relaxing when they felt nervous to speak Mandarin (Mean= 3.64, SD=

.987), having a sense of humour about mispronunciation (Mean= 3.19, SD= .945), and giving oneself a reward when they make progress in pronunciation (Mean= 3.11, SD= 1.163). These findings reflect that MFL learners showed encouragement in their Mandarin pronunciation learning. On the other hand, MFL learners did not often concerned about their emotional changes while learning Mandarin pronunciation (Mean= 2.94, SD= .985).

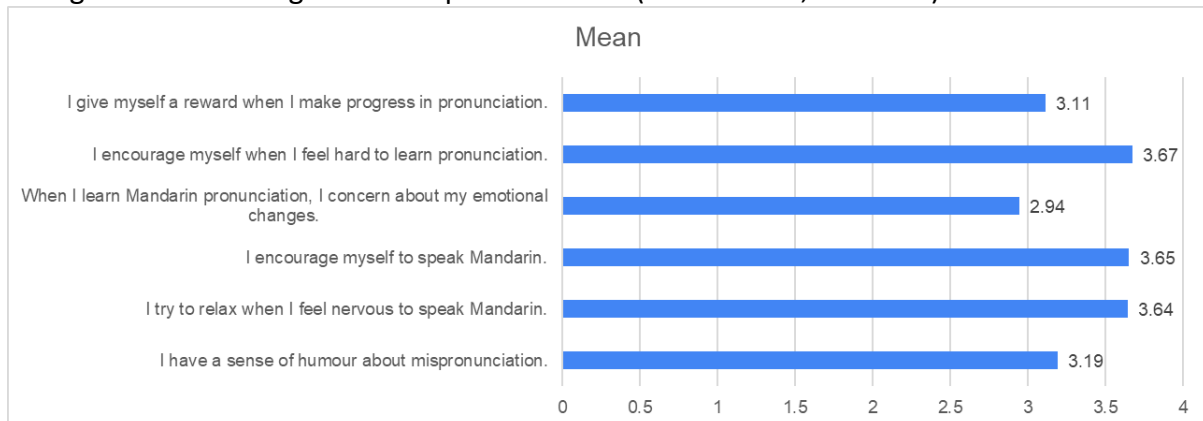


Figure 8- Affective strategies

Social Strategies

Figure 9 shows that in terms of social strategies, the strategy “I ask someone else to demonstrate the correct Mandarin pronunciation” is the most frequently used strategy, as the mean rated descriptively the highest (Mean= 3.82, SD= 1.033). This was followed by “I ask someone else to correct my pronunciation” (Mean= 3.77, SD= 1.027). Moreover, the findings of this study found that MFL learners also practice their Mandarin pronunciation with someone else (Mean= 3.72, SD= 1.038). These findings reflect that MFL learners are willing to receive corrective feedback while learning Mandarin pronunciation. However, they did not often teach or tutor someone else (Mean= 2.72, SD= 1.052). This reflects that learners are still not confident in assisting someone’s Mandarin pronunciation learning.

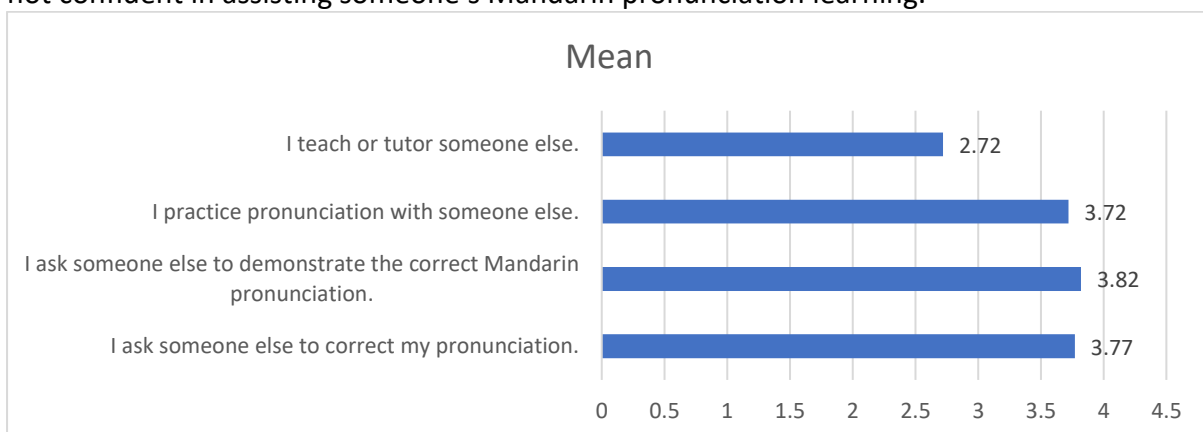


Figure 9- Social strategies

Conclusion

Summary of Findings and Discussion

In summary, this study depicted that MFL learners in Malaysia employed six categories of MPLS which included social strategies (Mean= 3.51), cognitive strategies (Mean= 3.42), affective strategies (Mean= 3.37), memory strategies (Mean= 3.03), metacognitive strategies (Mean= 3.03), and compensation strategies (Mean= 2.97). Social strategies were rated

descriptively the highest as compared to others MPLS. The finding of this study concurs with findings in studies by Zhang (2019); Liu (2008) who also found social strategies is the most frequently used MPLS. However, this study contradicts findings in several studies Zhou (2021); Jia (2017); Yi (2016); Deng (2014); Dong (2012); Li & Yan (2011) which found that cognitive strategies and metacognitive strategies were considered as the most frequently used MPLS. This study revealed that MFL learners' level of use of MPLS are moderate with the mean of 3.22. The findings of this study are in line with findings done by (Zhou, 2021; Sun, 2020; Zhang, 2019; Jia, 2017; Cao, 2015; Moon, 2012).

The notable findings of this study are as follows. As mentioned in this study, MFL learners utilized social strategies the most. They often seek help from someone else to receive the correct pronunciation of Mandarin. They also showed their willingness in receiving corrective feedback on their Mandarin pronunciation. MFL learners in Malaysia showed their cognitive awareness in learning Mandarin pronunciation. This strategy reflects that mimicking, rehearsal, repetition Mandarin pronunciation were used by MFL learning on their pronunciation learning. As for effective strategies, encouragement oneself is prioritised over Mandarin pronunciation learning. For memory strategies, MFL learners rely on various approaches to memorize Mandarin pronunciation such as thinking of the sound that shares similarity with Mandarin sound, copying pinyin and reviewing knowledge about Mandarin pronunciation. Furthermore, MFL learners also show awareness of metacognitive strategies as they often decode, check, plan, and evaluate when learning Mandarin pronunciation. Although the findings of this study revealed that compensation strategies seemed to be the less frequently used strategies, undoubtedly language transfer still occurs on MFL learners' pronunciation learning.

Pedagogical Implications and Suggestions for future studies

The findings of this study have several implications for teaching and learning of Mandarin pronunciation. First, educators need to identify MFL learners' MPLS and assist them to make up for any gaps in their choice and application. Second, educators need to delineate diverse teaching techniques in an effort to enable MFL learners to try out a wide range of MPLS while also taking into account their learning requirements. Third, curriculum developers need to incorporate practices that get MFL learners to use the language. Fourth, MFL learners should be acquainted with the various MPLS and these MPLS's crucial roles in mastering Mandarin pronunciation.

Nevertheless, the findings of this study are only catered to the MFL learners involved and cannot be generalised to the whole population of MFL learners in Malaysia. This indicated that as yet MPLS studies among MFL learners in Malaysia need a greater exploration in future research. Factors affecting the selection of MPLS also need to be taken into consideration in future studies. Therefore, it is recommended that qualitative data and interviews with MFL learners can also be included with the aim of attaining more comprehensive justification on the use of MPLS among MFL learners.

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