

Influence of Language Learning Strategies on Willingness to Communicate in Chinese Among Students with High and Low Anxiety

Li Munchen¹, Fazilah Razali^{2*}, Nurazidawati Mohamad Arsad³

^{1 2 3}Faculty of Education, Universiti Putra Malaysia,
43400 Serdang, Selangor, Malaysia
763798640a@gmail.com
fazilahrazali@upm.edu.my
azidarsad@yahoo.com.my
*Corresponding Author

<https://doi.org/10.24191/ajue.v17i4.16183>

Received: 21 April 2021

Accepted: 29 August 2021

Date Published Online: 31 October 2021

Published: 31 October 2021

Abstract: With the global expansion of China's economy, Chinese has established itself as a major language. Since then, higher education students' desire to learn Chinese has increased dramatically. However, strategies for foreign language learning and students' anxiety both play a key role in students' ability to communicate in Chinese. Thus, the purpose of this study is to examine the influence of language learning strategies (LLS), particularly those associated with different levels of anxiety, on students' willingness to communicate (WTC) in Chinese. Using a quantitative research design, a questionnaire assessing students' WTC, LLS and a speaking anxiety scale was distributed to 130 students enrolled in Mandarin as a foreign language course at MARA professional college in the Eastern region of peninsular Malaysia. The study gathered data from 66 low- and 64 high-anxiety students using the speaking anxiety scale. The findings demonstrated a significant correlation between LLS and WTC among both groups of students. Multiple regression analysis was used to determine the best predictors of students' WTC. It was discovered that indirect LLS were the best predictors for students with low-level anxiety, whereas direct and indirect LLS were both good predictors for students with high-level anxiety. This research reveals that in order to improve students' ability to communicate, educators must emphasise a variety of different learning strategies, depending on the speaking anxiety level of their students.

Keywords: Chinese Language, Foreign Language, Learning Language Strategies, Speaking Anxiety, Willingness to Communicate.

1. Introduction

The Chinese language has recently gained popularity as a result of China's rapid economic growth (Cui, 2019; Jafri et al., 2020). Numerous countries emphasise the important advancements that studying the Chinese language offers, notably in scientific research. As stated by Xie and Freeman (2019) China is a significant contributor to global scientific activity, particularly in the fields of scientific and engineering knowledge, which is primarily disseminated in Chinese. As a result, the dominance of English has been increasingly challenged by the growing importance of Chinese as a second or foreign language, both inside and outside China (Moloney & Xu, 2015).

Students in higher education who are not native Chinese speakers wish to learn Chinese in addition to English so they can become eligible for mobility programmes and increase their employment opportunities. Fox et al. (2019) claim that multilingual or bilingual graduates have higher earning

potential due to the likely increase in demand for those in the workforce who speak at least one language in addition to English. This will result in higher salaries for foreign language speakers. Fox et al. (2019) said that the further benefits of foreign language learning include the development of cognitive skills such as creativity and adaptability; improved academic achievement; the development of literacy and communication skills; and enhanced intercultural competence. Given the numerous benefits that students can obtain, Dłaska (2013) stated that competence in a foreign language is a globally transferable skill set for graduates, especially given the modern interconnected society.

In recognition of the importance of learning other languages, particularly Chinese, a significant number of Malaysian universities and educational institutions offer a Chinese language programme to those students interested in learning the language (Ting & Rijeng, 2018). Even though students have been encouraged to study Chinese and the best way to do so is by speaking it daily, learning Chinese has frequently been seen as a difficult undertaking for students, not just in Malaysia but also in other countries (Ma et al., 2017). The reason for this, according to Shen and Xu (2015, 82), is that ‘Chinese is fundamentally different from alphabetic languages in terms of phonology, orthography, and morphology’. The complexity of Chinese makes it extremely challenging for many learners and frequently creates barriers that prevent them from expressing themselves through speaking, resulting in anxiety among students.

By the 1980s, many studies had developed a more consistent view of the correlations between psychosocial factors and language acquisition, and anxiety became identified as a critical source of affective factors (Kralova & Petrova, 2017). The majority of the available evidence refers to the relationship between anxiety and speaking skills; however, Teimouri et al. (2019) suggested the need to study in foreign contexts, such as with learners whose second or foreign languages are not English, since there is a substantive gap in the literature on this subject. Meanwhile, Melchor-Couto (2021) suggested that research on foreign language anxiety among students should include their profiles, particularly the students’ level of anxiety, in response to the use of learning language strategies in encouraging a willingness to communicate. Thus, this study aimed to investigate the influence of language learning strategies on students’ willingness to communicate in Chinese, particularly referring to students with different levels of anxiety. The research objective of this study as follows:

1. To examine the relationship between language learning strategies and willingness to communicate in Chinese towards students with different levels of anxiety.
2. To examine the language learning strategies used by students with different levels of anxiety in predicting willingness to communicate.

2. Literature Review

2.1 Foreign language anxiety (FLA)

The foreign language classroom anxiety (FLA) theory was proposed by Horwitz et al. (1986) based on their ideas about FLA. The theory led them to develop an FLA measurement, known as the Foreign Language Classroom Anxiety Scale (FLCAS). Horwitz et al. (1986) explained that FLA sentiments emerge fundamentally from a fear to communicate. According to Palacios, (1998), numerous studies demonstrate that when students are asked to speak or engage in some form of interaction in a foreign language, anxiety is triggered. Azarfam and Baki (2012) discovered that language anxiety could impact learners’ speaking skills by reducing the quality of their oral performance as their level of anxiety increased over time. In this context, Martin and Alvarez Valdivia (2017) added that anxiety is an emotional and individual characteristic that has a significant influence on foreign language learning.

Azarfam and Baki (2012) identified the role and forms of anxiety in the FLA context from the students’ perspectives, including anxiety about the inability to communicate in class, anxiety about producing perfect and faultless sentences, anxiety about making speaking errors, fear of being called on and avoiding asking questions. In referring to such instances, FLA became recognised as a complex construct (Meihua Liu, 2016). Many FLA studies focus on language learners who aim to speak English, while very few studies have addressed learners of Chinese. Seneff, (2006) stated, Chinese is widely recognised as a challenging language for non-native speakers to learn.

Previous findings on FLA have shown that anxious students are less willing to participate in classroom discussions (Dewaele, 2013; Gursoy & Akin, 2013). Students tend to underestimate their ability and the arousal of anxiety probably makes some students more reluctant to speak (Meihua Liu & Jackson, 2008). Meanwhile, students who are less anxious appear to be more confident and perform better when speaking a foreign language (Liu, 2016). The level of FLA among students depends on their respective situations. For example, a study by Sutarsyah (2017) showed that levels of anxiety particularly increase when learners are asked to speak in front of the class, but not when they speak in small groups. However, as Teimouri et al. (2019) point out, when FLA is considered in terms of specific language skills, anxiety about listening and writing had far greater effects than anxiety about reading or speaking. In order for the language acquisition process to be successful, it is necessary to employ effective language learning strategies to overcome the anxiety that arises when speaking a foreign language.

2.2 Language learning strategies

Relatively limited numbers of studies have addressed Chinese speaking strategies, and these tend to be found exclusively in Chinese publications (Jiang & Cohen, 2012). In addition, research on Chinese speaking strategies is commonly quantified using Oxford's Strategies in Language Learning (SILL) scale (Sun et al., 2016). According to Oxford (1990), strategies in language acquisition refer to the precise activities, behaviours, procedures or approaches that students use to improve their foreign language ability. Furthermore, Oxford (2011) described language learning strategies as intentional, goal-directed efforts to regulate and control the process of foreign language acquisition.

According to Oxford (1990, 2011), language learning strategies fall into two categories: direct and indirect. Direct strategies are particular to the target language and include memory, cognitive and compensatory strategies. According to Oxford's system, cognitive strategies refer to the mental processes by which learners comprehend their learning; memory strategies, which apply to the processes by which learners memorise information; and compensatory strategies, which apply to the mechanisms by which learners overcome knowledge gaps and maintain the flow of their communication. Meanwhile, indirect strategies are concerned with the overall management of learning and include metacognitive, affective and social strategies. The metacognitive strategies described by Oxford assist learners in self-regulating their learning. Affective methods address emotional needs such as confidence, whereas social strategies address interpersonal interaction and collaboration.

According to Chow et al. (2018) and Tandang and Arif (2019), research indicates that students generally use direct strategies, including metacognitive and social strategies, when learning a foreign language in the classroom. Meanwhile, students learning Chinese as a second language make frequent use of social strategies (Na 2009; Jiang & Cohen, 2012). Students tend to use effective strategies to help them address the anxiety and stress they encounter while learning a foreign language (Lan & Oxford, 2003). Furthermore, Jiang and Cohen (2012) showed that, in terms of direct strategies, the speaking strategies used most often by Chinese language learners were the compensatory approach and cognitive strategies. Meanwhile, memory strategies were seldom utilised in approaches to learning speaking (Na, 2009), whereas students often used memory strategies for character acquisition, particularly with Chinese characters (Jiang & Cohen, 2012; Ma, 2007).

Numerous studies have discovered that when students' usage of language learning strategies increases (for example: Azarfam & Baki, 2012; Mohammadi et al., 2013), this can assist them to overcome their foreign language anxiety. Mohammadi et al. (2013) found that direct strategies, which included cognitive and compensation strategies, have a significant association with language anxiety. Indirect group strategies, such as social strategies, also have a significant association with language anxiety, in comparison to metacognitive and affective strategies. According to Luo (2014), more effective strategies should be implemented to assist students in reducing their anxiety about the Chinese language. Even though affective strategies are not commonly used by students, the findings by Yunus and Singh (2014) show that students agreed that using these strategies helped them to reduce their anxiety by enabling them to relax when they had to speak. At the same time, the strategies allowed them to avoid mistakes and improve their confidence levels especially in higher education institutions that are synonymous with academic freedom that will have a positive impact on active student engagement. (Sethy, 2021). For instance, learners engaged with students in their local Chinese community and

created an online virtual Chinese community for them to enhance their exposure to the language. As Sun et al. (2016) noted, speaking strategies may be regarded as activities and efforts made by students to enhance their willingness to communicate while also increasing their confidence about speaking in public.

2.3 Willingness to communicate (WTC)

The concept of willingness to communicate (WTC) emerged from Burgoon's 1976 work on "unwillingness to communicate". McCroskey and Baer (1985) subsequently modified the construct into a positive manner and called it "willingness to communicate (WTC)" (Jafri et al., 2020). WTC can be defined as a learner's variability in speaking behaviour or his or her readiness and intention to speak or enter into conversation with a certain person at a specific time in a second or foreign language (MacIntyre et al., 1998; MacIntyre, 2007; McCroskey & Baer, 1985). MacIntyre et al. (1998) introduced the Pyramid Model, a heuristic model of the WTC. This was developed specifically to understand the WTC of second or foreign language learners by combining the communication willingness model and the social language learning model (MacIntyre & Gardner, 1994). The WTC approach integrates all four language skills (listening, speaking, reading and writing), as well as circumstances encountered inside and outside language classrooms (MacIntyre et al., 2001).

According to Sutarsyah (2017), speaking anxiety has been found to influence learners' WTC. However, Shanti Manipuspika (2018) indicated that speaking anxiety has greater effects on learners' WTC with friends and acquaintances in the classroom, rather than with strangers. A recent study by Nkrumah (2021) also identified anxiety as a factor that affects students' WTC during the second language acquisition process. This illustrates that students exhibit fears and worries about their WTC, in that they feel they might make mistakes that will raise their concerns about their language learning being at a low level. Dewaele (2013) pointed out that among students, speaking anxiety, which is a symptom that corresponds with neuroticism (a proxy for trait anxiety), seems to play a significant role in affecting students' WTC. However, based on the findings by Azarfam and Baki (2012), anxiety affects students' listening skills more strongly than their speaking skills, probably due to the time pressure involved in listening.

Meanwhile, Yin and Ho (2013) noted how students believe that the ability to speak Chinese is difficult to acquire, due to the perceived difficulty with the pronunciation of Chinese characters. Additionally, (Luo, 2018) mentioned that Chinese tones and characters were the most challenging for students to learn and master, resulting in increased hesitance and willingness to communicate in Chinese. However, according to a literature review conducted by Ma et al. (2017), recent research has focused on teaching approaches and language learning strategies for improving learners' capability to speak that emphasise Chinese characters, as well as phonetic, lexical and grammatical development.

Farzam (2017) found that both direct and indirect strategies involving metacognitive and cognitive strategies greatly influenced learners' WTC. He also argued that both strategies will enhance learners' confidence to overcome certain communication challenges. Yunus and Singh (2014) discovered that even when students were shy, weak at speaking and lacked the courage to correct their speech and ask speakers to slow down, they rarely used effective strategies. Instead, the learners employed social strategies to assist themselves to correct their pronunciation, with the primary goal of achieving higher test scores. According to Meilan Liu et al. (2020), in order to assist students in learning Chinese, they should be encouraged to use socio-affective strategies when interacting with others, particularly with a native Chinese-speaking community, in order to reduce their sense of social isolation and enhance their WTC. Hakim and Suniar (2019) added, using socio-affective strategies with mental technique through teacher-student or peer interaction can decrease anxiety and promote students to speak.

3. Methodology

This study utilised a quantitative research design with a self-report questionnaire as the main data collection technique. This research design was used to identify relationships among different variables. In addition, the study explored the influence of language learning strategies on students' willingness to communicate in Chinese, particularly in regard to different levels of speaking anxiety.

3.1 Respondents

The population for this study was Malaysian students of various ethnicities (Malay, Chinese and Indian). The students were non-native Chinese speakers who studied at Mara Professional College (MPC) and had enrolled in the 'Mandarin as a foreign language' course. MPC is a full-fledged college that offers diploma and semi-professional programmes. There are six campuses, all of which are located in peninsular Malaysia. Using a random sampling technique, MPC in the Eastern region was selected. A total of 150 questionnaires were distributed to the students. The response rate, together with the complete responses returned, was 130 out of 150 (86.67%). Fifty-five male students (42%) and 75 female students (58%) participated in this study, ranging in age from 18 to 30 (Mean = 24 years).

3.2 Measure

3.2.1 Willingness to communicate (WTC)

This study used Wang's (2009) self-report questionnaire on students' willingness to communicate (WTC) to measure students' WTC in Chinese and to assess how learners actively sought opportunities to talk and communicate in the language. This instrument contained ten self-report questions and the responses used a five-point agreement format from (1) = strongly disagree to (5) = strongly agree. The scale scores were computed by summing the responses. A higher score meant that students were more willing to communicate in the Chinese language. The pilot study indicated the instrument had high reliability ($\alpha = .806$).

3.2.2 Speaking anxiety scale

The Foreign Language Speaking Anxiety Scale self-report was originally developed by Horwitz et al. (1986). This instrument has been widely used to evaluate students' anxiety levels when speaking a foreign language as a second language (see, for example, Liu & Yuan, 2021; Serraj & Noordin, 2013; Zheng & Cheng, 2018). Nevertheless, in order to explore anxiety related to speaking Chinese, this instrument was used according to modifications made by Shang (2006). In addition, some micro-adjustments were made to ensure the measurements were more relevant to the context of Malaysian students. Nineteen items were used after being verified by experts. The responses used a five-point Likert agreement scale format, ranging from (1) = *strongly disagree* to (5) = *strongly agree*. The scale scores were computed by summing the responses. The higher the score, the more anxious students felt about speaking Chinese. As Martin and Alvarez Valdivia (2017) reported, the total scale value of alpha for internal consistency was .944. The pilot study also indicated the instrument had high reliability ($\alpha = .895$).

3.2.3 Language learning strategies

The language learning strategies instrument was adapted from the Strategy Inventory for Language Learning (SILL), developed by Oxford and Burry-Stock (1995). This self-report questionnaire was used to examine L2 students' learning strategy use. It also investigated the association between the L2 learners' selections of learning strategies and different levels of speaking anxiety. SILL includes two types of learning strategies, direct learning and indirect learning strategies. Direct strategies have a direct impact on language learning. Memory, cognition and compensation are examples of direct strategies. Meanwhile, indirect strategies enhance language learning even though they do not have direct connection to language use. Metacognitive strategies, emotional strategies and social strategies are examples of indirect strategies. The questionnaire involved 18 items in total after being validated by experts. Responses were obtained using a five-point frequency ranging from 1 to 5. According to Feng et al. (2020), a strategy is considered high frequency if its average value is greater than or equal to 3.5. The reported internal consistency reliabilities of the questionnaires ranged between 0.79 and 0.94 (Feng et al., 2020; Oxford & Burry-Stock, 1995). The instrument demonstrated good and high reliability ($\alpha = .902$), according to the results of the pilot study.

3.3 Procedure and analysis

Permission for data collection was requested from the MARA professional college administrative unit for pilot and field studies. Additionally, permission to access student information, specifically the contact details of students enrolled in Mandarin language courses, was also obtained. This was because student consent was required before the questionnaire was distributed. The questionnaire, which comprised participants' demographic background, a speaking anxiety scale, language learning strategies used and willingness to communicate, was delivered via email to the students. Before the questionnaire disseminated to the students, pilot study was conducted to investigate the validity and reliability of the instruments. Two experts in psychology and assessment of instruction and curriculum development were appointed to validate the content of the instrument. Based on the higher proportion of expert validation agreement, this instrument was appropriate to employ in the study. Meanwhile, reliability analyses indicated that the instrument has good and strong internal consistency (values of around 0.8 and 0.9).

The collected data was analysed using statistical software, SPSS version 25. The variables' means (*m*) and standard deviations (*SD*) were computed for descriptive analysis. Meanwhile, the correlation coefficients were analysed to determine the strength of the relationship between language learning strategies and willingness to communicate. The direction, which might be negative or positive, was also examined (Pallant, 2013). Moreover, to identify students with low- and high-level anxiety, a cluster analysis was performed. The two-step clustering and hierarchical clustering techniques were applied following Ward's method. Using this method, the respondents were clustered into two distinct groups, based on their speaking anxiety scale score. Sixty-six participants, or 51%, were grouped into the first cluster and characterised as having low-level anxiety scores ($M = 54.955$, $SD = 6.611$). Meanwhile, 64, or 49%, of the participants were grouped into the second cluster and characterised by higher-level anxiety ($M = 77.234$, $SD = 9.466$). The following analysis used multiple regression, which is an extension of simple linear regression and is used to predict the value of a variable based on the value of two or more other variables (Tabachnick & Fidell, 2013). In this study, the purpose was to investigate which learning strategies used by high- and low-level anxiety students influenced their willingness to communicate.

4. Findings

In order to examine the levels of frequency with which language learning strategies were used, as well as to descriptively assess willingness to communicate for both low- and high-level anxiety students, means and standard deviations were computed. The results, presented in Table 1, show that the strategies were used by both groups of students at high frequency levels, since the average value of the mean score was over 3.5. However, the mean scores indicated that high-level anxiety students used direct ($M = 4.113$, $SD = 0.598$) and indirect learning ($M = 4.176$, $SD = 0.540$) strategies more frequently than low-level anxiety students (direct strategy, $M = 3.759$, $SD = 0.681$; indirect strategy, $M = 3.783$, $SD = 0.6$). A similar finding reflected the students' willingness to communicate, whereby students with high-level anxiety ($M = 40.484$, $SD = 5.656$) were more willing to communicate than low-level anxiety students ($M = 38.636$, $SD = 5.037$).

Table 1. Descriptive statistics

Variables	Anxiety level	Mean	SD	<i>n</i>
Direct strategies	Low anxiety	3.759	0.681	66
	High anxiety	4.113	0.598	64
Indirect strategies	Low anxiety	3.783	0.600	66
	High anxiety	4.176	0.540	64
Willingness to communicate	Low anxiety	38.636	5.037	66
	High anxiety	40.484	5.656	64

SD standard deviation, *n* frequency

To examine the relation between language learning strategies and willingness to communicate, correlation analyses were conducted between these variables for the low and high anxiety students (see Table 2). The results of the correlation analyses show that students' willingness to communicate was positively correlated with the learning language strategies. Surprisingly, the finding indicated that students with high levels of speaking anxiety were more likely to communicate when they used both direct ($r = 0.749$, $p < 0.001$) and indirect ($r = 0.746$, $p < 0.001$) language learning strategies, with a large effect size. Meanwhile, students with low levels of speaking anxiety were more likely to communicate when they used indirect learning strategies ($r = 0.651$, $p < 0.001$), with a larger effect size compared to the direct learning strategies ($r = 0.498$, $p < 0.001$) with a medium effect size.

Table 2. Correlation between language learning strategies and willingness to communicate

Language learning strategies	Low anxiety	High anxiety
	Willingness to communicate	
Direct strategies	0.498**	0.749**
Indirect strategies	0.651**	0.746**

** $p \leq .001$

coefficient of determination: small = $r \leq 0.1$; medium = $r = 0.3$; large = $r \geq 0.5$ (Cohen, 1988)

To explore the predicting effects of language learning strategies on students' willingness to communicate, regression analyses were conducted for the low- and high-level anxiety students, with direct and indirect strategies as independent variables and willingness to communicate as the dependent variable. Table 3 presents the coefficients and significance levels of the predictors from the regression models. The results indicated that the change in R^2 for the low-level anxiety students was significantly related to indirect learning strategies. This type of strategy also acted as a positive predictor ($\beta = 5.043$, $p < 0.01$) and explained 40.7% of the total variance for the low-level anxiety students' willingness to communicate. Meanwhile, the change in R^2 for the high-level anxiety students was significantly related to both learning strategies. These strategies also acted as a positive predictor (direct strategy, $\beta = 3.917$, $p < 0.01$; indirect strategy, $\beta = 4.166$, $p < 0.01$) and explained 59.4% of the total variance for the high-level anxiety students' willingness to communicate.

Table 3. Regression analysis of predictors for willingness to communicate

Anxiety level	Language learning strategies	Willingness to communicate					
		β	t	p	R^2	R^2 adjusted	ΔR^2
Low anxiety	Direct strategies	0.507	0.503	0.617	0.426	0.407	0.426
	Indirect strategies	5.043	4.411	0.000			
High anxiety	Direct strategies	3.917	2.806	0.007	0.607	0.594	0.607
	Indirect strategies	4.166	2.696	0.009			

$p \leq .01$

5. Discussion and Implications

The purpose of this study was to examine the influence of language learning strategies (LLS) on students' willingness to communicate (WTC) in Chinese, particularly involving students associated with different levels of anxiety. This study was conducted with students at MARA professional college in the Eastern region of peninsular Malaysia. It was found that the LLS for both levels of anxiety influence WTC. This result is broadly similar to those of previous studies by Farzam (2017), Sun et al. (2016) and Yunus and Singh (2014). Overall, it has been shown that LLS play an important role in students' WTC.

In regard to students with different anxiety levels, it was discovered that language learning strategies have varying influences on WTC. The study indicated that indirect strategies have a

significant influence on predicting WTC for students with low anxiety. Meanwhile, both the direct and indirect LLS have a significant influence on predicting WTC for students with high anxiety. However, this result contradicts those of previous studies of foreign language anxiety. According to the work of Dewaele (2013), Gursoy and Akin (2013) and Liu and Jackson (2008), students who are more anxious are more reluctant to speak than students with less anxiety. In addition, research by Luo (2018) and Yunus and Singh (2014) mentioned that if more strategies were used, student anxiety levels reduced. Therefore, students' confidence will increase when various activities and assignments are performed on their own rather than just listening to lectures (Rahmat et al., 2020).

Furthermore, to understand this situation, it is useful to refer to the heuristic model developed by Macintyre et al. (1998), whereby the middle layer of the model focuses on aspects such as motivation. This model emphasised that the place (inside and outside the classroom) had an effect on students' WTC. The current findings might have been due to the locations in which the students operated, since they may have felt more anxious when they had to communicate in Chinese with their friends or classmates inside the classroom (Sutarsyah, 2017). However, they may feel less anxious and apply indirect strategies, such as social strategies, when interacting with strangers outside the classroom. Besides that, motivation to obtain a good grade (Yunus & Singh, 2014) in the Chinese language examination likely induced students to use direct and indirect strategies even though they displayed high anxiety. It was a positive sign that to help students to increase their WTC in Chinese they prefer to use a variety of LLS.

Additionally, a strong positive relationship was identified between LLS (both direct and indirect strategies) and WTC for students with high anxiety. However, WTC for students with low anxiety had a strong relationship only with indirect strategies. This finding indicates that to assist students with low anxiety gain more WTC, educators should encourage learners to use both direct and indirect strategies. For example, using direct strategies, such as memory, cognitive, and compensatory strategies, will help students to improve their reading, listening and writing Chinese language skills. Moreover, it will enhance students' speaking skills and encourage them to interact or communicate more with others regardless of where they are. Besides that, as noted by Azarfam and Baki (2012) and Mohammadi et al. (2013), when students employ more strategies, this helps them to reduce their anxiety. Furthermore, as suggested by Meilan Liu et al. (2020), socio-affective strategies should be emphasised and applied regularly by students so they become inspired to train their emotional management of language anxiety and to communicate.

The implications of this study are that, firstly, to increase students' willingness to communicate, educators should emphasize a range of learning strategies depending on the students' level of anxiety related to speaking Chinese. To begin with, educators should ascertain students' degree of speaking anxiety and the nature of their fear, for example, by referring to the foreign language anxiety scale used in the research of various scholars, including Horwitz et al. (1986). Additionally, educators should be aware of the circumstances that cause students anxiety, such as oral presentations and performing in front of a class. By offering and encouraging suitable learning strategies, either direct or indirect, educators may assist students to overcome unnecessary anxiety about language acquisition and increase their willingness to communicate.

6. Limitations and Suggestions for Future Research

This study has several limitations. First, the number of respondents used was small, as this research involved a population only from the Eastern region of peninsular Malaysia. Therefore, future research could include participants from other regions. Second, this study only used a self-report questionnaire. Therefore, it is proposed that if future researchers use a small sample size, qualitative research methods such as interviews and observation should be employed to obtain more in-depth findings. In particular, it would be useful to explore the contradictory results between the current research and previous studies. Finally, the LLS components in direct and indirect strategies should be expanded in regard to the WTC with different levels of anxiety. This would identify the best strategy that students with different levels of anxiety can employ to enhance their WTC.

7. Conclusion

Students' willingness to communicate (WTC) correlates positively with language learning strategies (LLS). When students with high levels of anxiety use direct and indirect LLS, they increase their WTC. Students with low levels of speaking anxiety, on the other hand, were more WTC when they used indirect learning strategies rather than direct LLS. Students with low anxiety levels are more likely to choose the LLS strategy indirectly as a result of their lack of confidence. Therefore, the indirect strategy of LLS was revealed to be the main influence on WTC for students with low anxiety. Meanwhile, both the direct and indirect strategies of LLS were discovered to influence WTC for students with high anxiety. Educators should encourage students to employ the LLS depending on their level of anxiety to help them to gain more WTC. This is because to enable students to master a foreign language, either in terms of WTC or listening, speaking, reading and writing, they should apply various LLS, particularly those which impact their affective components. In addition, this study also contributes to the theoretical framework in regard to the influence of LLS as a factor for enhancing WTC among students with different levels of anxiety.

8. Co-Author Contribution

The authors affirm that there is no conflict of interest in this article. LM made substantial contributions to the concept and design of this study by collecting data and preparing the first draft. FR and NAM contributed to the conception and design of the study and approved the final version of the manuscript. NMA analysed and interpreted the data and helped in drafting and revising the manuscript.

9. Acknowledgement

The authors would like to thank all the students who participated in this study. Our gratitude also extends to the Publication and Citation Unit (PACU) of UPM for supporting the publication of this manuscript.

10. References

- Azarfam, A. A. Y., & Baki, R. (2012). Exploring language anxiety regarding speaking skill in Iranian EFL learners in an academics site in Malaysia. *International Journal of Applied Linguistics and English Literature*, 1(2), 153–162.
- Chow, B. W. Y., Chiu, H. T., & Wong, S. W. L. (2018). Anxiety in reading and listening to English as a foreign language in Chinese undergraduate students. *Language Teaching Research*, 22(6), 719–738. <https://doi.org/10.1177/1362168817702159>
- Cui, H. (2019). Application and exploration of BOPPPS model in oral Chinese teaching as a foreign language. *International Education Studies*, 12(12), 123–129. <https://doi.org/10.5539/IES.V12N12P123>
- Dewaele, J. (2013). The link between foreign language classroom anxiety and psychoticism, extraversion, and neuroticism among adult Bi- and multilinguals. *The Modern Language Journal*, 97(3), 670–684. <https://doi.org/10.1111/J.1540-4781.2013.12036.X>
- Dlaska, A. (2013). The role of foreign language programmes in internationalising learning and teaching in higher education. *Teaching in Higher Education*, 18(3), 260–271. <https://doi.org/10.1080/13562517.2012.696538>
- Farzam, M. (2017). The Effect of cognitive and metacognitive strategy training on intermediate Iranian EFL learners' willingness to communicate. *International Journal of Applied Linguistics and English Literature*, 7(1), 193. <https://doi.org/10.7575/aiac.ijalel.v.7n.1p.193>
- Feng, Y., Fernando Iriarte, & Valencia, J. (2020). Relationship between learning styles, learning strategies and academic performance of Chinese students who learn Spanish as a foreign language. *Asia-Pacific Edu Res*, 29(5), 431–440. <https://doi.org/10.1007/s40299-019-00496-8>
- Fox, R., Corretjer, O., Webb, K., & Tian, J. (2019). Benefits of foreign language learning and bilingualism: An analysis of published empirical research 2005–2011. *Foreign Language Annals*,

- 52(3), 470–490. <https://doi.org/10.1111/FLAN.12418>
- Gursoy, E., & Akin, F. (2013). Is younger really better? Anxiety about learning a foreign language in Turkish children. *Social Behavior and Personality*, 41(5), 827–842. <https://doi.org/10.2224/SBP.2013.41.5.827>
- Hakim, L. N., & Suniar, Y. (2019). Socio-affective strategies in enhancing students' speaking motivation. *Jurnal Basis*, 6(1), 125–133. <https://doi.org/https://doi.org/10.33884/basisupb.v6i1.1051>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132.
- Jafri, N., Kalthom, U., & Manaf, A. (2020). Looking into students' willingness to communicate: A case study in Mandarin language learning. *Universal Journal of Educational Research*, 8(1A), 123–131. <https://doi.org/10.13189/ujer.2020.081316>
- Jiang, X., & Cohen, A. D. (2012). A critical review of research on strategies in learning Chinese as both a second and foreign language. *Studies in Second Language Learning and Teaching*, 2(1), 9–43.
- Kralova, Z., & Petrova, G. (2017). Causes and consequences of foreign language anxiety. *XLinguae*, 10(3), 110–122. <https://doi.org/10.18355/XL.2017.10.03.09>
- Lan, R., & Oxford, R. L. (2003). Language learning strategies profiles of EFL elementary school students in Taiwan. *IRAL*, 41(2003), 339–379.
- Liu, Meihua. (2016). Bilingual/multilingual learners' willingness to communicate in and anxiety on speaking Chinese and their associations with self-rated proficiency in Chinese. *International Journal of Bilingual Education and Bilingualism*, 21(1), 54–69. <https://doi.org/10.1080/13670050.2015.1127889>
- Liu, Meihua, & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *Modern Language Journal*, 92(1), 71–86. <https://doi.org/10.1111/j.1540-4781.2008.00687.x>
- Liu, Meihua, & Yuan, R. (2021). Changes in and effects of foreign language classroom anxiety and listening anxiety on Chinese undergraduate students' English proficiency in the COVID-19 context. *Frontiers in Psychology*, 0, 2000. <https://doi.org/10.3389/FPSYG.2021.670824>
- Liu, Meilan, Zheng, Y., Ma, X., & Wei, Y. (2020). Sustaining multilingualism in Chinese universities: Uzbekistani students' demotivation while learning Chinese. *Sustainability 2020*, Vol. 12, Page 7570, 12(18), 7570. <https://doi.org/10.3390/SU12187570>
- Luo, H. (2018). Foreign language speaking anxiety: A study of Chinese language learners. *Chinese Journal of Applied Linguistics*, 41(1), 3–24.
- Ma, X., Gong, Y., Gao, X., & Xiang, Y. (2017). The teaching of Chinese as a second or foreign language: A systematic review of the literature. *Journal of Multilingual and Multicultural Development*, 38(9), 815–830. <https://doi.org/10.1007/s40299-018-0385-2>
- MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The Modern Language Journal*, 91(4), 564–576. <https://doi.org/10.1111/J.1540-4781.2007.00623.X>
- Macintyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545–562. <https://doi.org/10.1111/J.1540-4781.1998.TB05543.X>
- MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44(2), 283–305. <https://doi.org/10.1111/J.1467-1770.1994.TB01103.X>
- MacIntyre, P. D., MacMaster, K., & Baker, S. (2001). The convergence of multiple models of motivation for second language learning. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 369–388). Honolulu: The University of Hawai'i, Second Language Teaching and Curriculum Centre.
- Martin, S., & Alvarez Valdivia, I. M. (2017). Students' feedback beliefs and anxiety in online foreign language oral tasks. *International Journal of Educational Technology in Higher Education*, 14(18), 1–15. <https://doi.org/10.1186/s41239-017-0056-z>
- McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement. *Paper Presented at the Speech Communication Association Convention, New Orleans*.

- Melchor-Couto, S. (2021). Foreign language anxiety levels in second life oral interaction. *ReCALL*, 29(1), 99–119. <https://doi.org/10.1017/S0958344016000185>
- Mohammadi, E. G., Biria, R., Koosha, M., & Shahsavari, A. (2013). The relationship between foreign language anxiety and language learning strategies among university students. *Theory and Practice in Language Studies*, 3(4), 637–646. <https://doi.org/10.4304/tpls.3.4.637-646>
- Moloney, R., & Xu, H. (2015). Transitioning beliefs in teachers of Chinese as a foreign language: An Australian case study. *Cogent Education*, 2(1). <https://doi.org/10.1080/2331186X.2015.1024960>
- Na, J. (2009). A comparative study of oral Chinese learning strategies among Korean, European and American students. *Journal of Southwest University of Science and Technology*, 4, 64–67.
- Nkrumah, B. (2021). The beyond willingness to speak Chinese: Case of transferring learning Chinese into communication among university of Ghana students. *Global Journal of Foreign Language Teaching*, 11(1), 51–67. <https://doi.org/10.18844/GJFLT.V11I1.5339>
- Oxford, R. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Boston, MA: Heinle Cengage Learning. <https://doi.org/10.2307/329849>
- Oxford, R. (2011). *Teaching and researching language learning strategies*. Harlow: Pearson Longman.
- Oxford, R. L., & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL). *System*, 23(1), 1–23.
- Palacios, L. M. (1998). *Foreign language anxiety and classroom environment: A study of Spanish university students*. (UMI number 9838076). [Doctoral dissertation, The University of Texas at Austin]. ProQuest Dissertations and Theses Global.
- Pallant, J. (2013). *SPSS survival manual*. UK: McGraw-Hill.
- Rahmat, H., Leng, C. O., & Mashudi, R. (2020). Innovative educational practice for impactful teaching strategies through scaffolding method. *Asian Journal of University Education (AJUE)*, 16(4), 53–60. <https://doi.org/10.24191/ajue.v16i4.1195>
- Seneff, S. (2006). Interactive computer aids for acquiring proficiency in Mandarin. In H. Q., M. B., C. ES., & L. H. (Eds.), *Chinese Spoken Language Processing. ISCSLP 2006. Lecture Notes in Computer Science* (pp. 1–12). Berlin, Heidelberg: Springer. https://doi.org/10.1007/11939993_1
- Serraj, S., & Noordin, N. B. (2013). English language teaching. *English Language Teaching*, 6(5), 1–12. <https://doi.org/10.5539/elt.v6n5p1>
- Sethy, S. S. (2021). “Academic freedom” in Indian higher education setting. *Asian Journal of University Education (AJUE)*, 17(2), 39–49. <https://doi.org/10.24191/ajue.v17i2.9022>
- Shang, X. (2006). *Chinese-skill-specific anxiety among advanced Korean learners*. [Unpublished doctoral dissertation]. Beijing Language and Culture University.
- Shanti Manipuspika, Y. (2018). Correlation between anxiety and willingness to communicate in the Indonesian EFL context. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.3201946>
- Shen, H. H., & Xu, W. (2015). Active learning: Qualitative inquiries into vocabulary instruction in Chinese L2 classrooms. *Foreign Language Annals*, 48(1), 82–99. <https://doi.org/10.1111/FLAN.12137>
- Sun, P. P., Lawrence, ·, Zhang, J., & Gray, S. M. (2016). Development and validation of the Speaking Strategy Inventory for Learners of Chinese (SSILC) as a second/foreign language. *The Asia-Pacific Education Researcher*, 25. <https://doi.org/10.1007/s40299-016-0287-0>
- Sutarsyah, C. (2017). An analysis of student’s speaking anxiety and its effect on speaking performance. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 1(2), 143–152.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (7th ed.). Boston, MA: Pearson.
- Tandang, T. A. W., & Arif, M. M. (2019). Beliefs about language learning, role of gender and students’ achievement in relation to second language anxiety Politeknik Port Dickson. *Asian Journal of University Education (AJUE)*, 15(3), 276–284.
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019). Second language anxiety and achievement a meta-analysis. *Studies in Second Language Acquisition*, 41(2), 363–387. <https://doi.org/10.1017/S0272263118000311>
- Ting, H. L., & Rijeng, J. S. (2018). An investigation on Mandarin speaking anxiety among non-native Mandarin learners. *Journal of Business and Social Sciences (AJOBSS)*, 2, 1–9. <https://ir.uitm.edu.my/id/eprint/29996/>
- Wang, Y. (2009). *The Study on the Anxiety of The English Spoken Language Test for International*

- Students at the Junior And Intermediate Level*. [Unpublished doctoral dissertation]. East China Normal University.
- Xie, Q., & Freeman, R. B. (2019). Bigger than you thought: China's contribution to scientific publications and its impact on the global economy. *China and World Economy*, 27(1), 1–27. <https://doi.org/10.1111/cwe.12265>
- Yin, S. S., & Ho, C. T. (2013). Mandarin as the chosen foreign language course among learners of foreign languages: A case study. *Journal of Arts, Science & Commerce*, 4(3), 80–88.
- Yunus, N. M., & Singh, K. K. a/p M. (2014). The use of indirect strategies in speaking: Scanning the MDAB students. *Procedia - Social and Behavioral Sciences*, 123, 204–214. <https://doi.org/10.1016/J.SBSPRO.2014.01.1416>
- Zheng, Y., & Cheng, L. (2018). How does anxiety influence language performance? From the perspectives of foreign language classroom anxiety and cognitive test anxiety. *Language Testing in Asia*, 8(1), 1–19. <https://doi.org/10.1186/S40468-018-0065-4>