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(IJEPC)<https://gaexcellence.com/ijepe>EXPLORING SELF-EFFICACY AMONG
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Abstract:

The increasing global importance of Mandarin has led to a rise in student enrolment in Mandarin language learning. However, learner success depends on both the quality of instruction and psychological factors like self-efficacy. In the context of language acquisition, self-efficacy plays a crucial role in determining how well someone understands language (listening and reading) and how effectively they produce language (speaking and writing). Theoretically, self-efficacy acts as a central mediator of learner agency, influencing the intensity of effort and the degree of persistence maintained when facing linguistic obstacles. High efficacy beliefs are strong predictors of language learning motivation and the proactive employment of self-regulated learning strategies. Conversely, low self-efficacy can trigger avoidance behaviors and heighten foreign language anxiety, serving as a precursor to academic burnout. This study contributes to the field by addressing the lack of research on the dual framework of accepting and producing self-efficacy within a single pedagogical context. Understanding these aspects of self-efficacy offers valuable insights for developing effective learning strategies and curriculum. This study examines the relationship between reception self-efficacy and production self-efficacy in 145 Malaysian undergraduates at the beginning of their Mandarin language learning. The scope of this investigation is limited to the early-stage psychological profiles of these students, focusing on different tasks during the learning of Mandarin. The instrument used is a structured questionnaire comprising three sections: demographic information, reception self-efficacy, and production self-efficacy. The findings show that learners generally perceive their self-efficacy in Mandarin as low to moderate across all four Mandarin language skills: listening, reading, speaking, and writing. This indicates a pervasive lack of high confidence in their receptive and productive abilities. It is important to

address the task where learners feel most insecure, tailoring support to improve their perceived competence in Mandarin skills.

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Keyword:

Language Acquisition, Mandarin Skills, Production Self-Efficacy, Reception Self-Efficacy



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Introduction

In the current globalized landscape, Mandarin proficiency has emerged as a primary driver of economic mobility and cross-cultural competence, particularly within Malaysia's multilingual framework (Zhang & Li, 2021; Yap & Wong, 2021). Recent labor market data underscores this shift, revealing that Mandarin-speaking graduates command a substantial wage premium in high-growth sectors such as fintech and semiconductor engineering. While the influx of Chinese tech giants like Alibaba and BYD makes direct collaboration between Malaysian and Chinese technology hubs inevitable, successful language acquisition ultimately hinges on individual learner factors—most notably self-efficacy—alongside institutional support. In the Malaysian higher education context, Mandarin learning is particularly critical because Mandarin is increasingly offered as an elective or foreign language course across both public and private universities, driven by bilateral trade agreements with China and job market demands for multilingual graduates.

This research was motivated by classroom observations and interactions with Mandarin learners who exhibited varying degrees of confidence in listening, reading, speaking, and writing tasks which shapes learners' exposure hours, motivation profiles, and instructional contexts. Some students could comprehend spoken or written Mandarin effectively but struggled with oral or written expression, while others showed balanced performance across all skills. Due to the limited contact hours per week, large class sizes, lack of native-speaker interaction opportunities, and assessment formats that prioritize reading and writing over speaking and listening. These differences prompted an interest in exploring how students perceive their capabilities in language **reception** (listening and reading) versus **production** (speaking and writing), and how these perceptions might be related. Key concepts in this study are:

- **Language acquisition** refers to the process by which learners develop the ability to understand and use a language, through natural learning or formal teaching.
- **Mandarin skills** include the four core areas of language proficiency: listening, speaking, reading, and writing, which are crucial for effectively communicating in Mandarin.
- **Reception self-efficacy** is defined as a learner's belief in their ability to understand language they hear or read. It reflects confidence in their capacity to comprehend spoken language from native speakers and written text.
- **Production self-efficacy** refers to a learner's belief in their ability to speak and write well in a new language. Learners with high production self-efficacy tend to actively participate in communicative tasks, enhancing their fluency, accuracy, and overall communicative competence.

Statement of Problem

Although the challenges of learning Mandarin are well-known, there is insufficient research on students' confidence in their ability to learn the language. While previous studies have extensively examined language acquisition strategies and instructional practices (Zhang, 2020; Lim, 2024), less attention has been devoted to psychological variables, particularly self-efficacy, that critically influence learner engagement and achievement in second language acquisition (Bandura, 1997; Schunk & Pajares, 2005).

However, previous studies have largely treated language self-efficacy as a unidimensional construct, neglecting the potential distinction between learners' confidence in receptive skills (listening and reading) versus productive skills (speaking and writing) — a gap that is particularly consequential for logographic languages like Mandarin.

This study seeks to examine the relationship between two key dimensions of self-efficacy—reception self-efficacy (listening and reading) and production self-efficacy (speaking and writing)—to deepen the understanding of learner psychology in Mandarin language acquisition and guide the development of more effective instructional strategies. Establishing a strong link between these domains could enable educators to design integrated teaching approaches that simultaneously enhance learners' comprehension and expressive abilities, potentially creating a 'ripple effect' where gains in one skill reinforce confidence in another. Moreover, by identifying specific skills that learners find most challenging, —such as the unique orthographic demands of reading or the tonal complexities of speaking— the findings can support the creation of targeted interventions aimed at improving both confidence and performance in Mandarin learning, particularly at the beginner level. Focusing specifically on reception and production self-efficacy is justified because Mandarin presents asymmetrical challenges across these domains: tonal processing affects listening and speaking differently, while character recognition versus character production imposes distinct cognitive demands.

Objective of the Study and Research Questions

This study addresses the gap by examining the correlation between reception and production self-efficacy among Malaysian undergraduates at the beginner level of Mandarin learning. Specifically, this study is done to answer the following questions.

- How do learners perceive their reception self-efficacy in learning Mandarin?
- How do learners perceive their production self-efficacy in learning Mandarin?
- Is there a relationship between both types of self-efficacy in learning Mandarin?

Theoretical Framework

Theory of Self-Efficacy

Self-efficacy, defined as learners' belief in their ability to succeed in specific tasks, significantly influences how they perceive their ability to comprehend (listening and reading) and produce (speaking and writing) language, ultimately affecting their motivation and persistence. Based on Albert Bandura's Theory of Self-Efficacy (1997), people with high self-efficacy perceive challenges as opportunities to learn and grow rather than threats to be avoided.

In language learning, self-efficacy plays a crucial role in motivation, persistence, the learning strategies employed, and overall success. Learning a language takes time and effort. It requires engaging with the language, practicing speaking and writing, and being comfortable with uncertainty. Self-efficacy is also crucial for university students because it significantly impacts their approach to learning, academic performance, and overall educational experience (Shengyao et al., 2024).

Recent research highlights the importance of self-efficacy in language learning. For example, Fallah et al. (2020) found that flipped classrooms, which encourage active learning, can increase students' self-efficacy in learning English as a Foreign Language (EFL). Similarly, Bai and Wang (2023) discovered that self-efficacy, along with a growth mindset and intrinsic motivation, is a strong predictor of self-regulated learning and English achievement in Asian primary school students.

The use of technology in language learning also affects self-efficacy. Wang et al. (2021) found that students' belief in their ability to use technology influences how well they accept and use AI tools for English speaking practice. This aligns with Latorre-Coscolluela et al.'s 2024 study, which showed that online flipped learning can boost self-efficacy by providing opportunities for hands-on experience and social interaction.

When learning Mandarin, self-efficacy is important in two main areas: understanding (listening and reading) as input based and producing (speaking and writing) as output based. It's important to understand how these areas relate to each other because a learner's confidence in understanding the language can affect their ability to speak and write effectively. This study will investigate the relationship between self-efficacy in understanding and producing Mandarin among undergraduate students. The findings can help develop teaching methods and support systems to increase students' confidence and skills in learning Mandarin. The integration of input-based and output-based perspectives (Krashen, 1985; Swain, 1995) offers a more complete account of second language acquisition, particularly for logographic languages like Mandarin where receptive and productive skills impose distinct cognitive demands.

Difficulties in Learning Mandarin

The acquisition of Mandarin as a foreign language (MFL) for undergrad learners presents unique challenges that affect learners' reception self-efficacy (listening and reading) and production self-efficacy (speaking and writing). Research highlights several key difficulties that influence learners' confidence and performance in acquiring Mandarin skills.

Mandarin language acquisition presents several significant challenges that directly affect learners' self-efficacy in both receptive and productive skills. One of the most prominent difficulties lies in the tonal system and pronunciation. As a tonal language, Mandarin requires learners to distinguish and produce tones accurately; failure to do so often results in miscommunication. This challenge is particularly acute in speaking and listening and has been shown to reduce learners' production self-efficacy (Zhang & Lynch, 2021; Akram et al., 2019). Another major obstacle is character memorization and literacy. Mandarin's logographic script, unlike alphabetic systems, demands the memorization of thousands of unique characters. This affects learners' confidence in reading and writing, as many struggle with stroke order, character recognition, and retention (Yang, 2024; Zhou et al., 2022), thereby diminishing self-efficacy in literacy tasks.

Furthermore, grammatical and syntactic differences between Mandarin and more familiar Indo-European languages can create confusion. Mandarin lacks inflectional morphology, such as verb conjugations, and often follows a topic-comment sentence structure. These linguistic features complicate sentence formation and hinder learners' ability to construct and comprehend sentences accurately, affecting both reception and production self-efficacy (Chen, 2021). Lastly, limited exposure in non-native learning environments poses an additional barrier. In contexts such as Malaysia, opportunities for authentic interaction with native speakers are scarce, reducing learners' chances to engage in meaningful listening and speaking practice. This limited immersion leads to difficulty understanding natural speech patterns and regional accents, further lowering reception self-efficacy (Ju et al., 2022; Lim, 2024). Collectively, these challenges highlight the complex interplay of linguistic and contextual factors that shape learners' confidence and performance in Mandarin acquisition.

Self-efficacy in Mandarin language learning varies across the four core skills, with distinct challenges influencing both receptive and productive domains. In terms of reception self-efficacy, learners frequently struggle with listening tasks, particularly in distinguishing tones and processing rapid, natural speech (Zhang & Lynch, 2021). Similarly, reading self-efficacy is often hindered by the overwhelming task of recognizing and memorizing many Chinese characters, leading to reduced confidence and engagement (Yao et al., 2023). Graham (2022) emphasizes that reception self-efficacy is foundational to overall language acquisition; when learners lack confidence in their ability to comprehend spoken or written input, their broader language development tends to stagnate.

Regarding production self-efficacy, challenges are even more pronounced due to the active and socially evaluative nature of speaking and writing. In speaking, the fear of making tonal errors often results in communication anxiety, diminishing learners' confidence in oral expression (Akram et al., 2019). Writing presents its own set of difficulties, as the complexity of Chinese characters and the demand for correct stroke order discourage sustained practice, weakening writing self-efficacy (Zhou et al., 2022). According to Waddington (2023), production self-

efficacy is generally more unstable than reception self-efficacy because it involves real-time performance and social judgment, making it more susceptible to fluctuations in confidence.

In language learning, a key gap exists between receptive and productive self-efficacy: the supporting role of implicit motivation differs between the two domains. Learners typically develop relatively high receptive self-efficacy because repeated exposure to comprehensible input (e.g., listening and reading) passively reinforces a sense of familiarity and understanding. This exposure-driven confidence is largely supported by implicit motivation. In contrast, productive self-efficacy requires active retrieval, real-time processing, and error management, increasing cognitive load and perceived risk. Xie's (2012) study explores learners may feel confident in understanding Mandarin but lack confidence in using it.

Technology has emerged as a potential support system to mitigate some of these challenges. Tools such as mobile-assisted flashcard applications have been shown to improve character retention and reinforce reading and writing skills (Aijia & Supinda, 2021). Additionally, emerging technologies like virtual reality (VR) and AI-driven language tutors offer immersive environments that can strengthen tonal recognition and enhance speaking confidence (Henderson et al., 2012). Nevertheless, an et al. (2021) caution that over-reliance on technological aids may impair learners' self-regulated learning habits, ultimately limiting the development of sustainable self-efficacy in the long term. Therefore, while technology provides valuable support, its integration should be balanced with strategies that promote learner autonomy and long-term confidence.

Past Studies on Self-Efficacy for Learning Language (Mandarin)

The past studies present three notable limitations on self-efficacy for Mandarin language acquisition. First, studies on self-efficacy in Mandarin language learning (MLL) have primarily focused on advanced learners or those in native Mandarin-speaking environments (Liu et al., 2020; Chen & Wong, 2022), with comparatively less attention given to beginner-level learners in multilingual contexts like Malaysia (Lim, 2024). This gap is significant because Malaysian learners face unique challenges stemming from linguistic and cultural differences (Tan & Lee, 2021; Ju et al., 2022).

Second, while some studies explore general language self-efficacy, there remains limited research distinguishing between reception self-efficacy (listening, reading) and production self-efficacy (speaking, writing) in early-stage Mandarin learners (Wu & Zhang, 2022). Current research has often treated language self-efficacy as a single, generalized construct without adequately exploring how confidence levels may vary between receptive and productive domains (Choi & Lee, 2016; Lim, 2024).

Third, recent systematic reviews (Zhang, 2020) and empirical studies (Li et al., 2023) have called for more fine-grained investigations into domain-specific self-efficacy among language learners, particularly in less commonly taught languages like Mandarin and in under-researched multilingual contexts (Ju et al., 2022). As Lim (2024) emphasizes, understanding how beginning learners perceive their strengths and weaknesses across different language tasks is crucial for developing effective pedagogical interventions.

Given that low self-efficacy can hinder skill development (Zhou, 2021) and that Mandarin presents unique challenges in both receptive and productive domains (Yang, 2024), this study aims to bridge these research gaps by examining the relationship between reception and production self-efficacy among Malaysian undergraduates at the beginner level of Mandarin learning.

To complement Bandura's self-efficacy theory, this study also draws upon principles from second language acquisition research. Specifically, Krashen's Input Hypothesis (1985) emphasizes that language acquisition occurs when learners receive comprehensible input—a process closely related to reception self-efficacy. Conversely, Swain's Output Hypothesis (1993, 1995) posits that language production (speaking and writing) is essential for noticing gaps in one's knowledge and developing grammatical accuracy—a process directly relevant to production self-efficacy. Together, these frameworks suggest that confidence in reception (input processing) and confidence in production (output generation) may be related but distinct constructs, each contributing uniquely to Mandarin acquisition among beginner learners.

Conceptual Framework

One common goal to achieve in the learning of a language is the ability to use the target language to communicate. In order to achieve this, learners need to interact with other learners (Rahmat, et.al., 2021). Figure 1 shows the conceptual framework of the study. This study explores the relationship between reception and production self-efficacy in the learning of Mandarin. This study is rooted from Kutuk, et.al (2022) who presented two types of self-efficacy. The first type is reception self-efficacy, and this refers to the ability of the learners to understand and interpret language that is received through listening and reading. The next type is production efficacy, and this refers to the abilities of the learner to speak and write.

The division of self-efficacy into reception and production dimensions is theoretically justified by the input-output distinction in language processing models (Krashen, 1985; Swain, 2005), which posits that comprehension and production involve qualitatively different cognitive operations and skill sets. In this framework, reception and production self-efficacy are conceptualized as two correlated but distinct dimensions. Specifically, listening and reading map onto reception self-efficacy, while speaking and writing map onto production self-efficacy.

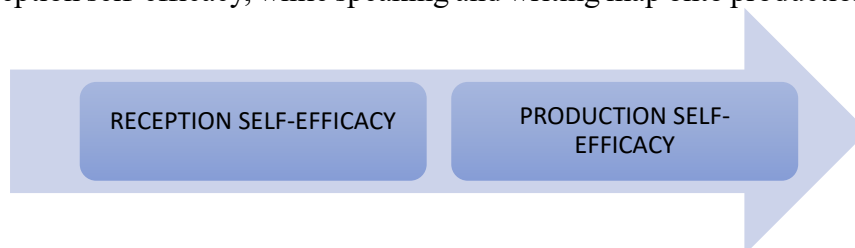


Figure 1- Conceptual Framework of the Study- Self- Efficacy in Learning Mandarin

Methodology

To empirically examine these theoretical distinctions, this study adopted a quantitative cross-sectional to systematically examine the self-efficacy of 145 Malaysian undergraduate students in the early stages of learning Mandarin. Participants were first and second semester undergraduates from UiTM. Their first languages included Bahasa Malaysia, Chinese dialects,

or English, reflecting Malaysia's multilingual demographic. Beginner level was operationally defined as having completed no more than one semester of formal Mandarin instruction and self-reporting no prior formal Mandarin learning experience. Purposeful sampling was used specifically for beginners to ensure the data accurately reflects the inherent psychological challenges of learning Mandarin in its early stages. At the time of data collection, participants were enrolled in 14-week beginner Mandarin course with 4 contact hours per week, covering basic vocabulary, simple sentence structures, and introductory Hanzhi recognition. Data collection was conducted through an online structured questionnaire hosted on Google Forms, a method selected because it effectively ensures standardized questionnaire management and participant anonymity. The research tools consist of three main components: demographic profiles, a subscale for reception self-efficacy (listening and reading), and a subscale for production self-efficacy (speaking and writing). This two-dimensional structure aligns with the theoretical dichotomy of language processing (receptive input and productive output). Participants used a five-point Likert scale (1 = never, 5 = always) to answer how frequently they performed specific language tasks.

Table 1- Likert Scale

1	Never
2	Rarely
3	Sometimes
4	Very Often
5	Always

The instrument used is a 5 Likert-scale survey and is rooted from Kutuk,et.al. (2022) to reveal the variables in table 1 below. The survey has 4 sections. Section A has items on demographic profile. Section B has 10 items on Reception Self-Efficacy. Section C has 10 items on Production Self-Efficacy.

Table 2- Distribution of Items in the Survey

NO	VARIABLE	SUB-CATEGORY	ITEMS	TOT ITEMS	CRONBACH ALPHA
B	RECEPTION SELF-EFFICACY	Listening	5	10	.910
		Reading	5		
C	PRODUCTION SELF-EFFICACY	Speaking	5	10	.920
		Writing	5		
				20	.950

Table 2 also shows the reliability of the survey. The analysis shows a Cronbach alpha of 0.910 for reception self-efficacy and 0.920 for production self-efficacy. The overall Cronbach alpha for all 20 items is 0.95; thus, revealing a good reliability of the instrument chosen/used. Further descriptive analysis using SPSS is done to present findings to answer the research questions for this study.

Findings for Demographic Profile

The demographic data show that the learner group in the survey is predominantly female, with 76% identifying as female and 24% as male. Most learners (75%) reported that they can not communicate well in Mandarin, with only a minority (25%) believing that they were fluent in Mandarin. This self-assessment provided key context to understand their self-efficacy in different skills.

Table 3- Percentage for Demographic Profile

Question	Demographic Profile	Categories	Percentage (%)
1	Gender	Male	24%
		Female	76%
2	Self-Rating Proficiency	Can communicate in Mandarin	25%
		Cannot communicate in Mandarin	75%

Findings for Reception Self-Efficacy

This section presents data to answer research question 1: How do learners perceive their reception self-efficacy in learning Mandarin? In the context of this study, reception self-efficacy is measured by (i) listening and (ii) reading skills. Learners generally exhibit a low to moderate level of self-efficacy in both areas.

Table 4- Mean for (i) LISTENING

STATEMENT/ QUESTION	Mean	SD
RSELQ1I can understand everyday Mandarin conversations (e.g., chats with friends).	2.4	0.79008
RSELQ2 I can distinguish between similar-sounding Mandarin words (e.g., tones like *mā* vs. *mǎ*)	2.6	0.95402
RSELQ3 I can understand Mandarin films or TV shows without English/Malay subtitles.	1.7	0.80539
RSELQ4 I can understand Mandarin speakers even if they talk quickly.	1.6	0.90576
RSELQ5 I can grasp the main ideas of lectures or presentations in Mandarin.	2.3	0.85192

Students have different levels of confidence in their Mandarin listening skills. They are most confident in distinguishing between similar-sounding Mandarin words (e.g., tones like mā vs. mǎ), with a mean score of 2.6. They also show moderate confidence in understanding everyday Mandarin conversations (e.g., chats with friends), with a mean score of 2.4. Learners struggle considerably with understanding Mandarin speakers even if they talk quickly, reporting a low mean score of 1.6. Similarly, understanding Mandarin films or TV shows without English/Malay subtitles is a major challenge, with a mean score of 1.7. Grasping the main ideas of lectures or presentations in Mandarin also presents moderate difficulty, with a mean score of 2.3. In general, students are confident with basic Mandarin conversation and recognizing tones, but they struggle when Mandarin is spoken quickly or when watching media without subtitles.

Table 5 -Mean for (ii) READING

STATEMENT/ QUESTION	Mean	SD
RSERQ1I can read and understand very simple Hanzi (Chinese Character) on notices, posters or in catalogues.	2	0.93500
RSERQ 2I can read and understand very short, simple Hanzi phrases.	2.2	0.98319
RSERQ 3I can read and understand short sentences in Hanzi.	2.1	1.01190
RSERQ 4I can read and interpret informal messages in Hanzi and Pinyin.	2.2	0.90982
RSERQ 5 I can read and understand specific information from complex Mandarin texts in Hanzi and Pinyin.	2.1	0.92424

Students tend to exhibit a consistently low to moderate level of confidence in their Mandarin reading comprehension, regardless of task complexity. Their ability to read and understand very simple Hanzi, such as those found on notices, posters, or catalogues, received a mean score of 2.0. Reading and understanding very short, simple Hanzi phrases scored slightly higher at 2.2. The mean score for reading short sentences in Hanzi was 2.1. Similarly, students reported a mean score of 2.2 for interpreting informal messages written in Hanzi and Pinyin, while extracting specific information from complex Mandarin texts yielded a mean of 2.1. Overall, the self-assessed scores range consistently between 2.0 and 2.2, indicating a stable yet modest level of confidence across a variety of reading tasks involving both Hanzi and Pinyin.

Findings for Production Self-Efficacy

This section presents data to answer research question 2- How do learners perceive their production self-efficacy in learning Mandarin? In the context of this study, production self-efficacy is measured by (i) speaking and (ii) writing skills. Learners generally exhibit a low to moderate level of self-efficacy in both areas.

Table 6- Mean for (i) SPEAKING

STATEMENT/ QUESTION	Mean	SD
PSESQ 1 I can discuss topics such as families, hobbies, work and travel with my classmates in Mandarin.	2.5	0.98684
PSESQ 2 I can interact with a native speaker of Mandarin fluently and spontaneously	1.7	0.82600
PSESQ 3 I can ask questions to my teacher and answer his/her questions in Mandarin.	2.2	0.90019
PSESQ 4 I can speak Mandarin with accurate tones, even in unfamiliar situations.	2	0.87357
PSESQ 5 I can give a short speech or presentation in Mandarin with little preparation.	2.1	0.90909

Learners generally demonstrate a low to moderate level of self-efficacy in speaking Mandarin. They express relatively greater confidence when discussing familiar topics, such as family, hobbies, work, and travel, with classmates, reflected in a mean score of 2.5. Moderate confidence is also reported in their ability to ask and answer questions with their teacher in Mandarin (mean score: 2.2), as well as in delivering short speeches or presentations with minimal preparation (mean score: 2.1). However, the greatest difficulty arises in engaging in fluent, spontaneous conversations with native Mandarin speakers, which received a significantly low mean score of 1.7. Speaking with accurate tones, especially in unfamiliar contexts, is also perceived as challenging, with a mean score of 2.0. In summary, while learners show some confidence in basic, structured speaking activities within familiar settings, they face notable difficulties with spontaneous communication and tonal precision in less predictable interactions.

Table 7- Mean for (ii) WRITING

STATEMENT/ QUESTION	Mean	SD
PSEWQ 1 I can write Hanzi from memory without relying on pinyin.	1.8	0.77947
PSEWQ2 I can write clear and grammatically accurate sentences in Hanzi and Pinyin.	1.9	0.74458
PSEWQ 3 I can write short essays or paragraphs in Mandarin Pinyin on familiar topics.	1.8	0.81661
PSEWQ 4 I can write ideas effectively in written Mandarin Pinyin using appropriate vocabulary	2	0.84549
PSEWQ 5 I can use digital tools (e.g., Pinyin input, Mandarin word processors) to write accurately.	2.6	1.03368

Learners typically report a low to moderate level of self-efficacy in Mandarin writing, except when using digital tools. Writing Hanzi from memory without the support of Pinyin yields a relatively low mean score of 1.8. Similarly, composing clear and grammatically correct sentences in Hanzi and Pinyin results in a mean score of 1.9. Writing short essays or paragraphs in Mandarin Pinyin on familiar topics also receives a mean score of 1.8, while expressing ideas effectively in written Mandarin Pinyin using appropriate vocabulary scores slightly higher at 2.0. In contrast, using digital tools like Pinyin input methods and word processors for accurate writing yields the highest self-efficacy (2.6). Overall, mean scores for traditional writing tasks fall between 1.8 and 2.0, with a marked increase for digital tool-assisted writing. This pattern underscores the general difficulty learners face with Mandarin writing, particularly in character production and extended composition without technological assistance.

Findings For the Relationship Between Reception and Production Self-Efficacy

This section presents data to answer research question 3: Is there a relationship between both types of self-efficacy in learning Mandarin? This is important to find out the relationship between confidence in the ability of students to understand Mandarin (listening and reading) to the confidence in their ability to produce Mandarin (speaking and writing).

To determine if there is a significant association in the mean scores between both types of self-efficacy in learning Mandarin, data is analysed using SPSS for correlations. Results are presented separately in table 8 below.

Table 8- Correlation between Reception and Production Self-Efficacy

		RECEPTION SELF-EFFICACY	PRODUCTION SELF-EFFICACY
RECEPTION SELF-EFFICACY	Pearson (Correlation)	1	.815**
	Sig (2-tailed)		.000
	N	145	145
PRODUCTION SELF-EFFICACY	Pearson (Correlation)	.815**	1
	Sig (2-tailed)	.000	
	N	145	145

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

Table 8 shows there is an association between reception and production self-efficacy. Pearson correlation analysis revealed a highly significant positive correlation between receptive self-efficacy and productive self-efficacy ($r = .815$, $p < .001$). According to Jackson's (2015) assessment criteria, a coefficient between 0.5 and 1.0 indicates a strong positive correlation, confirming a robust psychological link between these two constructs. This suggests that Malaysian university students who believe they can understand Mandarin through listening and reading are also more likely to be confident in their ability to actively use Mandarin in speaking and writing. The strength of this relationship indicates that self-efficacy is not an isolated trait but a coherent belief system, where confidence in receptive aspects forms the basis for

confidence in productive aspects. Theoretically, this aligns with the two-factor model of language acquisition, which posits that general factors of second language self-efficacy underpin specific skill dimensions. This strong correlation supports the theoretical framework of the two-factor model, indicating that language self-efficacy, as a single underlying universal factor, simultaneously influences skills in both receptive and productive dimensions. This implies that for beginners in Chinese, their perception of their own language decoding ability is inextricably linked to the confidence required to use the language, creating a "ripple effect": improvements in listening or reading comprehension can enhance learners' confidence in their listening, speaking, reading, and writing abilities. Therefore, these findings underscore the necessity of integrative instructional design that leverages receptive mastery to alleviate the high levels of anxiety often associated with beginners learning Chinese.

Summary of Findings and Discussions

Learners generally perceive their Mandarin skills in listening, reading, speaking, and writing as falling within a low to moderate range. This general lack of assurance points to the difficulty of Mandarin itself and pinpoints crucial areas where teaching can be improved.

In listening, students' confidence levels depend on the specific task. They feel more confident when distinguishing tones or understanding simple, everyday conversations. However, their confidence drops considerably when listening to fast, unscripted speech or trying to understand media without subtitles. This difference reveals a gap between basic listening skills and the ability to quickly and independently process real-world language.

In reading, students consistently express low confidence, even when encountering simple Chinese characters (Hanzi) in public places. Unlike listening, where confidence varies, reading difficulties seem to arise mainly from the challenges of the writing system, especially recognizing and interpreting Chinese characters.

In speaking, students are more comfortable discussing familiar subjects with classmates or participating in organized classroom discussions. However, their confidence decreases significantly during spontaneous conversations with native speakers, particularly when they need to use accurate tones in unfamiliar situations. This suggests that while structured practice helps speaking skills, students struggle with fluency and accurate tones in natural, unpredictable settings.

Writing presents similar problems. Students report only fair to average confidence, especially when writing Hanzi by hand or composing short texts from memory. Confidence increases noticeably when using digital tools like Pinyin input methods and Mandarin word processors. This indicates that technology reduces the mental effort required to remember characters and spell correctly.

Overall, these findings highlight the need for teaching methods that lessen the mental strain of learning Hanzi, provide regular exposure to authentic language use, and incorporate helpful technologies. By tackling these specific challenges, pedagogical interventions used by teachers should transition from isolated skill drills to integrated, multimodal approaches that leverage receptive confidence to mitigate productive anxiety.

Theoretical and Conceptual Implications

The study consistently found that participants had low to moderate confidence in their abilities across listening, reading, speaking, and writing. This generally supports Bandura's idea that self-efficacy beliefs are specific to the task at hand and affects how much effort people put in, how long they persevere, and how well they perform. However, the subtle differences observed in this study offer a more detailed understanding of how these beliefs appear when learning a language like Mandarin, which has a very different structure than many other languages. Understanding self-efficacy theory to Mandarin skills is especially important because the language presents unique difficulties. Mandarin uses tones, where pitch changes the meaning of words. It also uses a character-based writing system, which can be daunting for learners accustomed to alphabetic scripts. These language features can significantly influence a learner's self-perceived capabilities. For example, it's common to struggle with hearing and saying tones correctly, especially when things are fast-paced or unfamiliar, and that can impact self-efficacy. Likewise, the large number of complex Chinese characters can make reading and writing challenging, affecting confidence in these domains.

Pedagogical Implications

This study explores self-confidence levels when learning Mandarin Chinese and provides useful suggestions for teaching. The main result shows that learners have only low to moderate self-confidence in both understanding (listening and reading) and using (speaking and writing) the language. The study pinpoints specific areas where students struggle, offering chances for teachers to step in and help. For listening, students aren't confident in understanding fast, natural speech or media without subtitles. Teachers should use real-life audio from the beginning, with different speeds and accents. They should also directly teach listening strategies, like picking out keywords, getting the main idea, and dealing with unclear parts. Gradually, students should rely less on subtitles to build independent listening skills.

Similarly, students aren't confident speaking spontaneously with native speakers. They need more real-life conversation practice through casual interactions, role-playing, and language exchange to feel more comfortable speaking Mandarin naturally. The study also reveals consistently low confidence in reading and writing Chinese characters from memory, which reflects how challenging the writing system is. Teaching should focus on organized methods for learning characters, like radicals, structural components, mnemonics, and consistent practice. Introducing characters early and often in context can ease the learning process.

However, students feel more confident writing using digital tools. Technologies like Pinyin input and word processors can help with writing. Teachers should use these tools while still requiring regular handwriting practice to ensure students remember and recognize characters in the long run. Finally, while students can recognize tones in listening, they struggle to use them accurately when speaking, especially in new situations. This difference means that pronunciation training is needed, including tone exercises, minimal pair practice, and immediate feedback to improve tone accuracy in speaking.

Suggestions for Future Research

This study provides a foundational understanding of self-efficacy beliefs in Mandarin learning and offers several avenues for future research. Longitudinal studies are recommended to

examine how learners' confidence evolves, identifying critical points where support is most needed. Qualitative methods, such as in-depth interviews, focus groups, or think-aloud protocols, should be used to uncover the underlying reasons behind learners' low confidence, offering richer insight into the numerical trends. Future research should also focus on designing and implementing targeted teaching interventions, such as real-world listening modules, structured Hanzhi learning programs, or communicative speaking courses, and evaluating their impact on both learner confidence and actual language proficiency. Moreover, it is important to examine the correlation between self-efficacy levels and actual Mandarin performance, such as test scores or task outcomes, to assess the predictive validity of self-confidence measures. Additional variables like age, prior language experience, learning styles, motivation, and cultural background should be analyzed to understand their influence on learners' self-efficacy. Further research is also needed to determine the effects of digital tools on students' writing confidence, their ability to produce characters independently, and their overall writing proficiency. Finally, exploring Mandarin teachers' self-efficacy in teaching challenging aspects of the language, such as tones and characters, and how this influences student confidence can offer important pedagogical insights. By tackling these issues and exploring these research areas, Mandarin language education can create teaching methods that are more effective and build learners' confidence. This will help learners successfully handle the challenges of Mandarin.

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