

Motivation and Challenges in Learning Mandarin For Non-Chinese Descent High School Students at Methodist-6 School Medan

¹Shandy, ²Charles, ³Elly Romy, ⁴Cynthia Hualangi

^{1,2,3}Universitas Prima Indonesia, Indonesia

⁴Sekolah Tinggi Bahasa Asing Persahabatan Internasional Asia, Indonesia

Email: les.jackmen@gmail.com, cynhualangi@gmail.com

KEYWORDS

learning motivation,
learning difficulties,
Mandarin, non-Chinese
students, language
learning

ABSTRACT

This study aims to analyze the level of motivation and the difficulties faced by non-Chinese students in learning Mandarin at SMA Methodist-6 Medan. The background of this research is the increasing demand for Mandarin proficiency in Indonesia, following the growing bilateral relations between Indonesia and China and the increasing career opportunities requiring Mandarin skills. This study uses a quantitative approach with a survey method, where data is collected through questionnaires distributed to non-Chinese students. The results show that most students have high motivation to learn Mandarin, particularly instrumental motivation related to career opportunities. However, the main difficulties they face lie in writing and speaking skills, which are caused by the structural differences between Mandarin and Indonesian, as well as limited opportunities to practice outside the school environment. Additionally, there is an indication of a gap between students' high motivation and their actual ability to overcome linguistic barriers. The Pearson correlation test results show a weak and insignificant positive relationship between motivation and learning difficulties. Based on these findings, it is suggested that a more contextual and communicative learning approach should be applied to address the learning difficulties faced by students and improve their Mandarin language skills.

Attribution-ShareAlike 4.0 International (CC BY-SA 4.0)



INTRODUCTION

China's rapid economic growth has opened up various job opportunities at the global level, including in Indonesia (Zhang et al., 2020). This situation demands the ability to speak Chinese as one of the important competencies, not only to support careers in the international sector but also to strengthen bilateral cooperation relations between Indonesia and China (Wu & Li, 2019). Through the Belt and Road Initiative (BRI), the collaboration between the two countries has also encouraged the presence of various educational programs, such as scholarships, student exchanges, and cultural exchanges (Wang, 2021). This dynamic strengthens the urgency of mastering Chinese among Indonesian students, especially in the context of enhancing Indonesia-China cooperation (Ministry of Energy and Mineral Resources Republic of Indonesia, 2021). Furthermore, studies show that learning Chinese contributes significantly to improving Indonesia's competitive edge in the global job market (Tan & Huang, 2022).

As of May 2023, as many as 81 countries have integrated *Mandarin* into their respective national education systems (Antara, 2024). In Indonesia, formal Chinese learning is generally found in private schools, especially those with Chinese cultural backgrounds. However, in the era of globalization and global economic competition, mastery of *Mandarin* should be a

universal added value that is open to all students, regardless of ethnic background (Alindra & Romy, 2022). Therefore, *Mandarin* is now included in the group of foreign languages selected at the high school level.

In learning a foreign language, motivation plays a crucial role as an internal driver that moves individuals to achieve certain goals. Derived from the word "*motive*," motivation in the context of education is an intrinsic factor that encourages students to be actively involved, study consistently, and make maximum efforts for optimal results (Febrianti et al., 2023).

Success in learning does not only depend on motivation but is also influenced by various factors that can cause difficulties. In learning a foreign language, students need to master four basic skills: listening, speaking, reading, and writing (Aslamiah, 2020). *Mandarin* has linguistic characteristics that are very different from Indonesian, such as the use of *Hanzi* characters and a complicated tone system. The lack of opportunities to practice *Mandarin* outside of the classroom is an additional challenge, especially for students who do not have a Chinese cultural background (Lianisyah, U.Y. et al., 2022).

Based on the background description, several problems can be identified as follows: first, there is no quantitative or descriptive data on the level of motivation of non-Chinese students in learning Mandarin at SMA Methodist-6 Medan (Zhang & Wang, 2019). Second, there has been no scientific study that specifically addresses the types of difficulties experienced by non-Chinese students in the process of learning Mandarin at the school (Cheng, 2021). Research has shown that motivation is a critical factor in language acquisition, particularly in non-native environments, where students face various challenges (Liu & Zhang, 2020). Additionally, language learning difficulties often arise due to differences in cultural background and learning styles, especially among non-Chinese students (Tan, 2018). Understanding these challenges is essential for designing more effective Mandarin language programs (Lee & Chen, 2022).

At Methodist-6 Medan High School, out of a total of 304 students, about 90% are non-Chinese students (Methodist-6 Medan, 2024). Interestingly, a previous study in Bandung showed that non-Chinese students tended to make faster progress in *Mandarin* language learning than Chinese students. These findings open up an opportunity to delve deeper into the motivations and challenges faced by non-Chinese students in learning this language.

Two previous studies offer valuable insights into language learning motivation and difficulties, particularly in the context of non-Chinese students learning *Mandarin* in Indonesia. First, Aslamiah (2020) explores the multifaceted challenges students face in mastering foreign languages, including *Mandarin*, especially regarding its tonal system and *Hanzi* characters. However, this study does not specifically address the unique challenges of non-Chinese students in Indonesia. Lianisyah et al. (2022) further discuss the obstacles non-Chinese students face in acquiring *Mandarin*, such as the limited exposure to the language outside the classroom and the cultural gap. While these studies provide essential background information, they do not delve deeply into the motivational factors that drive non-Chinese students to learn *Mandarin* or the specific difficulties they encounter, which remain a gap in the existing literature.

This research aims to explore the motivation levels of non-Chinese students in learning *Mandarin* and identify the specific challenges they face in the process. The theoretical benefits include enriching the study of language education, particularly in the field of *Mandarin* language acquisition in Indonesia. It contributes to the development of learning models that account for motivational factors and learning difficulties. The practical benefits for SMA Methodist-6 Medan include insights into student motivations and difficulties, allowing the school to design better teaching methods. This study also provides valuable information for Universitas Prima Indonesia and future researchers to develop effective strategies for *Mandarin* language teaching and foster educational collaborations. The results will be significant for improving *Mandarin* language learning outcomes, supporting cross-cultural and linguistic education in Indonesia.

RESEARCH METHODS

Conceptual Framework

The conceptual framework in this study connects two main variables, namely learning motivation and difficulties in learning *Mandarin*, experienced by non-Chinese students at Methodist High School-6 Medan. This study is descriptive, so it does not aim to analyze the causal relationship between the two variables but instead focuses on mapping the forms of motivation and the types of difficulties faced by students in the *Mandarin* language learning process. The visualization of its conceptual framework can be described as follows:

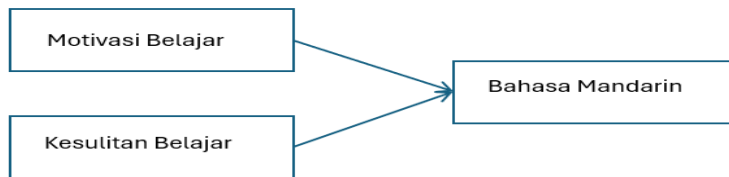


Figure 1. conceptual framework

Types of Research

This study uses a quantitative descriptive approach with a survey method to describe statistical data on students' motivation and difficulties based on the positivism paradigm (Sugiyono, 2019).

Data and Data Sources

This study used qualitative and quantitative data, including school descriptions, student difficulties, number of non-Chinese students, as well as primary data from observations and secondary data from school documents. The following Table 1 is the number of students of non-Chinese and Chinese descent per level. Principals of Methodist-6: A research permit is required in advance to obtain more detailed data on the number of students.

Table 1. Number of Chinese and Non-Chinese Students per Level

Class	Non-Chinese	Chinese
X (Ten)	32 People	7 People
XI (Eleven)	51 People	8 People
XII (Twelve)	37 People	7 People

Source: Respondent Results of Google Forms SMA Methodist-6 Medan, 2024

Data collection techniques

The data collection techniques used in this study are:

1. Questionnaire

This study used a closed-ended questionnaire to collect data related to motivation and difficulty in learning Chinese, because this method is suitable for a large number of respondents (Sugiyono, 2019). The following is Table 2 Variables of Motivation and Learning Difficulties.

Table 2. Motivation and Learning Difficulties

Variable	Sub Variables	Indicators
Learning Motivation (Gardner, 1985)	Motivation Interactive	Desire to interact with native speakers
		Building social relationships
		Interest in culture
		Desire to expand socializing, staying, or traveling
	Motivation Instrumental	Academic goals
		Career opportunities
		Getting a job
		Educational enhancement
		Benefits for education
		Communication needs
Learning Difficulties (Elisabeth, 2019)	Listening	Recording quality
		Cultural differences
		Accent
		New vocabulary
		Duration and speed
	Speak	Fear of Mistakes
		Lack of confidence
		Lack of motivation
	Read	Vocabulary and prior knowledge
		Decoding
		Brain memory work
		Language fluency
	Write	Writing characters
		Vocabulary
		Grammatical problems
	How to write	

Source: Data processed by Researcher, 2024

2. Interview

Semi structured interviews were used to dig up in-depth information related to the general picture and difficulties of learning Chinese, especially during preliminary studies to find research problems (Sugiyono, 2021).

3. Documentation

Documentation is used as a complement to data that can be in the form of writing, images, documents, which support research (Sugiyono, 2021). In this study, the documentation data is in the form of: profile or overview of the school, data on the number of students, and data from *websites* or scientific papers related to this research.

Data Analysis Techniques

This study aims to describe the motivation and difficulties of non-Chinese students at Methodist High School-6 Medan in learning Chinese. Therefore, a quantitative approach with descriptive statistical analysis techniques is used. The data is presented in the form of tables, graphs, pie charts, pictograms, as well as calculations of averages, percentages, deciles,

percentiles, and standard deviations. The sample was determined using the Yamane formula, while the motivational questionnaire used the Likert scale (Sugiyono, 2019)

RESULTS AND DISCUSSION

Respondent Identities

This study involved 120 non-Chinese students from grades X, XI, XII at Methodist-6 Medan High School who all followed Chinese subjects and were willing to fill out a research questionnaire.

Table 3. Number of Non-Chinese Students Per Level

Class	Non-Chinese Descendants
X (Ten)	32 People
XI (Eleven)	51 People
XII (Twelve)	37 People
Total	120 People

Source : Summary Results of Non-Chinese Students Methodist-6 Medan

Research Instruments

The main instrument used in this study was a questionnaire compiled using a 5-point Likert scale, namely:

1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

The questionnaire is divided into two main parts, consisting of 10 items that measure learning motivation and 16 items that measure the difficulty of learning Chinese.

Before use, the instrument has been tested for reliability using **the Alpha Cronbach coefficient** with the following results:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right)$$

Alpha Cronbach Formula:

Explanation:

- α = Cronbach's Alpha value
- k = number of items (e.g., 10 motivation items)
- σ_i^2 = variance of each item (summed)
- σ_t^2 = variance of the **total score per respondent** (sum of all items)
- **Learning Motivation:** $\alpha = 0.8496$ (high reliability category)
- **Learning Difficulty:** $\alpha = 0.8754$ (very high reliability category)

These results show that the instrument has good internal consistency, making it feasible to measure the variables in this study accurately and reliably

Research Results

The descriptive analysis in this study included the calculation of the average value and standard deviation of each item in the questionnaire. The standard deviation value is used to assess the extent to which respondents' answers to an item vary.

The smaller the standard deviation value, the more uniform the respondents' answers. Conversely, the greater the standard deviation value, the greater the variation in perception between respondents towards the item.

Description of Learning Motivation Data

The learning motivation questionnaire consists of 10 statement items based on the Likert scale. Based on the results of data processing from 120 non-Chinese respondents, it was obtained:

Example of manual calculation for Item 1:

Frequency of Answer:

- Score 2: 3 respondents
- Score 3: 43 respondents
- Score 4: 55 respondents
- Score 5: 19 respondents

Average Formula (\bar{x}):

$$\bar{x} = \frac{(2 \times 3) + (3 \times 43) + (4 \times 55) + (5 \times 19)}{120} = \frac{450}{120} = 3.75$$

Standard Deviation Formula(s):

$$s^2 = \frac{1}{n-1} \sum f_i(x_i - \bar{x})^2 = \frac{66.5}{119} \approx 0.5588 \quad s = \sqrt{0.5588} \approx 0.75$$

Results obtained :

- Minimum score : 2.0
- Maximum score : 5.0
- Average: 3.75
- Standard deviation: 0.75

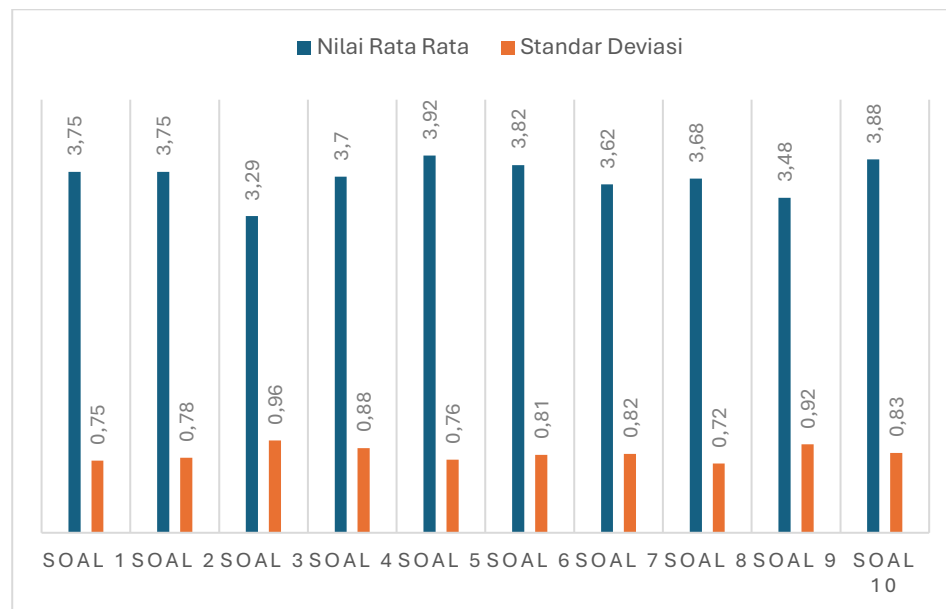


Figure 2. Average and Standard Deviation Per Learning Motivation Item

These results show that in general students show a fairly high level of learning motivation. Both instrumental motivation (oriented towards achieving grades, careers, or scholarship opportunities), and integrative motivation (oriented towards interest in culture and intercultural communication) can be seen from the respondents' answers. Visualizations in the

form of bar graphs have been used to clarify the average distribution of scores on each motivational statement item.

Description of Learning Difficulties Data

The learning difficulties questionnaire consists of 16 statement items that are analyzed using the Likert scale. The results of the descriptive analysis show:

Example of manual calculation for Item 11:

Frequency of Answer:

- Score 1: 1 respondent
- Score 2: 8 respondents
- Score 3: 48 respondents
- Score 4: 39 respondents
- Score 5: 24 respondents

Average Formula (\bar{x}):

$$\bar{x} = \frac{\sum (x_i \cdot f_i)}{n}$$

$$\bar{x} = \frac{(1 \cdot 1) + (2 \cdot 8) + (3 \cdot 48) + (4 \cdot 39) + (5 \cdot 24)}{120}$$

$$\bar{x} = \frac{1 + 16 + 144 + 156 + 120}{120}$$

$$\bar{x} = \frac{437}{120} = 3.6416 \approx \mathbf{3.64}$$

$$s^2 = \frac{\sum f_i (x_i - \bar{x})^2}{n - 1} = \frac{97.58}{119} = 0.8200$$

$$s = \sqrt{0.8200} = 0.9055 \approx \mathbf{0.91}$$

Standard Deviation

Formula(s):

Results obtained :

- Minimum score : 1.0
- Maximum score : 5.0
- Average: 3.64
- Standard deviation: 0.91

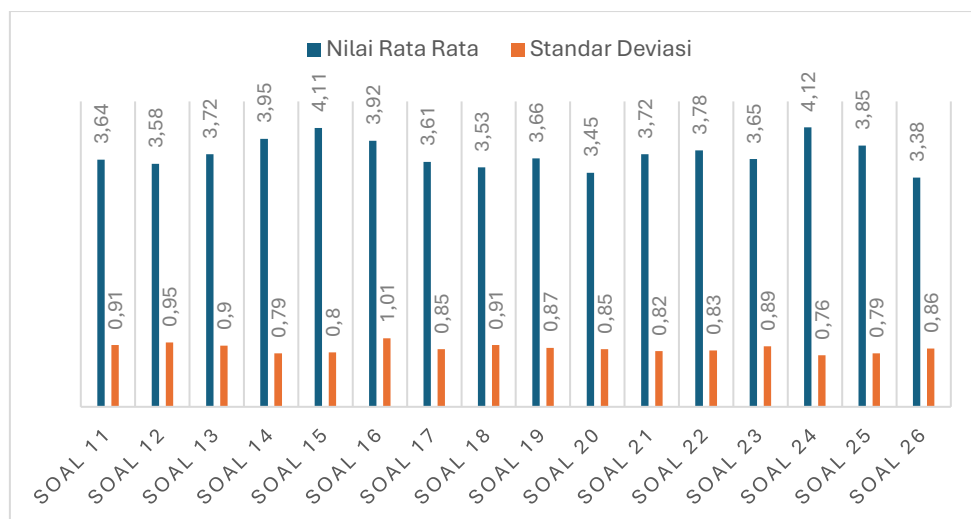


Figure 3. Average and Standard Deviation Per Learning Difficulty Item

These results show that in general, non-Chinese students experience challenges in receptive and productive Chinese skills, especially in aspects of writing Hanzi characters and understanding oral recordings. An average score above 3.5 on most items indicates that the perception of difficulty is quite high, while varying standard values of deviation reflect the diversity of students' learning experiences. These findings provide an important basis for designing teaching interventions that are more adaptive to the needs of students.

Motivation Level for Learning Chinese

Based on the results of the learning motivation questionnaire consisting of 10 statements, the following results were obtained:

- **Integrative Motivation (blue)**
 - 65% of students want to build social relationships and understand Chinese culture.
 - 55% of students want to interact directly with native speakers.
 - 48% of students want to travel or live in a Chinese-speaking country.
- **Instrumental Motivation (orange)**
 - 78% of students learn Mandarin to support their career prospects.
 - 82% of students consider Chinese proficiency important for job opportunities.
 - 60% of students associate learning Mandarin with further education opportunities and scholarships.

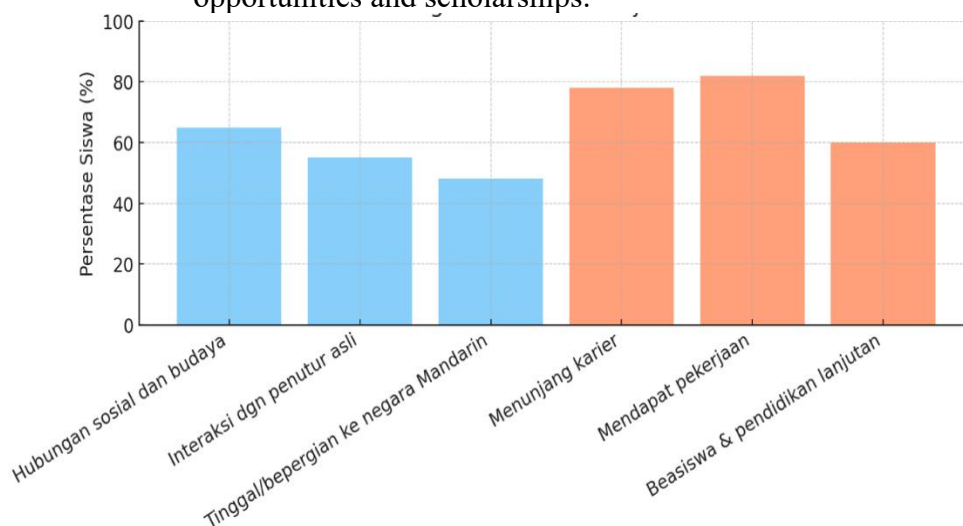


Figure 4. The Level of Motivation in Learning Mandarin

Forms of Difficulties in Learning Chinese

Based on 16 questions in the learning difficulty questionnaire, the following results were obtained:

- 76% of Chinese students have difficulty writing Chinese.
- 65% of Chinese students have difficulty speaking for fear of making mistakes.
- 62% of students learning Mandarin have difficulty listening because of a foreign accent.
- 58% of students learning Mandarin have difficulty reading foreign characters.
- 54% of students learning Mandarin have difficulty forgetting the content of the reading.

- 49% of students learning Mandarin have difficulty lacking confidence when speaking.

Meanwhile, the lowest difficulty occurs in:

- **Low motivation to speak (28%)**
- **Grammar comprehension (40%)**

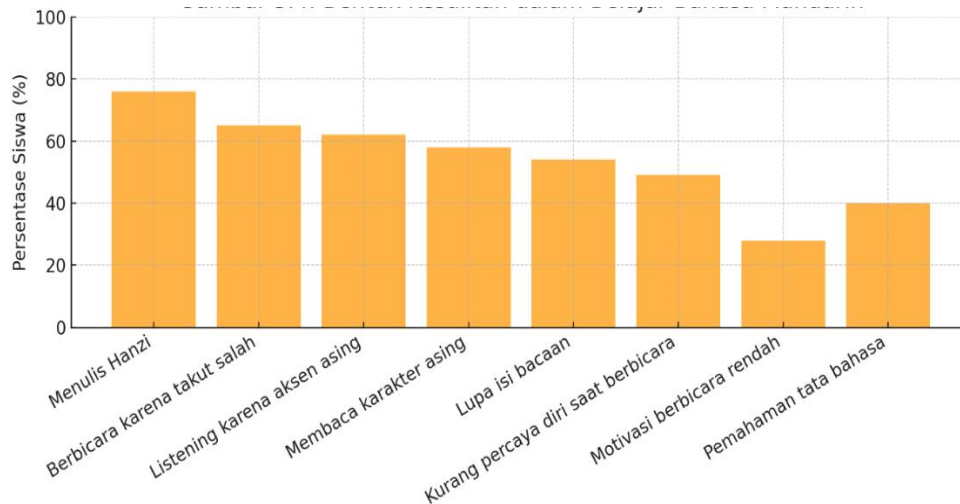


Figure 5. Types of Difficulties in Learning Mandarin

Correlation Test between Motivation and Learning Difficulties

To find out the relationship between the two main variables, namely motivation and difficulty learning Chinese, a Pearson correlation test was performed. This analysis used an average of each part of the questionnaire from 120 non-Chinese respondents.

Rumus Korelasi Pearson (r)

$$r = \frac{\sum (X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum (X_i - \bar{X})^2 \cdot \sum (Y_i - \bar{Y})^2}}$$

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \cdot \sum (y_i - \bar{y})^2}} = \frac{4.1438}{\sqrt{37.668 \cdot 42.2624}} = \boxed{0.1039}$$

Results obtained :

- Average motivation (x_1): 4,000
- Average difficulty (y_1): 3,625
- Average overall motivation (\bar{x}): 3.6801
- Average overall difficulty (\bar{y}): 3.6519

$\sum (x_i - \bar{x})(y_i - \bar{y})$: 4.1438 (sum of the results times the difference between motivation and difficulty of each respondent to their respective average)

$\sum (x_i - \bar{x})^2$: 37,668 (result of the sum of the square of the difference between the average motivation of each respondent and the total average)

$\sum (y_i - \bar{y})^2$: 42.2624 (derived — i.e. the result of the sum of the squares of the difference between the average difficulty of each respondent and the overall average (\bar{y}))

Table 3. Results of the Pearson Correlation Test between Motivation and Learning Difficulties

Statistics	Value
Pearson Correlation (r)	0.1039
Significance (p-value)	0.259
Number of Respondents (N)	120

These results show that there is a very weak positive relationship between learning motivation and Chinese learning difficulties in non-Chinese students. Although the Pearson correlation value of 0.1039 indicates a unidirectional relationship, the strength level is low and not statistically significant ($p = 0.259 > 0.05$). Thus, it can be concluded that learning motivation does not have a significant influence on the level of difficulty experienced by students in learning Chinese in this data.

These findings can be explained through Gardner's theoretical approach in *the Socio-Educational Model of Second Language Acquisition*, which states that motivation in second language learning consists of integrative (the desire to interact with the native speaker community) and instrumental (pragmatic goals such as work or academic grades). If students' motivation is more instrumental, then their internal motivation may not be strong enough to reduce the obstacles faced in the learning process. This is in line with the assumption that superficial motivation tends to be less effective in overcoming the challenges of learning a foreign language.

These results are also relevant to *the Affective Filter Hypothesis* put forward by Krashen, which emphasizes that affective variables such as motivation, anxiety, and self-confidence play an important role in the acquisition of a second language. High affective filters can inhibit the reception of language input, so even if individuals have learning motivation, they can still have difficulties if other affective factors are not supportive. Therefore, the weak relationship between motivation and learning difficulties in this study may indicate that motivation alone is not enough to facilitate the Chinese learning process optimally without the support of other affective factors.

CONCLUSION

Based on the findings, it can be concluded that non-Chinese students at Methodist-6 Medan High School demonstrate a high level of motivation to learn *Mandarin*, primarily driven by instrumental motivations related to career prospects. However, they face significant challenges, particularly in writing and speaking skills, due to the linguistic differences between *Mandarin* and Indonesian, as well as limited opportunities for practical language use outside the classroom.

Despite high motivation, there is a weak and insignificant positive correlation between motivation and the ability to overcome learning difficulties, indicating a gap between students' enthusiasm and their linguistic proficiency. This suggests the need for a more contextual and communicative approach to *Mandarin* instruction, incorporating more practical language exposure and interactive learning methods.

It is recommended that future research explore the integration of immersive and communicative language teaching methods that provide students with more opportunities to practice *Mandarin* in real-life contexts, both inside and outside the classroom.

REFERENCE

- Ministry of Energy and Mineral Resources Republic of Indonesia. (2021). *Grand Strategy Mineral dan Batubara* (hal. 1–435). Direktorat Jenderal Mineral Dan Batubara Kementerian Energi Dan Sumber Daya Mineral.
- Tan, S. L., & Huang, Y. M. (2022). The role of Chinese language skills in improving competitive advantage in the Southeast Asian labor market. *Asia Pacific Journal of Education*, 42(1), 88-101. <https://doi.org/10.1080/02188791.2022.2020178>
- Wang, L. (2021). The impact of the Belt and Road Initiative on educational exchanges between China and Indonesia. *Global Education Review*, 8(3), 15-29. <https://doi.org/10.53598/ger.v8i3.362>
- Wu, Y., & Li, X. (2019). Enhancing bilateral cooperation between China and Indonesia through language proficiency. *Journal of Asian Language and Cultural Studies*, 27(4), 102-116. <https://doi.org/10.1186/s40908-019-0198-x>
- Zhang, H., Li, Y., & Sun, Y. (2020). Economic growth and global job opportunities: A study on the rise of Chinese language demand in Southeast Asia. *International Journal of Economic Policy*, 9(2), 56-67. <https://doi.org/10.2139/ssrn.3595421>
- Cheng, W. (2021). The challenges of Mandarin learning for non-native speakers in Southeast Asia: A case study. *International Journal of Language Education*, 10(4), 45-58. <https://doi.org/10.1016/j.ijle.2021.02.005>
- Lee, S., & Chen, H. (2022). The role of cultural understanding in learning Mandarin as a second language in multicultural classrooms. *Asian Education and Development Studies*, 11(3), 329-340. <https://doi.org/10.1108/AEDS-12-2020-0192>
- Liu, H., & Zhang, X. (2020). Motivation and its impact on language acquisition: A study of Mandarin learners in a foreign language context. *Journal of Second Language Acquisition*, 28(2), 193-210. <https://doi.org/10.1016/j.jsla.2020.02.004>
- Tan, L. (2018). Learning Mandarin in diverse classrooms: Addressing the challenges faced by non-Chinese students. *Asia Pacific Journal of Education*, 38(4), 555-567. <https://doi.org/10.1080/02188791.2018.1527569>
- Zhang, X., & Wang, Y. (2019). Motivation in learning Mandarin as a second language: Perspectives from non-Chinese students. *Language Learning Journal*, 47(1), 75-90. <https://doi.org/10.1080/09571736.2019.1632294>
- Alindra, Y. & Romy, E. (2022). The Role of Chinese in Improving the Global Competence of High School Students. *Journal of Language Education*, 10(2), 45-58.
- Between. (2024). 81 Countries Teach Mandarin in Schools. Accessed from <https://www.antaranews.com>
- Aslamiah. (2020). Improving Students' Language Skills Through Interactive Learning. *Journal of Language Education*, 8(1), 25-33.
- Elisabeth, L. (2019). Difficulties in Learning Foreign Languages in High School Teenagers. *Scientific Journal of Education*, 3(2), 57–64.
- Febrianti, A., Nurhadi, D., & Lestari, S. (2023). The Effect of Motivation on Foreign Language Learning Outcomes of High School Students. *Journal of Educational Psychology*, 11(1), 12–22.
- Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.

- Lianisyah, U.Y., et al. (2022). Analysis of Non-Chinese Students' Difficulties in Learning Chinese. *Journal of Foreign Languages and Cultures*, 5(3), 91–98.
- Methodist-6 Medan. (2024). Student Data of Methodist High School-6 Medan. Internal school documents.
- Sugiyono. (2019). *Educational Research Methods: Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.