

Conceptualizing Foreign Language Speaking Mindset of Undergraduate Students in an EFL Context

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Article information

Abstract

The current study explored the conceptualization of domain specificity of language mindset in the speaking domain. The purposes were to determine the level of foreign language speaking mindset among Thai undergraduate students, validate the psychological constructs related to foreign language speaking mindset, and identify the factors associated with foreign language speaking mindset among Thai undergraduate students. A survey on foreign language speaking mindset was developed, validated, and used in the present study. The results suggested that Thai undergraduate students adopted a moderate foreign language speaking mindset. Factor analysis suggested three factors associated with the foreign language speaking mindset: emotional outcomes of attribution, motivational process-oriented goals, and proactive responses in failure situations. Validation of the Foreign Language Speaking Mindset Inventory (FLSMI) demonstrated that this instrument is reliable and practical for measuring the foreign language speaking mindset of Thai undergraduate students. These results underscore the importance of a supportive learning environment, emphasizing the role of educators in providing constructive feedback and cultivating a growth mindset to enhance students' proactive learning strategies for foreign language speaking

Keywords	foreign language speaking mindset, growth mindset, fixed mindset, undergraduate students, EFL context
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1. Introduction

The acquisition of foreign language speaking skills is a complex and multifaceted process that has been the subject of extensive research for many years. Researchers have explored various aspects of this process, including linguistic factors and affective factors (Ibna Seraj & Hadina, 2021). The challenges associated with speaking skill acquisition are particularly pronounced, as students need to not only learn and internalize linguistic elements but also apply them in real-time communication within unfamiliar cultural contexts (Chand, 2021). In the context of Thai EFL learners, these challenges are especially salient, as students often have limited exposure to authentic English-speaking environments and may struggle with the immediate demands of real-time communication (Kalra & Siribud, 2020; Sha'ar & Boonsuk, 2021). Recent research has highlighted the significant role of affective factors in speaking performance, suggesting that psychological aspects can profoundly impact a student's ability to effectively communicate in a foreign language (Amoah & Yeboah, 2021). This emerging focus on affective factors underscores the importance of considering affective dimensions in the development of effective language learning and teaching strategies.

The present study focused on a psychological variable which could potentially affect students' speaking skills: foreign language speaking mindset. Initially, language mindset was investigated within the broader context of second language acquisition (Lou & Noels, 2019b). Eventually, it emerged as a significant construct that affects language learning. Mindset research has predominantly focused on learners' academic success since language skills are essential for

learners' education and professional development (Rao, 2019). Recent investigations have highlighted the importance of a domain-specific view of language-related skills (Lou & Noels, 2019b). Empirical research has demonstrated that language mindset can vary according to specific domains, indicating that learners may exhibit different mindsets regarding various sub-skills of language learning (Khajavy et al., 2021). This variability in language mindsets across sub-skills has significant implications for language education. It suggests that educators should not assume a uniform mindset across all language domains and should investigate approaches to address specific areas where learners may hold different beliefs (Mercer & Ryan, 2010).

Existing literature has examined the influence of language mindset on students' academic performance. A growth mindset tends to foster students' belief in the efficacy of effort in language learning, whereas a fixed mindset might impede students' language learning progress (Yao et al., 2021; Yeager & Dweck, 2020). Furthermore, several studies have investigated broader educational outcomes of language mindsets. The links between language mindset and learners' cognitive and affective processes have been established from various perspectives, such as intelligence beliefs (Wilang, 2024), goal orientation (Lou & Noels, 2017), emotional and behavioral responses in failure situations (Sadeghi et al., 2020), anxiety (Ozdemir & Papi, 2022), foreign language enjoyment, ideal L2 self, and grit (Fathi et al., 2024). These connections assist researchers and educators in understanding learners' language-related challenges.

Regarding specific-domain language mindset, Zarrinabadi et al. (2023b) have emphasized the significance of growth and fixed mindsets in L2 and L3 grammar learning, noting that both can contribute to academic achievement through distinct mechanisms. A growth mindset fosters effort and active strategies, while a fixed mindset prompts learners to seek assistance following setbacks. Teng (2024) reported that a growth language mindset enhances vocabulary acquisition by improving metacognitive processes. These findings

contribute to educators' and researchers' understanding of language mindset and its influence on specific-skill domains in language learning, potentially informing strategies to foster more efficacious learning environments and interventions.

Investigating language mindsets specific to the speaking domain in the Thai EFL context is essential because of the unique challenges that Thai learners face (Tantiwich & Sinwongsuwat, 2024). The dominant teaching method in Thailand is communicative language teaching (CLT) (Pechapan-hammond, 2020), which emphasizes authentic language use and student-centered approaches. However, grammatical rules are prioritized, leading to lecture-based instruction and limited time for practicing language skills (Pitikornpuangpetch & Suwanarak, 2021). This results in a significant gap in oral communication abilities among Thai EFL learners, which hinders their overall language development. Additionally, Thai learners have minimal opportunities to practice speaking English outside the classroom, as English is primarily used as a foreign language (Baker, 2008). It is plausible to hypothesize that language mindsets specific to speaking may contribute to the challenges and performance of Thai language learners.

Existing research in Thailand has investigated language mindset among students (Buathong, 2019; Janudom, 2021; Wilang, 2024), employing both Dweck's (2006) and Lou and Noels' (2019a) frameworks. Most empirical studies have been conducted using quantitative methods. To the best of our knowledge, domain-specificity of the language mindset regarding the speaking domain has scarcely been explored, specifically in the Thai context (Derakhshan & Fathi, 2024; Janudom, 2023). Investigating foreign language speaking mindsets could shed light on Thai language learners' perceptions of effort and other psychological factors, thereby offering new solutions and perspectives (Li, 2023; Paradowski & Jelińska, 2023). The current study aimed to address this by examining one domain-specific language mindset—foreign language speaking mindset—and related factors in the Thai EFL context to 1) determine the level of foreign language speaking mindset among Thai undergraduate students, 2) validate the psychological constructs related to foreign language speaking mindset, and 3) identify the factors

associated with foreign language speaking mindset among Thai undergraduate students. This research contributes to a deeper understanding of students' mindsets and provides insights for educators and researchers in the field of language learning.

2. Literature Review

2.1 Language Mindset

Mindset refers to an individual's beliefs about whether their abilities are changeable or fixed (Dweck, 2017). There are two primary types of mindset: growth and fixed. Learners with a growth mindset believe that they can improve their abilities through effort, whereas those with a fixed mindset view their abilities as static (Khajavy et al., 2020; Yeager & Dweck, 2020). This concept has been extensively applied in various disciplines including language learning. Mercer and Ryan (2010) have defined learners' mindsets about language learning as their beliefs about their ability to learn languages. Similarly, language mindsets can be growth- or fixed-oriented, which is parallel to general mindset theory (Ryan & Mercer, 2012). Lou and Noels (2017) have further tailored the concept of language mindset to second language acquisition, incorporating general language intelligence beliefs, second language aptitude, and the critical period hypothesis, thus providing a unique perspective on language learning compared to general mindset theory. Although perspectives on both general and language mindsets have been widely employed, it is notable that in different contexts, some perspectives on general and language mindsets are simplistic in explaining the relationship between mindsets and learners' behavior (Burgoyne et al., 2020). The measurement of general mindset includes two perspectives based on the interpretation of intelligence and talent at two different ends (growth and fixed), which might not be capable of explaining divergent results (Heine et al., 2001). Additionally, the measurement of language mindset does not include other factors that might explain what contributes to learners' mindset, leaving the discussion open for the potential of other psychological variables to contribute to learners' meaning systems (Yan & Schuetze, 2023). Correspondingly, Lou and Noels (2019b)

integrate the six dimensions from motivation theory into the meaning-making system. The Language Mindset Meaning-making System (LMMS) highlights how six key components—effort, attribution, achievement goals, failures and mistakes, self-regulation, and emotions—produce systematic differences in the fundamental motivational processes of learners. This framework provides a divergent view from Dweck and Yeager (2019) by integrating perspectives from motivation theory, and illustrates how other psychological constructs contribute to language learners' mindsets. Currently, there is little evidence from empirical research employing this framework. Consequently, it is questionable whether this framework can be applied to the different contexts of language learning. Nevertheless, extensive research on language mindset has revealed results that are both consistent and inconsistent with the language mindset meaning-making system.

Building on this theoretical foundation, previous research has revealed consistent perspectives regarding the language mindset meaning-making system. Blackwell et al. (2007) demonstrate a link between mindset and persistent effort, indicating that learners with a growth mindset believe that effort is crucial for learning. This has prompted research on enhancing learner effort through feedback-seeking behavior and praise for effort (Papi et al., 2019; Zarrinabadi et al., 2023a). Mercer and Ryan (2010) found that learners with a growth mindset set higher achievement goals and employed effective learning strategies, whereas those with a fixed mindset set lower goals because of their self-perception of limited language proficiency. Studies indicate that growth-mindset learners are more engaged, more persistent, and achieve higher proficiency (Eren & Rakıcioğlu-Söylemez, 2023; Wang et al., 2021), whereas fixed-mindset learners avoid challenges and show helpless behavior (Lou & Noels, 2017). Zhang et al. (2021) highlight the influence of mindset on learners' attributions and behaviors, and Guan et al. (2024) point out that growth-mindset learners attribute success to effort. Furthermore, goal orientation and responses to failure are linked to language mindsets (Chen & Wong, 2015; Yao & Zhu, 2024). Empirical evidence suggests that growth-mindset learners actively respond to failures and challenges,

unlike fixed-mindset learners (Sadeghi et al., 2021). This active response is tied to self-regulatory tendencies (Lou & Noels, 2019). Moreover, Sato (2022) explains that growth-mindset learners see challenges as learning opportunities, leading to higher engagement, whereas fixed-mindset learners do not, and thus become less resilient. Finally, Amini Farsani and Seyedshoja's (2024) study has revealed that growth mindset learners are better at regulating negative emotions when facing language learning challenges compared to fixed mindset learners.

While substantial evidence supports the relationship between growth mindset and positive language learning outcomes, there are also studies that present inconsistent perspectives. Based on the prevalent framework, it is obvious that effort is a vital factor in categorizing learners' mindset subsystems as growth or fixed (Lou & Noels, 2019; Ryan & Mercer, 2012). Burgoyne et al. (2020) have presented evidence contradicting the notion that a fixed mindset necessarily predicts the belief that only talent accounts for success. In addition, previous studies have revealed that learners with a growth mindset tend to set both mastery and performance goals and demonstrate enthusiasm in seeking strategies to address challenges in language learning. Learners with a fixed mindset are more likely to set performance goals and show less eagerness to seek strategies to manage challenges in language learning (Sadeghi et al., 2020; Zarrinabadi et al., 2023a). This provides a divergent perspective from earlier research which suggests that growth-oriented learners tend to set mastery goals only. Song et al. (2020) also attain divergent results, finding that a fixed mindset has a nonsignificant impact on learners' performance goal setting. A subsequent study by Yao et al. (2021) has reported inconsistent results regarding the relationship between a fixed language mindset and performance-avoidance goals. Although a fixed mindset could predict helplessness behavior among learners, it does not necessarily result from performance-avoidance goal adoption. It is imperative to acknowledge that the findings from both perspectives underscore the necessity of empirical research on language mindset meaning systems, as numerous variables contribute to

learners' subsystems. Elucidating these interactions can yield a more nuanced understanding of how learners' mindsets influence their language learning.

Moving beyond general language mindsets, recent research has begun to explore how mindsets may vary across specific language skills and domains. Several studies have conceptualized the domain-specific nature of language mindset. Anderson (2018) has found that undergraduate learners exhibit different mindsets for specific language domains, which supports the idea that mindset varies by skill. Khajavy et al. (2021) have demonstrated that language and reading mindsets are distinct constructs, and Teng (2024) has shown that a growth mindset in vocabulary learning among Chinese undergraduates fostered positive attitudes and proactive learning strategies. Similarly, Yao and Zhu (2024) report that a growth mindset in writing among Chinese high school learners encouraged feedback-seeking behavior, whereas a fixed mindset did not. Yao et al. (2024) link a growth mindset in writing to positive mentalities. Derakhshan and Fathi (2024) have highlighted the role of a growth mindset in L2 speaking in improving performance during assessments. These studies collectively illustrate that a language mindset is domain-specific and significantly influences learners' attitudes, strategies, and behaviors in learning specific language skills. Despite these insights, there is still a gap in understanding domain-specific language mindsets in particular education settings, since cultural background and social interaction play a crucial role in shaping language mindsets (Bai & Wang, 2023). This study aimed to address this gap by exploring foreign language speaking mindsets in the Thai EFL context.

To investigate these domain-specific language mindsets, researchers have developed various measurement tools and approaches. In early studies, researchers employed qualitative methods using both semi-structured and in-depth interviews to explore learners' language mindsets (Mercer & Ryan, 2010). Recently, quantitative tools have been developed. Language mindset scales are commonly used to examine learners' language and domain-specific language

mindsets, such as the Language Mindset Inventory (Lou & Noels, 2017), L2 Reading Mindset Scale (Khajavy et al., 2021), and L2 Pragmatic Mindset Scale (Zarrinabadi et al., 2022). Several studies have explored learners' language mindsets across different language learning contexts, such as Chinese, Iranian, and Japanese (Collett & Berg, 2020; Hao, 2023; Zarrinabadi et al., 2023b). These studies provide validation methods for measurements and tools for assessing language and domain-specific language mindsets. However, very few of these measurements aim solely to explore non-academic constructs. Therefore, there is a need to develop measurements that are inclusive of variables that contribute to learners' cognitive subsystems, so as to examine the critical role of those variables in shaping and enhancing learners' interpretation of their language learning experience, as well as the influence of these constructs on learners' approaches, strategies, and behaviors in learning specific language skills.

Focusing on the Thai context, existing research has explored learners from different levels of education from various language mindset perspectives. Buathong (2019) used a mindset intervention to examine learners' language mindsets regarding their perspective on language intelligence. Janudom (2021) conducted a study to raise awareness of language mindsets among undergraduate students. Later, Janudom (2023) examined the effect of a mindset intervention on learners' oral communication learning achievement. Wilang (2024) investigated the transformation of language mindsets using the language mindset toolkit. To generalize Thai learners' language mindsets, Wilang (2021) investigated high school learners' language mindsets and identified factors related to language mindsets using Dweck's (2006) framework. Chuanon et al. (2021) explored undergraduate learners' language mindsets from the perspective of their relation to their attribution of their language learning achievement. Thayati et al. (2024) explored learners' language mindsets and their meaning-making systems based on second language acquisition and motivation theory. Wilang (2024) explored undergraduate learners' language mindsets using both Dweck and Lou's and Noels' frameworks. Sawongta (2023) investigated the relationship between Thai

learners' language mindsets and their language proficiency. These studies provide insights into the prevalent language mindsets among Thai learners, together with academic and nonacademic outcomes related to language mindset. While studies that seek to establish the relationship between mindset and academic achievement emphasize the role of mindset in language learning in the Thai educational context, none of the studies delve into domain-specific beliefs. Despite the valuable insights provided by the existing literature, there remains a notable gap in the comprehensive investigation of language mindsets within specific domains. Therefore, exploring domain-specific language mindsets in a more integrated and detailed manner is essential.

This investigation aimed to address the gap in existing research by examining foreign language speaking mindset and its associated factors within the EFL context. The research utilized the framework developed by Lou and Noels (2019a) because of its thorough theoretical framework, which offers a detailed lens for examining language mindset. By applying this framework, the researchers could examine various dimensions of mindset in speaking, including beliefs about the malleability of language skills, attitudes towards language learning challenges, and responses to feedback or setbacks.

3. Methodology

3.1 Methods

The present study employed a quantitative approach utilizing a survey, which aimed to conceptualize the foreign language speaking mindset construct. It sought to capture the unique psychological and motivational factors that influence students' attitudes, beliefs, and behaviors toward speaking a foreign language.

3.2 Research Setting

The study was conducted at a university situated in the northeastern region of Thailand, renowned for its diverse academic programs, including engineering, health sciences, agriculture, applied linguistics, digital technology, and other disciplines.

3.3 Participants

The study included 894 undergraduate students who participated voluntarily and consented to be part of the study. Among them, 530 were female, 346 were male, and 18 chose not to specify their gender. The majority of the participants were first-year students (841 individuals, 94.07%), while a smaller proportion were from years 2 to 6 (53 individuals, 5.92%). Engineering was the most common major among the students, with 469 participants (52.46%) enrolled in the engineering programs. Regarding English language proficiency, most participants self-identified as beginners, comprising 855 students (95.6%). A smaller proportion perceived themselves to be at an intermediate level (25 individuals, 2.8%), while only 14 individuals (1.6%) considered themselves to be at an advanced level.

3.4 Research Instrument

Foreign Language Speaking Mindset Inventory (FLSMI)

The FLSMI consisted of 21 items. These items were developed based on the theoretical framework of the language mindset meaning system (Lou & Noels, 2019a), which explained the interaction of underlying motivational factors within mindset subsystems. In developing the items, the researchers adopted antecedents from existing related scales such as reading mindset (Khajavy et al., 2021), effort beliefs (Ferrell & Barbera, 2015), achievement goals (Midgley et al., 1998), and beliefs about failures and mistakes (Conroy et al., 2002), to suit the present study.

The FLSMI consisted of two sections: general background and FLSMI. The initial survey comprised 59 statements. The items were submitted to three experts in applied linguistics from different universities for validation. Based on IOC scores, only the items above 0.50 agreement were included, reducing the number of items to 42. Then, the FLSMI was piloted among undergraduate students. The results from the pilot study showed that the Cronbach's alpha coefficient of the FLSMI was .85, indicating high reliability. However, further comments from experts and pilot study participants recommended simplifying the items to reduce the cognitive

load on the participants. Thus, instead of including different items for both fixed and growth dimensions, these two dimensions were combined, meaning that 21 statements were retained. Responses to the survey were on a 6-point rating scale, ranging from 1 (Strongly Disagree) to 6 (Strongly Agree). All items were translated into Thai to improve the participants' comprehension. The interpretation of the scale was derived from previous studies that applied a 6-point rating scale in the survey (Daskalovska et al., 2023; Vate-U-Lan & Masouras, 2018), as shown in Table 1.

Table 1

Interpretation of the 6-point Likert scale

Weighted-mean interval	Interpretation
5.17-6.00	Strong growth (SG)
4.33-5.16	Moderate growth (MG)
3.49-4.32	Weak growth (WG)
2.67-3.50	Weak fixed (WF)
1.83-2.66	Moderate fixed (MF)
1.00-1.82	Strong fixed (SF)

3.5 Procedure

The Foreign Language Speaking Mindset Inventory was administered to undergraduate students both online and onsite. Data collection began at the beginning of the third trimester, from November to December 2023. The participants took approximately 15-20 minutes to complete the survey. Prior to initiating the surveys, participants were asked to complete an informed consent form, which was provided on the initial page of the survey. The participants received explicit confirmation that all the collected data would be treated with strict confidentiality and anonymity. Approval was obtained from the university's Institutional Review Board (IRB).

3.6 Analysis

The survey data were analyzed using SPSS16. The researchers used descriptive statistics to determine the level of speaking mindset, Cronbach's alpha to establish scale reliability, and exploratory factor analysis (EFA) to elicit the underlying patterns and factors associated with foreign language speaking mindset.

4. Results

4.1 Level of Foreign Language (English) Speaking Mindset of Thai Undergraduate Students

To address the first research question regarding the level of mindset, the results indicated that Thai undergraduate students exhibited a weak growth mindset overall ($M = 3.91$). However, they expressed moderate belief that their foreign language speaking ability could be improved through effort, as evidenced by high scores on specific items (Item 1 = 4.50, Item 2 = 4.72, and Item 3 = 5.02).

Table 2

Foreign Language Speaking Mindset of Thai Undergraduate Students

Foreign Language Speaking Mindset Inventory	Mean	S.D.	Interpretation
3. To be honest, I don't think I can improve my ability to speak a foreign language.*	5.02	1.21	MG
4. The harder I practice, the better I will be at speaking a foreign language.	5.02	1.15	MG
17. Even if I don't have talent in speaking a foreign language, I try to seek strategies to practice speaking.	4.76	1.13	MG
14. When I am failing in speaking a foreign language, it means that it is fruitless to practice speaking.*	4.73	1.27	MG

Foreign Language Speaking Mindset Inventory	Mean	S.D.	Interpretation
2. Only a few people can learn and get better at speaking a foreign language, and they were born with this ability. I'm not one of them.*	4.72	1.41	MG
6. I think I can improve to speak a foreign language well because of hard work.	4.70	1.21	MG
1. As a language learner, I have limited ability to speak a foreign language and can't change it.*	4.50	1.25	MG
13. When I am failing in speaking a foreign language, it means that I don't have enough talent in language learning.*	4.38	1.45	MG
5. To tell the truth, when I try hard to improve my foreign language speaking, it makes me feel not very smart.*	4.27	1.49	WG
16. I don't like corrective feedback and criticisms because it suggests that I am not good at speaking a foreign language.*	4.12	1.53	WG
12. I might not participate in a foreign language speaking activity to avoid looking foolish when speaking.*	3.97	1.50	WG
9. I participate in foreign language speaking activities because I enjoy learning new speaking skills.	3.78	1.31	WG
11. I participate in foreign language speaking activities to improve my skills.	3.73	1.32	WG
15. When I couldn't do a difficult foreign language speaking task, it probably means that the task is beyond my level.*	3.59	1.46	WG

Foreign Language Speaking Mindset Inventory	Mean	S.D.	Interpretation
10. I like foreign language speaking activities that challenge me.	3.32	1.38	WF
7. I may need a special talent to speak a foreign language well.*	3.22	1.42	WF
18. I am afraid to speak in my foreign language classes.*	3.26	1.57	WF
8. I find it hard to speak a foreign language well because I am not good at languages.*	3.20	1.52	WF
20. I worry of making mistakes when I speak a foreign language.*	2.68	1.43	WF
19. I feel nervous when I have to speak a foreign language in front of my teacher and classmates.*	2.66	1.45	MF
21. I am afraid people will not understand me when I speak a foreign language.*	2.56	1.35	MF
Total	3.91	.72	WG

The items with asterisk were performed after reverse scoring.

MG=Moderate growth, WG=Weak growth, WF=Weak fixed, and MF=Moderate fixed

Their agreement on regulating learning (Item 17 = 4.76), interpreting failures (Items 14 = 4.73, 13 = 4.38), participation goals (Items 12 = 3.97), and feedback (Item 16 = 4.12) suggested a moderate growth mindset in strategy use, setback interpretation, goal orientation, and cognitive responses to mistakes. The slight disagreement on challenges in foreign language speaking (Item 15 = 3.59), talent as a key to success (Items 7 = 3.22, 8 = 3.20), and emotional tendencies (Items 19 = 2.66, 20 = 2.68, 21 = 2.56) indicated a weak to moderate fixed mindset regarding task difficulty, attributing success to talent, and emotions related to foreign language speaking.

4.2 Exploratory Factor Analysis

To answer question two on the validation of the underlying constructs, a preliminary assessment was conducted. The average inter-item correlation for the items of the FLSMI scale indicated a value of .242, falling within the range of .20 to .40. This suggested that the items of the FLSMI exhibited sufficient uniqueness (Piedmont, 2014). However, closer examination of the inter-item correlations for Items 7 and 15, as well as the total-item correlations for Items 7 (-2.68) and 15 (-.457), revealed consistently negative correlations and low total-item correlations for these two items. Based on these findings, it was deemed appropriate to delete these two items from the scale. As a result of this adjustment, the Cronbach's alpha coefficient of the FLSMI increased from .87 to .91, and reduced the number of items to 16.

To answer question three on the factors associated with foreign language speaking mindset, EFA extracted three factors (see Table 3). Initial examination of the FLSMI items revealed a Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was equal to .905, and Bartlett's test of sphericity was significant ($p < .001$), indicating adequacy for proceeding with EFA. The cumulative total variance explained for the 16 items was 62.04%, suggesting that three factors could explain 62.04% of the variance. Moreover, three factors exhibited eigenvalues greater than 1, indicating their significance. Each factor elicited was labeled based on the content of the clustered items. The Cronbach's alpha coefficient of the three factors ranged from .82 to .86 (see Table 3), which suggested that each factor had high internal consistency.

Table 3

Factor Loadings from EFA for 16 Items on Foreign Language Speaking Mindset of Thai Undergraduate Students

Items in Survey	EFA			Commonality
	Factor	Factor	Factor	
	1	2	3	
Factor 1: Emotional Outcomes of Attribution (α =.86)				
Item 20	.836			.745
Item 19	.833			.737
Item 18	.735			.683
Item 21	.732			.576
Item 8	.478			.488
Factor 2: Motivational Process-Oriented Goals (α =.84)				
Item 9		.798		.742
Item 11		.793		.732
Item 10		.753		.752
Item 17		.631		.513
Item 4		.616		.569
Item 6		.602		.515
Factor 3: Proactive Responses in Failure Situations (α =.82)				
Item 14			.784	.661
Item 13			.747	.661

Items in Survey	EFA			Commonality
	Factor	Factor	Factor	
	1	2	3	
Item 5			.670	.561
Item 16			.607	.461
Item 12			.498	.529
Eigenvalue	6.360	2.108	1.458	
% of Variance	39.752	13.176	9.112	
Cumulative %		62.040		

The first factor, ‘Emotional Outcomes of Attribution’ included five Items—20, 19, 18, 21, and 8. This factor encompassed the emotional reactions and beliefs associated with one’s perception of their ability to learn and use a foreign language. This factor reflected the anxiety and fear experienced when speaking or performing in a foreign language, influenced by self-perception of linguistic ability and the anticipation of misunderstanding or failure.

The second factor, labeled ‘Motivational Process-Oriented Goals,’ comprised six Items (9, 11, 10, 17, 4, and 6). It illustrated students’ drive to engage in foreign language speaking activities driven by intrinsic enjoyment, a focus on skill improvement, and a belief in effort as a pathway to success. Key characteristics included intrinsic motivation to learn, participation aimed at skill development, a preference for challenging tasks, the use of strategies and persistence in practice, and a belief that improvement comes through hard work rather than innate talent. This factor highlighted a proactive, growth-oriented approach to language learning.

The third factor, 'Proactive Responses in Failure Situations' consisted of five Items—14, 13, 5, 16, and 12. This represented positive responses to challenges, characterized by positive self-perceptions, a willingness to engage with challenging situations, and openness to feedback that could enhance learning. These responses were driven by the interpretation of setbacks or mistakes as indicators of insufficient effort, acknowledgment of hard work, and recognition of the value of criticism and feedback.

5. Discussions

Regarding the level of foreign language speaking mindset among Thai undergraduate students, it is not surprising that they adopted a moderate growth mindset in the domain of foreign language speaking. These results are consistent with the findings of previous studies exploring students' language mindsets in the Thai context (Janudom, 2023; Thayati et al., 2024; Wilang, 2024). Descriptive statistics revealed a combination of both growth and fixed perspectives underlying students' meaning systems, which both aligns with and contrasts with Lou and Noels' (2019a) framework. The perspectives that align with Lou and Noels' (2019a) framework encompass effort, failures and mistakes, and self-regulatory tendencies, whereas the perspectives that diverge from the framework include attribution, achievement goals, and competence-based emotional tendencies. These perspectives elucidate Thai undergraduate students' learning strategies in the speaking domain and the challenges associated with acquiring speaking skills.

The findings have indicated that social interaction within the Thai context significantly influences students' beliefs regarding effort, thereby impacting their responses to failure and their self-regulatory behaviors when confronted with challenges. The emphasis on collective harmony and social relationships in Thai society likely shapes students' perceptions of effort as a means to improve and enhance social connections (Salsarola, 2023). This cultural context encourages the view of challenges as opportunities for growth, fostering resilience in learning. Furthermore, the limited opportunities for English practice in daily Thai life may

lead students to believe that increased effort in speaking will improve proficiency (Wang & Rajprasit, 2015). Consequently, Thai students are more inclined to engage in self-regulatory behaviors, such as seeking additional practice or developing strategies to overcome communication barriers. This aligns with Chansri et al.'s (2024) study demonstrating that Thai undergraduates persist in challenging situations, seek assistance from instructors or peers, and adapt strategies to facilitate learning. These cultural values and limited English exposure create a unique environment that motivates students to invest more effort in language skills, particularly speaking, recognizing the potential for improvement through sustained practice and dedication.

Concerning the discrepancy in achievement goals, the relationship between language proficiency and mindset among Thai undergraduate students may explain the notable deviation from Lou and Noels' (2019a) framework. While the growth mindset typically emphasizes effort as the primary factor in language learning success, Thai students appear to place significant value on intelligence as well. This suggests that their perception of language acquisition extends beyond mere persistence and hard work, incorporating the cognitive aspects of language learning. The recognition of intelligence as a crucial factor may stem from the complex linguistic components involved in mastering a foreign language, particularly in speaking skills. This emphasis on intelligence could also be attributed to the challenges Thai students face in acquiring and applying vocabulary and grammatical structures in context-specific situations. These challenges are similarly encountered by EFL students in other contexts, such as China and Indonesia (Amoah & Yeboah, 2021; Chand, 2021). Unlike native speakers who intuitively grasp language nuances, non-native learners often need to consciously process and adapt linguistic elements to fit various conversational scenarios (Sha'ar & Boonsuk, 2021). This cognitive demand may lead Thai students to believe that a certain level of intellectual capacity is necessary to effectively navigate the intricacies of foreign language speaking. Consequently, their approach to language learning likely involves a combination of effort-based

strategies and attempts to enhance their cognitive abilities related to language processing and application.

Furthermore, the Thai education system's emphasis on examinations and rote learning significantly influences students' English language acquisition (Pitikornpuangpetch & Suwanarak, 2021). This model prioritizes memorizing vocabulary and grammar over practical language use. Consequently, students struggle to balance achieving high test scores (performance goals) with developing communicative competence (mastery goals). This dual focus creates a complex learning environment where students must manage the need for exam success and long-term fluency in spoken English. The pressure to excel in exams may reinforce a superficial understanding of the language, hindering meaningful communication. Nevertheless, the drive to excel in speaking skills may encourage students to seek out extra opportunities for language practice, promoting a comprehensive approach that integrates academic achievement with real-world language competence.

Regarding the divergence on competence-based emotional tendencies, the results have indicated that Thai undergraduate students, despite adopting a growth mindset, experience negative emotions during foreign language speaking activities. Emotional challenges in speaking interactions may arise from the need for immediate cognitive engagement, requiring simultaneous formulation of responses and comprehension of interlocutors' messages (Goh, 2016). This dual cognitive load can hinder students' ability to manage negative emotions, leading to reluctance or silence during speaking activities. Unlike reading and writing, which allow more time for reflection, speaking demands instant interaction and engagement, intensifying emotional challenges. The pressure to perform and fear of mistakes may further exacerbate these emotions, impeding active participation. Thus, targeted strategies are needed to help students manage emotions and build confidence in speaking, even within a growth mindset framework.

Regarding the validation of the psychological constructs related to foreign language speaking mindset, the Cronbach's alpha coefficient of the Foreign Language Speaking Mindset Inventory (FLSMI) indicated that it is a reliable tool for measuring Thai undergraduate students' foreign language speaking mindset. Future studies may use the FLSMI in various contexts to further validate the scale and construct.

In terms of factors related to foreign language speaking, factor analysis provided insight into how psychological variables interacted in Thai undergraduate students' cognitive mechanisms. The results indicated that there were three factors associated with the foreign language speaking mindset: 1) emotional outcomes of attribution, 2) motivational process-oriented goals, and 3) proactive responses in failure situations. Regarding the first factor, the latent variable suggested a relationship between negative emotions and students' self-attribution. The results indicated that students experienced high levels of foreign-language-speaking anxiety. Anxiety is characterized by a fear of making mistakes and reluctance to speak in front of the class. This anxiety stems from students' attribution of low language competence. This could be explained by the relationship between attribution and emotional responses: when students perceive the controllability of their learning, they tend to be able to regulate negative emotions effectively (Holschuh et al., 2001). Therefore, it can be assumed that Thai undergraduate students might perceive their speaking performance to be uncontrollable. This leads to a high level of negative emotions. This contrasts with studies suggesting that students with a growth mindset experience more positive emotions (Ozdemir & Papi, 2022; Schroder et al., 2019).

Regarding the second factor, this study has indicated that Thai undergraduate students' beliefs about effort and self-attribution impact how they set goals in their language learning. This is consistent with prior research that has established a relationship between growth mindset and goal orientation (Yao & Zhu, 2024). Students with a growth mindset are likely to set mastery goals,

whereas fixed-mindset students tend to set performance goals. According to the findings, their mindset might influence their goal orientation, which eventually leads to their willingness or reluctance to participate in speaking activities. Mastery goals foster active participation, whereas performance goals might lead to a more cautious approach. However, it is vital to note that the relationship between mindset and goal orientation is complex, with some students endorsing both mastery and performance goals (Yu & McLellan, 2020). Regarding the third factor, this study has pointed out that Thai undergraduate students tend to be active in their learning of foreign-language speaking. In this study, although they perceived themselves as having low language proficiency, they had a strong sense of capacity to improve. Consequently, students with high self-efficacy are more likely to employ various learning strategies, seek constructive feedback, and persist through difficulties (Sadeghi et al., 2020). This not only enhances their immediate speaking performance, but also contributes to long-term language proficiency and confidence.

6. Conclusion

This study suggests that Thai undergraduate students adopt a weak growth mindset regarding foreign-language speaking. The Foreign Language Speaking Mindset Inventory is a reliable tool for measuring foreign language speaking mindset in the Thai EFL context. Exploratory factor analysis (EFA) has revealed three factors contributing to foreign language speaking mindset.

The current study reinforces language mindset theory by demonstrating the domain-specific nature of mindsets. This subtlety expands the theoretical understanding of mindset as context dependent. Future research should include longitudinal studies to examine how a growth mindset in foreign language speaking evolves over time and to determine its long-term impact on academic and non-academic outcomes. Cross-cultural comparison research could explore how different cultural backgrounds influence mindset development, while mixed-methods research could provide deeper insights into students' experiences.

The availability of the FLSMI suggests its potential use in diverse contexts to gain deeper insights into effective educational practices. Expanding the use of the FLSMI to different educational levels (e.g., high school, graduate students) could provide insights into how speaking mindsets evolve throughout the educational journey. Exploring the application of the FLSMI in multilingual environments could offer insights into how exposure to multiple languages influences speaking mindset. The elicited factors could guide the development of targeted interventions to foster growth mindsets in foreign language speaking across educational and professional settings.

The findings regarding emotional challenges in this study have indicated that it is imperative for educators to acknowledge and comprehend the frequent occurrence of negative affective states among students during foreign language speaking activities. Teachers should create a supportive classroom environment, in which failures or mistakes are viewed as part of the learning process. Collaborative learning activities that emphasize peer encouragement and support may help reduce students' fear of judgment or corrective feedback. Providing regular and constructive feedback on their performance and areas for improvement may motivate students to be more proactive in developing their speaking skills.

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