Exploring the Impact of Vocabulary Strategies, Language Exposure, and Beliefs on Students' Oral Skills: A Structural Equation Modeling Approach

Ilyn I. Enobio [a*] and Reita C. Palma [a]

[a] University of Mindanao-Professional School, Matina, Davao City, Philippines.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Aims: To develop a best-fit model for students' oral skills using structural equation modeling, to understand the intricate relationship between vocabulary learning strategies, language exposure, language learning beliefs, and oral skills of students and to use the resulting model to inform evidence-based practices for improving communication skills in education.
Study Design: The study used Structural Equation Modeling (SEM).
Place and Duration of Study: The study was conducted among students in the Grade 12 Senior High School in Region 10, Philippines during the school year 2024-2025.

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*Corresponding author: E-mail: enobioilyn10@gmail.com;

Methodology: Stratified random sampling was used to obtain 400 students as respondents. A questionnaire was used to gather data, which was analyzed using mean and standard deviation, Pearson product-moment correlation, and multiple regression analysis to determine the relationship between variables. SEM was used to identify the best-fit model for the oral skills of students.

Results: The study revealed that the variables of vocabulary learning strategies and language exposure were obtained at a moderate level, while language learning beliefs and oral skills were obtained at a high level. There were significant relationships between the three variables and oral skills. Two variables were identified as predictors, excluding language exposure. Model 3 emerged as the best-fit model for oral skills, where memory, social, and metacognitive strategies were included in vocabulary learning strategies, friends and home were included in language exposure, and language ability and difficulty in language learning were included in beliefs in language learning

Conclusion: This study further demonstrated the significant role of each variable in the oral skills of students. The findings point that linguistic competence, cognitive and social factors are crucial for effective oral communication. Thus, this provides valuable insights for educators and curriculum developers to design programs and activities that enhance students' oral skills and communication effectiveness across diverse contexts.

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1. INTRODUCTION

One of the challenges faced by students today in language learning is enhancing oral skills, which is divided into emotional, social, and linguistic problems as explained by (Jaya, et al., 2022 and Chand, 2021). (Vandergrift and Goh, 2022) highlighted those oral skills are crucial for students' future success. These are vital component of language learning, allowing individuals to share their ideas with others. Students need to expand their oral skills because these are essential and challenging as pointed by (Banawis, 2023). Despite of these, students have limited encounter with oral skills within their classrooms. (Zaman and Aslam, 2021 and Huynh, 2020) explained that if a student lacks effective oral skills, it will surely become a problem in their daily lives.

(Saleh's 2022) study in Nigeria revealed that 69% of students struggled with using the language, with 66% of them having difficulty with pronunciation and oral skills due to their weak language learning. (Rivera and Villanueva, 2023) explain that oral skills are important because these enable both speakers and listeners to participate in communication, exchange information, and build positive relationships.

The Philippines is one of the countries that utilize language at all levels of education to prepare students for the challenges of communication in the future. This objective cannot be achieved without addressing the problem of students' oral skills. (Bastida and Yapo, 2019) cited that it is essential to address this so that students can develop confidence and competence as they cross their path.

In accordance with DepEd Order No. 21, s. 2019, which outlines the Policy Guidelines on the K to 12 Basic Education Program, students need to develop various skills suitable for 21st-century learners. One of these is oral skills, which are very useful in subjects like oral communication, practical researches, and other subjects. (De Guzman and De Jesus, 2021) point out that when students have confidence in their abilities, they are more likely to succeed in both academic and social endeavors.

Previous researches focused on the importance of vocabulary learning strategies, which are needed in a language. As viewed in the study of (Dano, Waris, and Komariah, 2022) appropriate vocabulary strategies are needed to convey and understand concepts, as these significantly impact oral abilities. However, students sometimes struggle to express their feelings effectively. (Separa, 2020) explained that students face problems with oral skills because they are not accustomed to using the target language, which also limits their vocabulary.

Furthermore, (Soriano and Garcia, 2021) elaborate that language exposure can help students overcome their weaknesses and

enhance their language proficiency. By exposing them to the language, their oral skills can be developed. (Kozhevnikova, 2019) state that one of the essential components that determines how well the students learn a language depends on amount of time students are exposed to the target language and culture. Furthermore, (Domingo, 2020) describe that the longer the exposure, the more input students receive, which leads to successful language learning. This presents a challenge for teachers and students to identify potential activities that promote language exposure.

On the other hand, exploring students' beliefs about learning is useful for gathering information about their needs. (Momani, 2021) found out that when a student embarks on language learning, their oral skills emerge as part of the overall system. Beliefs can be understood through a psychological lens, including the assumption that students perceive themselves as learners with various influencing factors.

However, (Gracia, et al., 2021) explained that oral skills are paramount for language learners. Language learning in the country aims to enhance this, especially technology as stated by (Fatima, 2021) and (Nguyen and Pham 2022) that using this has beneficial impact on the oral communication abilities of students, but the goal has not been fully realized for all. This study highlights the need for students to develop various strategies for oral skills. (Villanueva and Rosales, 2022) added that this poses a significant challenge, especially in communication, as students hesitate to engage due to uncertainty about their developed concepts.

This study aims to investigate and develop a structural equation model for oral skills. It also seeks to determine the level of vocabulary learning strategies among students based on: Memory, Determination, Social, Cognitive, and Metacognitive. It is also necessary to assess the level of language exposure among students based on home, friends, school, and media. This study also aims to understand the level of students' language learning beliefs based on language aptitude, difficulty in language learning, nature of learning, learning and communication strategies, motivation and expectations. It is also expected to determine the level of skills among students based on interaction management, multimodality and prosody, textual coherence and cohesion, argumentative strategies, and lexicon and terminology.

Moreover, this study will also assess the significant relationships between vocabulary learning strategies and the students' oral skills, language exposure and the students' oral skills; and language learning beliefs and the students' oral skills. It will also discover the combined and individual influence of vocabulary learning strategies, language exposure, language learning beliefs, and the students' oral skills. Finally, the study aims to identify the best-fit model for the oral skills of students.

Furthermore, this research investigates the structural relationships among oral skills to illuminate how various factors influence student development. The findings will inform the creation of more effective language teaching strategies, ultimately improving pedagogical methods and empowering students to achieve greater fluency. Hence, disseminating these results will foster collaboration and discussion among educators and students, strengthening the learning community.

2. MATERIALS AND METHODS

2.1 Research Design

The research design employed is a descriptive-correlational survey, causal approach, and structural equation modeling to identify the best-fit model for students' oral skills. The descriptive-correlational design uses collected data to explain the relationship between variables. (Bhat, 2022) stated that its primary objective is to describe and establish the relationship between each variable without altering them, instead seeking other methods and relations within the data.

Furthermore, Structural Equation Modeling (SEM) is used in this research to identify and analyze the structural relationships between each variable. It is a statistical tool used to examine structural relationships; it combines factor analysis and multiple regression by (Bose, 2022). Data collection was conducted through the use of revised and adapted questionnaires.

To analyze and interpret the data, mean and standard deviation were used to determine the level of all variables: vocabulary learning strategies, language exposure, language learning beliefs, and oral skills. Pearson r was also used to investigate the relationship between the three exogenous variables and oral skills. Multiple Regression Analysis was used to

determine the significant predictors of oral skills. The structural equation modeling was used to identify the best-fit model for students' oral skills.

2.2 Research Respondents

This research utilized a stratified random sampling technique, employing the Raosoft Calculator, to select 400 Grade 12 students from public senior high schools across the fourteen divisions of Region X, Northern Mindanao, Philippines. The sampling frame comprised the 93,516 Grade 12 students enrolled in these schools. This ensured representation from the diverse student population within the region.

Additionally, this study includes Grade 12 SHS students aged 18 and above because they have completed coursework in oral communication and practical research, requiring extensive oral skills (e.g., research defenses, interviews). This age group is also more likely to be seeking employment, and therefore needs oral communication abilities. Grade 11, junior high school students, and those under 18 were excluded as their curricula emphasize reading and writing skills, and their employment prospects are typically less prevalent.

2.3 Research Instrument

This research utilized instruments derived from authentic and credible published journals. The instrument used to assess vocabulary learning strategies was adapted from Schmitt's 1997 taxonomy, which is based on five categories revised by (Ta'amneh, 2021), aligning with the analysis of vocabulary learning strategies. For the second variable, language exposure, the questionnaire was adapted from Magno's work in 2009 and revised by (Domingo, 2020), focusing on situations involving language exposure. The measurement of language learning beliefs utilized the Beliefs About Language Learning (BALLI) questionnaire developed by Horwitz in 1987 and revised by (Al-Malki and Javid, 2018) focusing on diverse beliefs in language learning. Lastly, for measuring oral skills, the adapted questionnaire, Test of Self-Perceived Oral Competence (TSOC) by (Gracia, et al., 2021), was employed.

Moreover, the instrument underwent contextualization, revision, and validation to achieve its target. The first step involved aligning it with the research needs and presenting it to the adviser for corrections and suggestions. For validation, it was reviewed by six experts, receiving a total score of 4.73. Validation was conducted through pilot testing to determine the Cronbach Alpha of each item, resulting in 0.780 for vocabulary learning strategies, 0.870 for language exposure, 0.804 for beliefs in language learning, and 0.879 for students' oral skills. Likert-type Scales were also used to calculate and present the Cronbach's alpha coefficient for internal consistency reliability of any scale used in the research.

3. RESULTS AND DISCUSSION

3.1 Students' Vocabulary Learning Strategies

Table 1 presents the level of students' vocabulary learning strategies across the indicators: memory strategies, determination strategies, social strategies, cognitive strategies, and metacognitive strategies. It has a total mean of 3.28 and a standard deviation of 0.50, with indicating a moderate level and suggesting that these strategies are demonstrated occasionally. Examining the indicators revealed that determination strategies were the highest, with a mean of 3.39 and a standard deviation of 0.61, also moderate, while cognitive strategies were the lowest, with a mean of 3.16 a standard deviation of 0.69, also moderate.

The results show that the students' level in vocabulary learning strategies is moderate. Students demonstrate some strategies in acquiring vocabulary and lexicon. (Zuhairi and Mistar, 2023), found that students have a moderate level of vocabulary learning strategies, where knowledge and word processing were the most commonly used strategies, while cognitive strategies were the lowest among all strategies. (Wang, et al., 2025) added that students increased their vocabulary by practicing previously taught words and learning new ones by memory. These results support (Khan's, 2018) explanation that students, when it comes to language, have limited vocabulary and require more time and strategies to learn new words effectively. By utilizing various strategies, students can expand and enhance their vocabulary. Therefore, students must be provided with a variety of vocabulary learning activities that address different learning styles and preferences.

Table 1. Students' vocabulary learning strategies

Indicators	SD	Mean	Descriptive Level
Memory Strategies	0.57	3.33	Moderate
Determination Strategies	0.61	3.39	Moderate
Social Strategies	0.62	3.27	Moderate
Cognitive Strategies	0.69	3.16	Moderate
Metacognitive Strategies	0.72	3.22	Moderate
Overall	0.50	3.28	Moderate

3.2 Students' Language Exposure

Table 2 presents the level of students' language exposure measured across home, friends, school, and media, with a mean ranging from 3.06 with standard deviations of 1.16 to a mean of 3.50 with standard deviation of 0.77. The overall mean is 3.26 and overall standard deviation is 0.84, indicating a moderate level, meaning that students demonstrate this language exposure occasionally. Analyzing the indicators reveals that language exposure in media has the highest mean of 3.50 with standard deviation of 0.77, while two indicators have the lowest mean: exposure at home, with a mean of 3.06 with standard deviation of 1.26, moderate level and exposure with friends, with the same mean of 3.06 with the standard deviation of 1.16, same in moderate.

The research results are consistent with previous studies on assessing students' language exposure. (Domingo, 2020) found out that students have a moderate level of language exposure and are more exposed to the language through media and school compared to home and friends. (Jhun, 2024) also revealed that students are more exposed to using modern technology, printed or non-printed materials, and language exposure in school. Related to these findings, Krashen (1982) presented the Acquisitional Learning theory, which explains that language learning can occur naturally and unconsciously. (Bing, et al., 2022) added that when students grow up in an environment with extensive exposure, it significantly helps them develop their language. Thus, school should ensure that the environment provides consistent and meaningful exposure to the target language.

3.3 Students' Language Learning Beliefs

Table 3 shows the level of students' language learning beliefs based on language aptitude, difficulty in language learning, nature of learning, learning and communication strategies, and motivation and expectations, with a mean ranging from 3.44 with standard deviation of 0.66 and to and a mean of 3.81 with standard deviation of 0.65. The level of students' language learning beliefs has an overall a mean of 3.60 with standard deviation of 0.65, indicating a high level and suggesting that students frequently demonstrate these beliefs. All five indicators recorded high levels. Analyzing these, motivation and expectations scored the highest, with a mean of 3.81 and a standard deviation of 0.84 and, while learning and communication strategies scored the lowest, with a mean of 3.44 and standard deviation of 0.66.

The findings confirm previous studies assessing the level of students' beliefs in language learning. (Napil and San Jose, 2020) explained that students have a high level of beliefs in language learning, with a mean indicating that motivation and expectations are the most strongly held beliefs. Additionally, (Agustina and Megawati, 2023) demonstrated favorable attitudes toward language acquisition, with expectations and motivation being the most firmly established beliefs. Students emphasized the belief that learning a language is important and beneficial when there are ready-made activities and motivation, while learning and communication strategies received lower belief scores from students. These results relate to (Hadi, 2020) explanation that beliefs in language learning are the knowledge that students hold about the different parts of the process. If a student aims to develop oral skills, they need to see opportunities to communicate using the language. Therefore, students must be provided individualized support and guidance to help develop positive beliefs and effective strategies that align with their individual needs.

3.4 Students' Oral Skills

Table 4 describes the level of students' oral skills, measured through interaction management, multimodality and prosody, textual coherence and cohesion, argumentative strategies, and lexicon and terminology. It has an

overall mean of 3.78 with a standard deviation of 0.61, indicating a high level and suggesting that students frequently demonstrate these skills. Examining the indicators, interaction management scored the highest, with a mean of 3.97 and a standard deviation of 0.77, high, while lexicon and terminology scored the lowest, with a mean of 3.66 and a standard deviation of 0.74, which is still high.

Results from various research studies show a high level of oral skills among students. (Satriawan and Skolastika, 2023) found out that students have a high level of oral skills, where proper interaction using correct pronunciation is a prominent. This aligns with (Rayla and Sonsona, 2021), which revealed that a lack of interaction and coherence are leading challenges for students. This is closely related to Jeremy Harmer's Theory of Speaking, which emphasizes the importance of oral skills in communication, whether it's a first or second language by (Indrawati, 2021). Therefore, there should be opportunities for students to practice all aspects of oral skills in a balanced way.

3.5 Relationship between Vocabulary Learning Strategies and Students' Oral Skills

Table 5 presents the significant relationship between vocabulary learning strategies and students' oral skills. Based on the hypothesis, the relationship between the variables is tested at a .05 significance level. It has a total r-value of 0.541 and probability value of 0.000, indicating that the hypothesis is not supported. However, when examining the indicators, all vocabulary learning strategy indicators show a significant relationship with students' oral skills where the probability value is less than .05, with a total r-value of 0.459 for memory strategies, 0.453 for determination strategies, 0.403 for social strategies, 0.375 for cognitive strategies, and 0.435 for metacognitive strategies. Therefore, it can be concluded that there is a significant relationship between the two variables.

Table 2. Students' language exposure

Indicators	SD	Mean	Descriptive Level
Home	1.26	3.06	Moderate
Friends	1.16	3.06	Moderate
School	0.89	3.44	Moderate
Media	0.77	3.50	Moderate
Overall	0.84	3.26	Moderate

Table 3. Students' language learning beliefs

Indicators	SD	Mean	Descriptive Level
Language Aptitude	0.59	3.51	High
Difficulty in Language Learning	0.62	3.56	High
Nature of Language Learning	0.67	3.70	High
Learning and Communication Strategies Motivation and Expectations	0.66	3.44	High
Overall	0.84	3.81	High
	0.55	3.60	High

Table 4. Students' oral skills

Indicators	SD	Mean	Descriptive Level
Interaction Management	0.74	3.97	High
Multimodality and Prosody	0.76	3.75	High
Textual Coherence and Cohesion Argumentative Strategies	0.74	3.78	High
Lexicon and Terminology	0.71	3.73	High
Overall	0.74	3.66	High
	0.61	3.78	High

Table 5. Relationship between vocabulary learning strategies and students' oral skills

Vocabulary Learning Strategies	Oral Skills					
	IM	MP	TCC	AS	LT	Overall
MS	.289**	.292**	.406**	.447*	.467*	.459**
	.000	.000	.000	.000	.000	.000
DS	.307**	.337**	.376**	.441**	.416**	.453**
	.000	.000	.000	.000	.000	.000
SS	.272**	.252**	.318**	.410**	.421**	.403**
	.000	.000	.000	.000	.000	.000
CS	.234**	.231**	.301**	.379**	.409**	.375**
	.000	.000	.000	.000	.000	.000
MS	.314**	.272**	.353**	.423**	.443**	.435**
	.000	.000	.000	.000	.000	.000
Overall	.362**	.352**	.445*	.535**	.550**	.541**
	.000	.000	.000	.000	.000	.000

Legend:
MS-Memory Strategies, MCS-Metacognitive Strategies, AS-Argumentative Strategies
DS-Determination Strategies, IM-Interaction Management, LT-Lexicon and Terminology
SS-Social Strategies, MP-Multimodality and Prosody
CS-Cognitive Strategies. TCC-Textual Coherence and Cohesion

The research results show a significant relationship between vocabulary learning strategies and students' oral skills, aligning with the findings of (Dano, Waris, and Komariah, 2022), who found a strong and significant relationship between vocabulary learning strategies, they explained that appropriate vocabulary strategies are needed to convey and understand concepts, which significantly impacts oral abilities. (Putri and Refnaldi, 2020) stated that if students are proficient in using vocabulary, oral skills become easier. This means that students are motivated to increase their speaking abilities to enhance their vocabulary and communication.

3.6 Relationship between Language Exposure and Students' Oral Skills

Table 6 presents the significant relationship between language exposure and students' oral skills. Based on the hypothesis, the relationship between the variables is tested at a .05 significance level. It has a total r-value of 0.271 and a probability value of 0.000, indicating that the hypothesis is not supported. However, when examining the indicators, all language exposure indicators show a positive relationship with students' oral skills, with a p-value of 0.000 for home, school, and media, and 0.0001 for friends. This shows an r-value of 0.207 for home, 0.159 for friends, 0.285 for school, and 0.279 for media. Therefore, it can be concluded that there is a significant relationship between the two variables.

The research results show a significant relationship between language exposure and students' oral skills, aligning with the findings of (Domingo, 2020), who explained that exposure significantly impacts language proficiency in aspects like listening, reading, writing, and most importantly, speaking. The longer the exposure, the more input students receive, leading to successful language learning. This is also supported by (Soriano and Garcia, 2021), who found that exposure can help students overcome their weaknesses and enhance their language proficiency. Thus, creating a rich and supportive language learning environment, educators can help students develop the oral skills they need to succeed.

3.7 Relationship between Language Learning Beliefs and Students' Oral Skills

Table 7 presents the significant relationship between language learning beliefs and students' oral skills. The data shows that the total r-value is 0.647 with a significance level of 0.000. This means there is a significant relationship between beliefs in language learning and students' oral skills.The relationship between the indicators of language learning beleifs and students' oral skills is also evident, with a significance level of 0.000 and an r-value of 0.447 for language aptitude, 0.537 for difficulty in language learning, 0.568 for the nature of learning, 0.511 for learning and communication strategies, and 0.536 for

motivation and expectations. This proves that there is a connection between beliefs in language learning and students' oral skills.

The research results show a significant relationship between language learning beliefs and students' oral skills. According to the findings of (Syafrizal, et al., 2018), a student's ability to become proficient in a language is not only influenced by mental aptitude but also by their attitudes and perceptions towards the target language. (Momani, 2021) also emphasized that students' oral abilities are directly influenced by their self-perception and attitudes towards the target language, meaning that beliefs in language learning are crucial for students' pursuit of different skills. Therefore, it can be concluded that students' beliefs in language learning significantly impact their oral abilities.

3.8 Influence between Language Learning Beliefs and Students' Oral Skills

Table 8 shows the significant influence of vocabulary learning strategies, language exposure, and language learning beliefs on students' oral skills. Based on the results, the total F-value is 112.371 with a corresponding *p-value* of 0.000, indicating that the regression model is significant. This means the hypothesis is not supported. It can also be seen that the language exposure has a value of 0.268, indicating that its influence on oral skills is not as extensive compared to vocabulary learning strategies and language learning beliefs. This suggests that other variables may be predictors of students' oral skills.

Additionally, the R^2 value of 0.460 means that 46% of the variation in oral skills can be explained by the predictors. This means that over half of the percentage comes from other factors. It is also revealed that language learning beliefs have the highest beta value of 0.521, indicating a greater influence compared to vocabulary learning strategies with 0.250 and language exposure with -0.046.

(Dano, Waris and Komariah, 2022) also confirmed that vocabulary learning strategies are predictors of students' oral skills and they mentioned that as students use different strategies, their oral abilities improve. Meanwhile, language exposure, based on the research findings, shows no significant influence. (Irene, et al., 2023) also explained that students' use of their first language or Mother Tongue is evident, especially outside the classroom. Sometimes, they need to translate into their first language and enrich their vocabulary in the target language before they can speak. (Syafrizal, et al., 2018) confirmed the significant influence of beliefs in language learning on students' oral skills. Therefore, understanding the relative importance of these factors can create more effective language learning environments that support students in achieving their full potential in oral communication.

3.9 Summary of Goodness of Fit Measures of Three Structural Models

This section examines the relationships between the variables in the study. Table 9 summarizes three models which were developed to identify the best-fit model for students' oral skills. The models were analyzed based on the given indicators, which served as the basis for accepting or rejecting the model.

Table 6. Relationship between language exposure and students' oral skills

Language Exposure	Oral Skills					
	IM	MP	TCC	AS	LT	Overall
HO	.162**	.115**	.123**	.215*	.247*	.207**
	.001	.022	.014	.000	.000	.000
FR	.167**	.090**	.092**	.148**	.165**	.159**
	.001	.072	.066	.003	.001	.001
SC	.282**	.165**	.207**	.246**	.282**	.285**
	.000	.001	.000	.000	.000	.000
ME	.259**	.209**	.210**	.225**	.257**	.279**
	.000	.000	.000	.000	.000	.000
Overall	.251**	.165**	.180*	.247**	.282**	.271**
	.000	.001	.000	.000	.000	.000

Legend:
HO-Home, ME-Media, AS-Argumentative Strategies
FR-Friends, IM-Interaction Management, LT-Lexicon and Terminology
SC-School, MP-Multimodality and Prosody, TCC-Textual Coherence and Cohesion

Table 7. Relationship between language learning beliefs and students' oral skills

Language Learning Beliefs	Oral Skills					
	IM	MP	TCC	AS	LT	Overall
LA	.314**	.334**	.354**	.412*	.437*	.447**
	.000	.000	.000	.000	.000	.000
DLL	.410**	.383**	.418**	.518**	.496**	.537**
	.000	.000	.000	.000	.000	.000
NLL	.439**	.467**	.456**	.506**	.486**	.568**
	.000	.000	.000	.000	.000	.000
LCS	.397**	.375**	.439**	.425**	.477**	.511**
	.000	.000	.000	.000	.000	.000
ME	.472**	.415**	.454**	.443**	.432**	.536**
	.000	.000	.000	.000	.000	.000
Overall	.511**	.493**	.530*	.570**	.576**	.647**
	.000	.000	.000	.000	.000	.000

Legend:
LA-Language Aptitude, ME-Motivation and Expectations, AS-Argumentative Strategies
DLL-Difficulty in Language Learning, IM-Interaction Management, LT-Lexicon and Terminology
NLL-Nature of Language Learning, MP-Multimodality and Prosody
LCS-Learning and Communication Strategies, TCC-Textual Coherence and Cohesion

Table 8. Influence between vocabulary learning strategies, language exposure, language learning beliefs and students' oral skills

(Variables)	Oral Skills			
	B	B	T	Sig.
Constant	.786		4.659	.000
Vocabulary Learning Strategies	.304	.205	5.467	.000
Language Exposure	-.033	-.046	-1.109	.268
Language Learning Beliefs	.584	.521	10.764	.000
R	.678			
R²	.460			
∆R	.456			
F	112.371			
P	.000			

Table 9. Summary of goodness of fit measures of three structural models

Model	P-value (>0.05)	CMIN/DF (0<value<2)	GFI (>0.95)	CFI (>0.95)	NFI (>0.95)	TLI (>0.95)	RMSEA (<0.05)	P-close (>0.05)
1	.000	5.502	.816	.841	.814	.818	.106	.000
2	.000	5.157	.827	.855	.828	.832	.102	.000
3	.105	1.410	.984	.994	.979	.989	.032	.864

Hypothesized Structural Model 1 shows the direct relationship between endogenous and exogenous variables. It shows that the exogenous variables, vocabulary learning strategies, language exposure, and language learning beliefs, do not predict oral skills, with a p-value greater than 0.05. The goodness of fit results indicate that the model values do not meet the required indicators, as seen in CMIN/DF > 2, GFI, CFI, NFI, TLI < 0.95, and RMSEA > 0.05 with a P-Close < 0.05. This means that the model is not suitable according to the data.

Hypothesized Structural Model 2 shows the relationship between vocabulary learning strategies, language exposure, language learning beliefs, and their relationship to students' oral skills. it can be concluded that the exogenous variables have no significant influence on students' oral proficiency, with a p-value greater than 0.05. The goodness of fit

results indicate that the model values do not meet the required indicators, as seen in CMIN/DF > 2, GFI, CFI, NFI, TLI < 0.95, and RMSEA > 0.05 with a P-Close < 0.05. Therefore, this model did not meet the required criteria.

Hypothesized Structural Model 3 shows the non-latent exogenous variables for vocabulary learning strategies, language exposure, language learning beliefs, and their direct relationship to the non-latent variables for students' oral skills. The goodness of fit results is shown. Its Chi-Square divided by degrees of freedom (CMIN/DF) is 1.410; the Normed Fit Index (NFI) is 0.979; the Tucker-Lewis Index (TLI) is 0.989; the Comparative Fit Index (CFI) is 0.994; the Goodness of Fit Index (GFI) is 0.984; the Root Mean Square of Error Approximation (RMSEA) is 0.032; and the P of Close Fit (P-close) is 0.864. This indicates that the exogenous variables have a significant influence on students' oral skills, with a p-value greater

than 0.05. The goodness of fit results show that the model values meet the required indicators, as seen in CMIN/DF > 2, GFI, CFI, NFI, TLI < 0.95, and RMSEA > 0.05 with a P-Close < 0.05. Therefore, this model meets the required criteria.

3.10 Best Fit Model on Students' Oral Skills

The model 3 shows the relationship between the exogenous variables, vocabulary learning strategies, language exposure, language learning beliefs, and their direct causal relationship with the endogenous variable, students' oral skills. It shows that the three exogenous variables are interconnected. Vocabulary learning strategies have a direct relationship with language learning beliefs and language exposure. Meanwhile, language exposure has a direct relationship with vocabulary learning strategies and language learning beliefs.
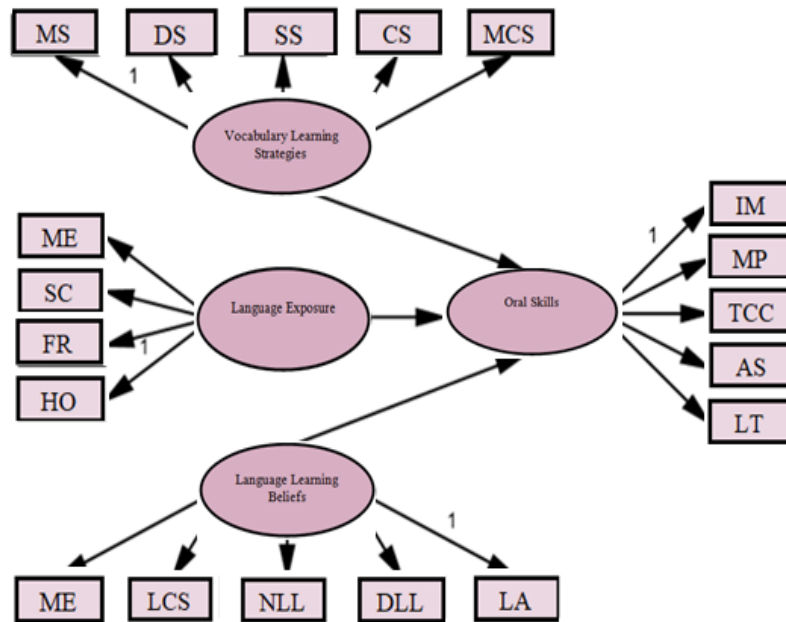

Fig. 1. Conceptual model on direct relationship of latent exogenous variables
Legend:
MS-Memory Strategies, HO-Home, LA-Language Aptitude
DS-Determination Strategies, FR-Friends, DLL-Difficulty in Language Learning
SS-Social Strategies, SC-School, NLL-Nature of Language Learning
CS-Cognitive Strategies, ME-Media, LCS-Learning and Communication Strategies
MCS-Metacognitive Strategies, ME-Motivation and Expectations
IM-Interaction Management, AS-Argumentative Strategies, MP-Multimodality and Prosody
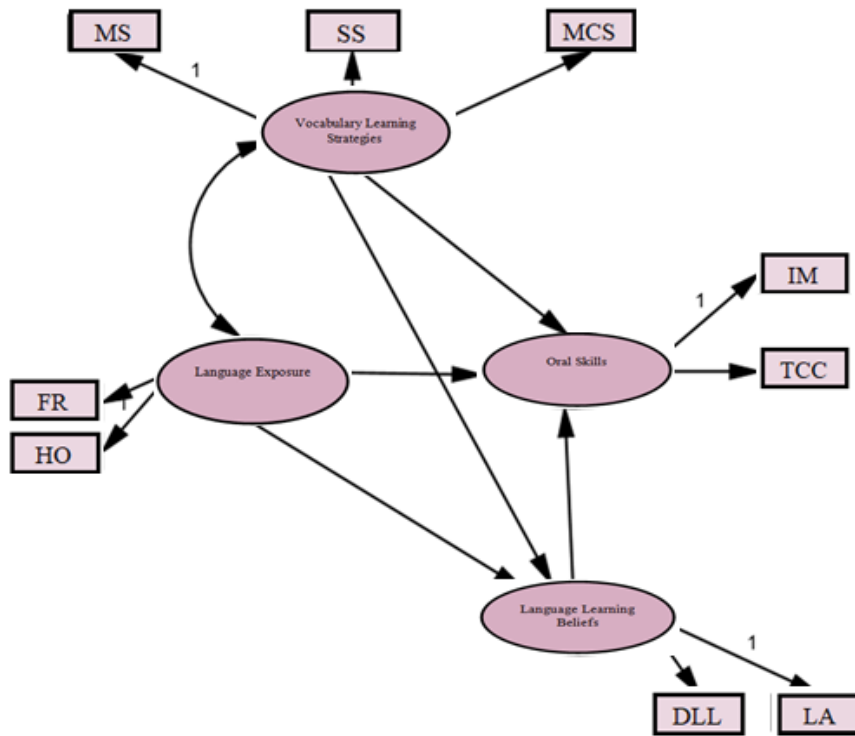*LT-Lexicon and Terminology, TCC-Textual Coherence and Cohesion*

Fig. 2. Best fit model on students' oral skills
Legend:
MS-Memory Strategies, HO-Home, LA-Language Aptitude
DS-Determination Strategies, FR-Friends, DLL-Difficulty in Language Learning
SS-Social Strategies, SC-School, NLL-Nature of Language Learning
CS-Cognitive Strategies, ME-Media, LCS-Learning and Communication Strategies
MCS-Metacognitive Strategies, ME-Motivation and Expectations
IM-Interaction Management, AS-Argumentative Strategies, MP-Multimodality and Prosody
LT-Lexicon and Terminology, TCC-Textual Coherence and Cohesion

Additionally, three out of five indicators of vocabulary learning strategies, namely memory strategies, social strategies, and metacognitive strategies, were found to be significant predictors of students' oral skills. Meanwhile, two out of four indicators in language exposure, namely friends and home, were found to be related to students' oral skills. On the other hand, two out of five indicators in language learning beliefs, namely language aptitude and difficulty in language learning, remained predictors of students' oral skills. Based on the results, students' oral skills can be measured through vocabulary learning strategies based on memory strategies, social strategies, and metacognitive strategies; language exposure based on home and friends; and language learning beliefs based on language ability and difficulty in language learning.

Oral skill is a macro skill that students need to develop to achieve a high level of knowledge and be prepared for various fields, especially their future prospective jobs or professions. Enhancing their vocabulary learning strategies and expanding their beliefs in language learning are crucial factors that will help them become knowledgeable and proficient in oral skills. Meanwhile, it is important to further expand exposure in the language to further improve this skill.

4. CONCLUSION

This study's use of the structural equation model provided a solid foundation for systematically analyzing the variables. Students with a higher level of using these strategies on vocabulary learning are more proficient in communication, highlighting their importance in developing oral skills. This demonstrates that successful language learning beliefs does not solely rely on the technical aspects of language but also on

effectively utilizing positive perspectives towards language learning.

The results show that vocabulary learning strategies, language exposure, and language learning skills have a significant relationship with students' oral skills. Furthermore, two of the variables revealed to be significant influence while language exposure does not. It emerged that students face challenges such as limited language fluency in informal contexts, like home and with friends. These findings suggest a need for more opportunities to hone oral skills, not only within the school but also outside of it. Model 3 was identified as the most suitable for the data, with supporting evidence. The Goodness of Fit Model 3 is excellent, meeting all the established criteria.

Overall, this study emphasizes the integration of effective language learning strategies, language exposure development, and valuing beliefs in language as having a significant relationship with students' oral skills. The results support Jeremy's Theory of Speaking, which explains that languages themselves and mental and social processing are necessary for fluent and effective oral communication. In this way, it can help teachers and curriculum implementers develop programs and activities that will further enhance students' oral skills, leading to more effective communication in various situations.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Authors hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during writing or editing of this manuscript.

CONSENT

The authors have obtained and retained written consent from all participants, in accordance with relevant international and/or university ethical guidelines.

ETHICAL APPROVAL

This research followed all institutional ethical guidelines, as evidenced by ethics committee certification number UMERC-2024-203.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

Agustina, S., & Megawati, F. (2023). ELT students' language learning beliefs and the correlation to English proficiency. *International Social Sciences and Humanities, 2*(1), 188-196. https://doi.org/10.32528/issh.v2i1.118

Al-Malki, E., & Javid, C. Z. (2018). Identification of language learning beliefs among Saudi EFL learners. *Arab World English Journal, 9*(4), 186-199. https://dx.doi.org/10.24093/awej/vol9no4.13

Banawis, M. A. (2023). Enhancing speaking skill among senior high school students on oral communication in the University of Eastern Philippines. *Eur. Chem. Bull, 12*(6), 7680–7684.

Bastida, E., & Yapo, J. (2019). Factors contributing to oral communication apprehension among selected senior high school students in Santa Rosa City, Laguna, Philippines. *Asia Pacific Journal of Contemporary Education and Communication Technology, 5*(2), 10-20.

Bhat, A. (2022). Descriptive correlational: Descriptive vs correlational research. *QuestionPro.* https://www.questionpro.com/blog/descriptive-research-vs-correlational-research/

Bing, O., Mustofa, A., & Anam, S. (2022). Language exposure and Indonesian secondary students' language accuracy. *ELTLT*, 1-8. https://doi.org/10.4108/eai.14-8-

Bose, B. (2022). Structural equation modeling: Definition and analysis. *Digital Vidya.*

https://www.digitalvidya.com/blog/structural-equation-modeling/

Chand, G. (2021). Challenges faced by bachelor level students while speaking English. *Indonesian Journal of English Language Teaching and Applied Linguistics, 6*(1), 45-60. https://doi.org/10.21093/ijeltal.v6i1.853

Dano, R. F., Waris, A. M., & Komariah, A. (2022). The correlation between students' vocabulary mastery and speaking skill. *Borneo Journal of Language and Education, 2*(2), 23-38.

De Guzman, M., & De Jesus, F. (2021). Non-intellective challenges in oral communication skills among grade 11 learners. *International Journal of English Literature and Social Sciences, 6*(4), 84-95.

Domingo, P. (2020). Correlation between the students' English language proficiency and their exposure to English language. *Nobel Journal of Literature and Language Teaching, 11*(2), 178-187. https://doi.org/10.15642/NOBEL.2020.11.2

Fatima, U., Farid, Z., & Tayyab, M. (2021). The effects of technology on the oral communication skills of undergraduate ESL learners. *Global Language Review, VI*(III), 91-102. https://doi.org/10.31703/glr.2021(VI-III).10

Gràcia, M., Alvarado, J., & Nieva, S. (2021). Assessment of oral skills in adolescents. *Children, 8*(1136), 1-15. https://doi.org/10.3390/children8121136

Hadi, M. J. (2020). Exploring the teaching and learning belief of an Indonesian English teacher. *Journal of Languages and Language Teaching, 8*(1), 29-39. https://doi.org/10.33394/jollt.v8i1.2222

Huynh, T. (2020). Problems of learning speaking skills encountered by English major students at Ba Ria-Vung Tau University, Vietnam. *European Journal of English Language Teaching, 5*(4), 39-48.

Indrawati, I. (2021). Developing students' speaking skill of grade XI at SMAN 2 Tolitoli by using describing picture. *Journal of Management and Education, 4*(4), 300-307.

Irene, J., Sathasivam, K., Jeyaraja, S., & Maniam, M. (2023). The effects of mother tongue interference among ESL learners' speaking skills. *International Journal of Academic Research in Business and Social Sciences, 13*(7), 919-935.

Jaya, H., Petrus, I., & Pitaloka, N. (2022). Speaking performance and problems faced by English major students at a university in South Sumatera. *Indonesian EFL Journal, 8*(1), 105-112. https://doi.org/10.25134/ieflj.v8i1.5603

Jhun, F. (2024). Language skills and exposure to English language among bachelor of arts in English language studies students at Mindanao State University-Sulu. *Psychology and Education, 20*(5), 526-533. https://doi.org/10.5281/zenodo.11444747

Khan, R., Radzuan, N., Shahbaz, M., & Ghulam, M. (2018). The role of vocabulary knowledge in speaking development of Saudi EFL learners. *Arab World English Journal, 9*(1), 406-418. https://dx.doi.org/10.24093/awej/vol9no1.28

Kozhevnikova, E. (2019). The impact of language exposure and artificial linguistic environment on students' vocabulary acquisition. *PEOPLE: International Journal of Social Sciences, 5*(1), 430-439.

Momani, M. (2021). The association between beliefs about language learning and language proficiency among Jordanian EFL learners at Ajloun University College. *Journal of Language Teaching and Research, 12*(1), 144-157.

Napil, M., & San Jose, A. (2020). Beliefs and strategies in Filipino language learning and academic performance of indigenous students. *International Journal of Educational Policy Research and Review, 7*(5), 151-163. https://doi.org/10.15739/IJEPRR.20.017

Nguyen, T., & Pham, V. (2022). Effects of using technology to support students in developing speaking skills. *International Journal of Language Instruction, 1*(1), 1-8. https://doi.org/10.54855/ijli.22111

Putri, A., & Refnaldi. (2020). The correlation between students' vocabulary mastery and speaking ability at grade 8 of junior high school. *Journal of English Language Teaching, 9*(1), 44-45. https://doi.org/10.24036/jelt.v9i1.107809

Rayla, A., & Sonsona, R. (2021). Assessing senior high school students' oral proficiency skills in the new normal. *Science International (Lahore), 33*(3), 153-157.

Rivera, K., & Villanueva, H. (2023). Speaking English as experienced by grade 7 students: A phenomenological study. *Journal of Education and Learning Innovation, 3*(2).

https://doi.org/10.35877/454RI.eduline1622

Saleh, G. U. (2022). Assessment of the problems of learning the aural-oral skills at JSS level in Katsina State, Nigeria. *International Journal of English Language and Linguistics Research, 10*(1), 32-44.

Satriawan, K., & Skolastika, M. P. (2023). The analysis of students' speaking ability in speech at the English literature department of Mahasaraswati Denpasar University. *BULLET: Jurnal Multidisiplin Ilmu, 2*(3), 739-746.

Separa, L., Generales, L., & Medina, R. J. (2020). Situational speaking difficulties of English as second language learners in the Philippines. *JATI-Journal of Southeast Asian Studies, 25*(1), 144-167. https://doi.org/10.22452/jati.vol25no1.8

Soriano, E., & Garcia, A. J. (2021). English language exposure: Its effectiveness in helping students understand their English lessons. *Luz y Saber, 15*(1), 15-28.

Syafrizal, S., Nurhaedah, G., & Liana, T. (2018). Correlational study of language learning attitude and speaking in Indonesian context: A case study. *Journal of English Language Studies, 3*(1), 63-79.

Ta'amneh, A. (2021). An analysis of various vocabulary learning strategies used by EFL university students. *Journal of Applied Linguistics and Language Research, 8*(3), 77-88. Available online at www.jallr.com.

Vandergrift, L., & Goh, C. (2022). The importance of oral language skills for real-life communication and job skills in Tanzania. *Interdisciplinary Journal of Linguistics, Marketing and Communication, 9*(4), 18-33.

Villanueva, L., & Rosales, M. (2022). English speaking problems of freshmen students in a teacher education institution. *International Journal of Advanced Research in Management and Social Sciences, 11*(6), 285-293.

Wang, C., Zhu, S., & Dai, Y. (2025). Exploring the impact of self-regulation on vocabulary learning strategies and knowledge in CSL: A structural equation modeling approach. *Humanities and Social Sciences Communications, 12*(1), 1-15.

Zaman, Q., & Aslam, M. (2021). An analysis of oral communication competency of tenth grade English language examination in Balochistan. *Pjer, 4*(1), 232-235.

Zuhairi, A., & Mistar, J. (2023). Vocabulary learning strategies and vocabulary mastery by Indonesian EFL learners. *World Journal of English Language, 13*(8), 453-456. https://doi.org/10.5430/wjel.v13n8p453