

Applying Cognitive Linguistics to Teaching Vietnamese Idioms: Evidence From Teaching Vietnamese to Foreigners in Vietnam

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Abstract

Culture and language are two interconnected categories. When language learners interact with another language, they also interact with its culture. Students cannot comprehend a culture without direct access to the vocabulary of that culture. Likewise, the trend of international integration in Vietnam encourages many expatriates to study Vietnamese. Consequently, it becomes increasingly important to discover effective methods for teaching Vietnamese. This study (n=200) used a cross-sectional survey with the purpose sampling technique. Structural equation modeling (SEM) was used to evaluate the proposed hypotheses. According to research findings, all three learning interests, integrated thinking abilities, and learning strategies positively and significantly affect learning benefits. In addition, the factor of learning benefits has a positive and statistically significant influence on the subject grade point average (GPA) factor with the maximum regression coefficient. This study suggests that instructors should implement cognitive language to enhance student learning outcomes.

Keywords: Vietnamese; idioms; skills; strategy; benefits; learning; teaching; GPA; foreigners.

Introduction

As Vietnam continues integrating into the global economy, many expatriates are learning Vietnamese (Khuong, 2017). Vietnamese is regarded as a difficult language due to its complex grammar system and tonal system (Park, Chu, & Tran, 2020). The complexity of the Vietnamese language makes it difficult for non-native speakers to comprehend the meaning of concrete words, grammatical structures, and phonetics (Le, 2017; Park et al., 2020). Therefore, there have been a variety of organizations with varying effects that teach Vietnamese to expatriates (Nguyen, 2012). It is necessary to employ appropriate Vietnamese teaching methods to make the lessons less tedious, making it simpler

for students to comprehend the meaning of complex words and cultural information (Brown, 2018). The teacher's role is to select the appropriate cultural material (Quesada & Lozano, 2020). Consequently, innovative teaching methods must be developed in which the learner's activity must predominate in the lesson, and the teacher's role is to select the appropriate cultural material.

Cognitive linguistics is a 1970s-era interdisciplinary approach to studying language, mind, and sociocultural experience. A commitment to the inseparability of meaning and form in language study characterizes cognitive linguistics. According to this methodology, language is best examined in the context of its use and emerges from that context. Cognitive linguists concentrate primarily on two broad areas of research: the study of language organization and the use of language to investigate aspects of conceptual structure. Cognitive linguistics is gaining prominence in cognitive science, social science, and applied linguistics (Casasanto & de Bruin, 2019).

Mastering a foreign language is among the most difficult challenges language students confront. There are many standard phrases (idioms, phrases, etc.) to be learned when studying a foreign language. There is a need for instructional methods to assist students in completing this endeavor. In addition, some proposals for teaching vocabulary go beyond rote memorization techniques and conventional language acquisition methods. Therefore, cognitive linguistic teaching methods can benefit firm words, semantics, and incongruent grammatical structures (Shaykhislamov & Makhmudov, 2020). Previous research has examined the effect of cognitive language on the effectiveness of foreign language acquisition. However, these studies' findings are inconsistent, even contradictory. Boers and Lindstromberg (2006) found no statistically significant correlation between learning outcomes and individual differential measures of executive function, working memory, motivation, or learning style, which should be interpreted cautiously. Applying cognitive languages benefits all learners, not just a subset with particular abilities (Kissling & Arnold, 2022). In the meantime, Ahmadi, Zarei, and Esfandiari (2020) identified the role of cognitive analysis in idiom instruction. The proper language instruction approach or method is always of interest to students and instructors (Quesada & Lozano, 2020).

Masini (2019) notes that teaching and learning idioms are one of the most challenging areas in which instructors and students of foreign languages seek out practical and effective teaching methods. But first, the teacher must direct students to comprehend the meaning and origin of idioms (Liontas, 2017, 2019). Idiom knowledge must be embedded in authentic and purposeful linguistic materials and situations (Liontas, 2017). Consequently, cognitive expressions must be incorporated into the language teaching process, and learners must be taught how a language embodies concepts based on cognitive reasoning (Wolter, 2023). In addition, cognitive linguistics requires students to reveal the cultural context and meanings of related vocabulary (Ding, 2019; Stockwell, 2020). Language instructors should not disregard cognitive linguistics if the target language can be used naturally. Instructional idioms necessitate essential decisions regarding issues such as instructional strategies, frequency of use, etc. (Liontas, 2017).

An idiom is a group of words in a specific order that has a meaning distinct from the definitions of the individual terms. Idioms are figurative expressions that do not correspond to their literal meanings. Due to their prevalence in spoken and written discourse, however, idiom comprehension and production pose a unique challenge for vocabulary acquisition (Quesada & Lozano, 2020). Because idioms are fixed expressions belonging to the regular usage of native speakers with standardized meanings and forms (Carrol & Conklin, 2017), teaching Vietnamese idioms improves language learning effectiveness for foreign language learners (To, 2022). In other words, idioms are frequently encountered as symbolic expressions in spoken and written discourse, which makes acquiring vocabulary difficult for language learners (Quesada & Lozano, 2020).

Language is a cognitively complex activity. Pre-linguistic conditioning plays a crucial role in its acquisition (Abakedi, 2020). Therefore, to learn effectively, foreign language students must acquire the perceptions necessary to effectively learn the language and use it like native speakers (Schmitt & Cowie, 2020). Those who comprehend idioms will be proficient in this language. Previous research has supported a cognitive linguistic approach to idiom instruction. Because language instruction involves mental and sociocultural factors, cognitive expressions enable students to demonstrate a valuable comprehension of the subject (Shaykhislamov &

Makhmudov, 2020; Stockwell, 2020). The cognitive linguistics approach emphasizes the role that meaning, conceptual, and experiential processes play in investigating the intersection of language and mind (Jermoskin, 2017). Language teaching strategies are continuously being updated and revised to keep up with the changes in our educational system. Based on cognitive, social, and communicative theories, cognitive linguistics hypothesizes that idioms are examples of conceptual metaphors (Hung, 2019). Cognitive linguistics enables students to acquire linguistic expressions without memorizing sentence patterns (Ngoc, 2017), to acquire idioms with more precise meanings (Aydin, 2019), and to appreciate pedagogy (Zarei, 2020). Cognitive approaches assist learners in processing ambiguous idioms, constructing meaning through an integrated process that includes idiom components (Al-Otaibi, 2019; Vandehey, 2019), improving outcomes in learning foreign languages (Hajjalizadeh & Mohseni, 2016), and comprehending the original meaning of idioms (Wang, 2020). This study aims to examine the role of cognitive language in teaching Vietnamese idioms by testing hypotheses regarding the factors that influence the effectiveness of learning Vietnamese phrases via cognitive linguistic analysis.

Literature Reviews

Idioms and teaching idioms

Idioms are commonplace and a rich source of culture (Quesada & Lozano, 2020). They are idiomatic expressions that native speakers commonly use (Carrol & Conklin, 2017). The idiom's meaning and form are standardized, permitting only minimal variation. Thus, knowledge of idioms in a foreign language expands learners' vocabularies and enhances their language proficiency in the target language, enabling them to attain the requisite level of language proficiency (Byessonova, 2017). The relationship between the meanings of the words comprising an idiom and the idiom as a whole is, at best indirect, if it exists at all (Tahayna, Ayyasamy, & Akbar, 2022). For an idiom to be considered parsable, it is sufficient that its components have literal or figurative meanings that independently contribute to the phrase's overall symbolic interpretation (Honeck & Hoffman, 2018).

Idiomatic expressions are highly structured semantically (Saxena & Paul, 2020). Therefore, failure to comprehend the meanings of idioms can impact a person's language comprehension in social, academic, and professional settings (Smith & Dowse, 2019). Foreign language students can be taught idioms through various practical activities to learn and implement them (Aminah, 2018). The acquisition of idioms in the classroom requires explicit instruction, cognitive skills, and strategies (Alharthi, 2020; Liu, 2021). Moreover, idioms entail the construction of multimodal mental symbols whose properties can be studied through the lens of multimodal social semiotics (de Bruin, 2019; Hart, 2016). Teaching idioms requires more collaboration and creativity to support learning and teach a deeper comprehension of real-world problem-solving concepts.

Cognitive language and its role in foreign language teaching

Cognitive language is not only a phenomenon that transcends languages but also cultures. Mental expressions have the same linguistic and conceptual foundation in native and target languages (Wolter, 2023), allowing language learners to gain valuable insights into language teaching due to cognitive and sociocultural factors (Stockwell, 2020). Cognitive linguistics is a metacognitive strategy in foreign language teaching that helps students understand and remember textual structure and semantics in different cultural contexts (Ali & Razali, 2019) because linguistics and cognition mediate potential causality effects on textual and semantic comprehension (Koornneef et al., 2016). Cognitive language aids in foreigners' rapid acquisition of fundamental Vietnamese semantic knowledge (Brown, 2018; Le, 2017; Park et al., 2020). It also helps foreign language learners feel that learning is appealing and enjoyable by convincing them that learning a foreign language is a source of entertainment, addiction, curiosity, fluency, and straightforward comprehension. In addition, it aids students in formulating and resolving problems, enabling them to manage complex and aggravating aspects of language acquisition (Fang, 2015; Farjami, 2012).

Studies on idioms from a cognitive linguistics perspective appear early (Boers, Eyckmans, & Stengers, 2007) and suggest that language instructors should avoid

ignoring cognitive language whenever possible. Use the target language naturally instead (Ding, 2019). Idiomatic expressions exhibit a substantial amount of semantic structure. Its meanings are constructed simultaneously from word meanings and context-specific interpretations (Saxena & Paul, 2020). Therefore, idiom instructors assist students in understanding idioms' original meaning (Liontas, 2019), allowing them to integrate their knowledge of expressions into authentic and relevant linguistic documents and situations (Liontas, 2017).

Understanding cognitive language enables students to determine whether idiomatic expressions contain literal or figurative components (Honeck & Hoffman, 2018). In addition, the analytical power of expressions does not depend on semantically formed word sequences, and cognitive language helps reveal this (Brandon Chai, 2019) consequently, which can assist learners in deducing idiom meanings based on etymological information and facilitating their processing within the context of the target language culture (Brandon Chai, 2019).

Individuals use their preferred learning mode (Srivastava & Shah, 2022), so it is impossible to determine whether cognitive linguistics is an effective tool for semantic analysis (Neu, Saxton, & Rahaman, 2022). When endeavoring to communicate in a foreign language, students frequently translate aspects of their native language into speech patterns of the target language (Sharwood Smith, 2021). Familiarity and literalness are quantifiable signals for calculating and representing idiomatic meanings in one's mental vocabulary (Beck & Weber, 2020). Cognition language assists learners in dealing with ambiguity in informal processing because it requires learners to place words in context-specific relationships (Holtzen et al., 2022; Liu & Su, 2021).

Although the function of cognitive language in effective foreign language instruction is still uncertain, the following effects can be considered. Cognitive language enables students to combine individual words into complete thoughts. In addition, learners can quickly learn the grammar structure due to logical reasoning and the flexibility to arrange numerous separate, easily-misunderstood components of the grammatical structure system (Fang, 2015; Tabata-Sandom, Nishikawa, & Ishii, 2020).

In addition, it helps learners feel engaged and amused because it gives them the impression that learning a second language is enjoyable. It can also make second language learners addicted, like a compelling television series that must be analyzed and investigated. It concentrates on assisting second language learners in managing the complex and frustrating aspects of language learning (Fang, 2015; Farjami, 2012).

Hijazo-Gascón (2018) reports the benefits of cognitive language development through communication and learning strategies. It helps students develop strategies for learning idioms that accurately anticipate language and have a strong desire to communicate with or learn from a community. In addition, learners are meticulously prepared, constantly seeking sentence patterns in the target language and actively regulating the speech of others. Consequently, second language acquisition will significantly benefit learners (Brandon Chai, 2019; Tabata-Sandom et al., 2020). Cognitive language assists second-language learners in locating words and recognizing intricate structures. The cognitive language analysis approach to teaching idioms enables students to comprehend grammar easily by lying resolutely. Language rules prevent the development of language patterns through behavior. It also assists students in exerting mental effort, developing error analysis skills, and comprehending and applying contextual grammar (Rubin, 1975).

As depicted in Figure 1, the authors have constructed a research model based on what?

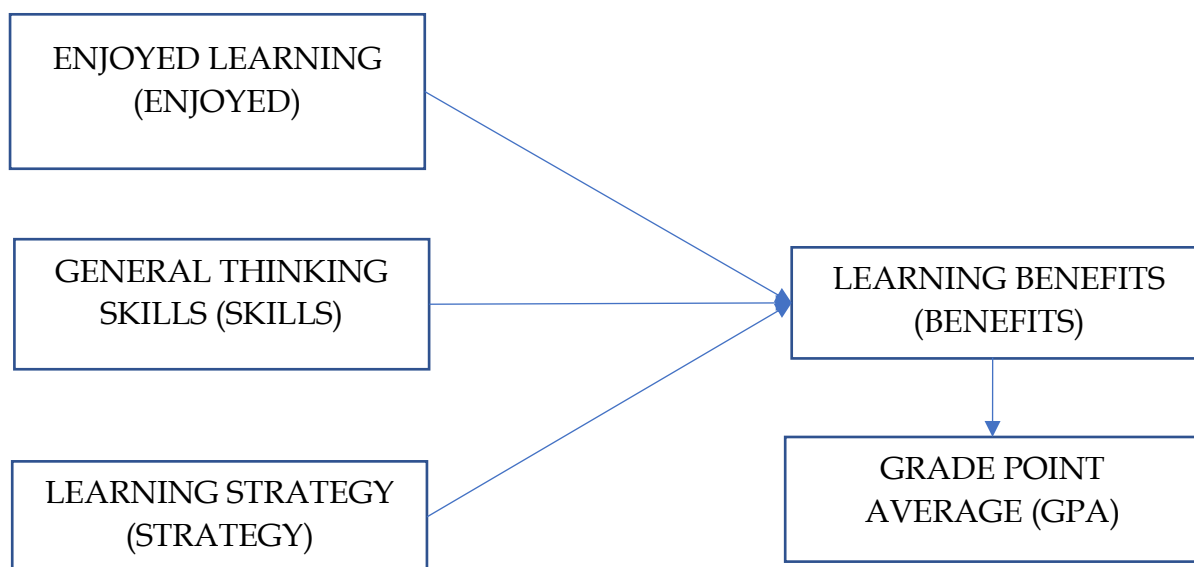


Figure 1 The Research Model

Based on the above documents, the following hypotheses have been formed:

H1. *Enjoyed learning has a positive and meaningful impact on learning benefits.*

H2. *General thinking skills have a positive and meaningful impact on learning benefits.*

H3. *Learning strategy has a positive and meaningful impact on learning benefits.*

H4. *Learning benefits have a positive and significant impact on the grade point average.*

Research Method

A one-hour curriculum for teaching Vietnamese idioms is developed to evaluate the research hypotheses. The cognitive linguistics method is used to teach idioms in a scenario. The cognitive linguistic method analyzes eight idiomatic sentences ([Table 1](#)). The instructor guides the students through a two-step procedure. The teacher introduces an idiom by associating it with a specific communication context and then asks students to explain its meaning. The second stage involves the instructor introducing students to cognitive linguistics techniques for identifying the source and target domains. The teacher attaches the idiom to the Vietnamese cultural context and requests the students to redefine its meaning after the students have expressed their opinions. A conceptual conclusion will then be drawn regarding the idiom. This method is applied to the remaining seven idiomatic phrases. The instructional design is learner-centered ([Weimar, 2013](#)). Each group is permitted to examine and exchange the most widely held beliefs.

The eight selected idioms pertain to five prevalent topics in daily Vietnamese communication. These include the animal form alluding to a specific person, animal characteristics alluding to human circumstances, natural phenomenon characteristics alluding to human actions, natural phenomenon characteristics alluding to the human condition, and natural phenomena alluding to the emotional state of a man ([Table 1](#)).

Table 1 Matrix analysis of Vietnamese idioms

No	Topic	Idiom sentence	Common source	Target domains	Meaning in Vietnamese culture	Concept of idioms
1	The form of the animal alludes to a particular person.	He is "black as a crow."	The form of the animal: is ugly and black.	The form of a particular person: ugly	The image of a crow indicates ugliness, lousy luck, mourning, calamity, and hell (Nguyen, 2003).	Call someone ugly (Nguyen, 2003).
		She looks like an "owl."	The form of the animal: bad, smelly, scared	Personality: ugly, cruel	The image of an owl indicates someone's terrible intentions to harm others (Nguyen, 2003).	Denigrate someone in terms of appearance and morals
2	Animal characteristics allude to human circumstances.	His fortune is "like a fish in water."	Animal characteristics: Water is the habitat of fish.	Human circumstances: refer to a person who meets a favorable person or opportunity they wish for.	Fish and water indicate luck, prosperity, and meeting a suitable and favorable object or situation (Nguyen, 2003).	It is used to refer to someone who has an excellent opportunity (Nguyen, 2003).
3	Natural phenomena characteristics allude to human actions.	His temperament is "hot as fire"; I still have to pamper him.	Natural phenomena characteristics: The rapid oxidation of a material in a combustion reaction releases heat (Ta, 2007).	Human actions: often irritable, unable to suppress emotions.	The image of the flame shows longevity, immortality, unity, and determination to win. (Nguyen, 2003).	It used to denigrate the character of someone short-tempered, unable to control his emotions (Nguyen, 2003).
		Her glance was "like lightning."	Natural phenomena characteristics: The bright light was immediately extinguished due to an electrical discharge between two clouds or between clouds and the ground (Ta, 2007).	Human actions: quickly, suddenly,...	Clouds, rain, thunder, and lightning are phenomena that play a massive role in the lives of Vietnamese people. Lightning symbolizes robust, intelligent, and skillful people handling difficult situations quickly (Nguyen, 2003).	It used to refer to intelligent, flexible actions...(Nguyen, 2003).

No	Topic	Idiom sentence	Common source	Target domains	Meaning in Vietnamese culture	Concept of idioms
4	Natural phenomena characteristics allude to the human condition.	Their situation was "like the moon and the sun."	Natural phenomena characteristics: The sun gives us heat and light. The moon has no light of its own; it shines because it reflects sunlight-the attribute of the moon opposite to the sun (Ta, 2007).	The human condition: refers to people always in conflict, with no common ground to agree on.	The image of the moon and the sun in Vietnamese culture reflects people who have nothing in common, cannot compromise, etc. (Nguyen, 2003).	It is used to criticize harmful conflicts between individuals for which there is a solution (Nguyen, 2003).
		I miss you like "drought longing for rain."	Natural phenomena characteristics: severe lack of rainfall over a long period reduces the air's moisture and soil's water content (Ta, 2007).	The human condition: those who fall into extreme emotional deprivation.	In Vietnamese culture, rain is the desire of the people. Therefore, the ceremony to pray for rain is held with the meaning of praying for the villagers to have a year of favorable weather and good harvest, and at the same time, educating generations to protect and respect the living environment (Dinh, 1993).	It indicated nostalgia and longing for a love (Dinh, 1993).
5	Natural phenomena allude to the emotional state of a man.	The news of his passing was like "a bolt from the blue."	Natural phenomena: the source of solid electromagnetic radiation occurring in nature occurs suddenly (Ta, 2007).	The emotional state of a man: The news came suddenly, stunned,...	In Vietnamese culture, the image of lightning is represented by a statue of a lightning god, used to indicate rain, good harvest, and hope. On the other hand, lightning represents the power of death, making people feel dizzy and startled (Dinh, 1993).	It refers to feeling dizzy and unable to control emotions when hearing unbelievable news (Dinh, 1993).

The research was conducted at universities in Hanoi that offer international students Vietnamese language courses. The duration of the investigation is two years, 2021 and 2022. The questionnaire was constructed in seven steps: 1. Determining research objectives and questions; 2. Identifying survey subjects and anticipated survey samples; 3. Defining data collection methods; 4. Identifying questionnaire questions; 5. Organizing the order of questionnaire questions; 6. Conducting test interviews and consulting with experts; 7. Complete and modify the questionnaire (Thanh et al., 2022). The author used in-depth interviews with three Vietnamese language instructors for foreigners and two pedagogy professors to develop a research questionnaire. A linguist edited the questionnaire after the initial version was created. The questionnaire comprises 2 parts. Part 1 captures demographic information about the study participants, including age, gender, country, and years of Vietnamese study. Part 2 is used to collect data on learning enjoyment (Fang, 2015; Farjami, 2012; Halbach, 2000), general thinking skills (Fang, 2015; Farjami, 2012), learning strategy (Preston, Bayley, & Escalante, 2022); and learning benefits (Luan & Thanh, 2022; Rubin, 1975). The GPA is calculated following Circular No. 08/2021/TT-BGDT of Vietnam's Ministry of Education and Training. The initial draft was pilot-tested on forty participants to refine and perfect the final draft. In addition, some queries were better tailored to the research topic (see Appendix for the questionnaire's structure).

Using a targeted sampling method, the final version of the questionnaire was sent directly to the respondents. 29 Australian students, 30 Cambodian students, 48 Chinese students, 34 Laotian students, 32 Russian students, and 27 South Korean students participated in the investigation. Students at Hanoi University, Hanoi National University of Education, University of Social Sciences and Humanities, and University of Foreign Languages study Vietnamese participated. Consequently, 200 valid votes were collected--demographic information on study participants is presented in Table 2.

Table 2 Demographic characteristics of survey participants

		Duration of Learning Vietnamese							
		1 to 2 years		2 to 3 years		Less than 1 year		More than 3 years	
		N	% of N	N	% of N	N	% of N	N	% of N
Gender	Female	13	9.4%	64	46.0%	14	10.1%	48	34.5%
	Male	16	26.2%	27	44.3%	14	23.0%	4	6.6%
Age	20 years old	8	22.2%	19	52.8%	3	8.3%	6	16.7%
	21 years old	6	13.6%	13	29.5%	3	6.8%	22	50.0%
	22 years old	13	14.4%	53	58.9%	8	8.9%	16	17.8%
	Over 22 years old	2	6.7%	6	20.0%	14	46.7%	8	26.7%
Country	Australia	0	0.0%	13	44.8%	5	17.2%	11	37.9%
	Cambodia	3	10.0%	12	40.0%	9	30.0%	6	20.0%
	China	11	22.9%	15	31.2%	5	10.4%	17	35.4%
	Laos	7	20.6%	19	55.9%	3	8.8%	5	14.7%
	Russia	4	12.5%	18	56.2%	4	12.5%	6	18.8%
	South Korea	4	14.8%	14	51.9%	2	7.4%	7	25.9%

SPSS 20 and AMOS 20 software were used to analyze the scale's reliability, exploratory factor analysis, confirmatory factor analysis, and SEM analysis to examine research hypotheses.

Research Results

Reliability analysis

Cronbach's Alpha test is used to measure the reliability of the scale. Table 3 shows that 29 items' Cronbach's Alpha coefficients are more than 0.7, thus qualifying for the analysis of the following steps (Hanafiah, 2020). Composite Reliability is reasonable for a defined structure with 5-8 items to meet the minimum threshold of 0.80 (Feher et al., 2020). Table 3 shows the Composite Reliability of the benefit

coefficient = 0.881; benefit = 0.818 and strategy = 0.863 are valid. But the Composite Reliability of skill factor = 0.781, compassion = 0.786, and GPA = 0.707 (approximately 0.80) are acceptable (Hanafiah, 2020). The Average Variance Extracted threshold of items is more significant than 0.50 (Feher et al., 2020). Table 3 shows that the Average Variance Extracted from items enjoyed = 0.482, skills = 0.408, benefits = 0.428, strategy = 0.475, and GPA = 0.445 (close to 0.5) are still acceptable for analysis of the following steps (Hanafiah, 2020).

Table 3 Reliability analyses

factors	Cronbach's alpha	Average Variance Extracted	Composite Reliability
ENJOYED	0.881	0.482	0.881
SKILLS	0.779	0.408	0.781
BENEFITS	0.817	0.428	0.818
STRATEGY	0.863	0.475	0.863
GPA	0.706	0.445	0.707

Exploratory factor analysis

The exploratory factor analysis (EFA) condition is Factor loading > 0.5. The KMO coefficient (Kaiser-Meyer-Olkin) is an index used to consider the suitability of factor analysis. It must satisfy $0.5 \leq \text{KMO} \leq 1$ (Feher et al., 2020). Table 4 shows that the Bartlett test has statistical significance (Sig.=0.00), coefficient KMO=0.914 (>0.5). Furthermore, Bartlett's test with Sig. = 0.000 (< 0.05), observed variables are correlated with each other in the population. Thus, the variables are valid for factor analysis (Feher et al., 2020). Factor loading is the criterion to ensure the practical significance of factor analysis: factor loading > 0.3 is considered to be the minimum; Factor loading > 0.4 is considered necessary; factor loading > 0.5 is deemed to be of practical significance. Table 4 shows the factor loading of all items > 0.5, meaning the factor analysis is valid (Hanafiah, 2020). Table 4 shows that the Extraction Sums of Squared Loadings of 5 factors = 56% (>50%) are valid (Feher et al., 2020). In addition, Initial eigenvalues of 5 factors = 1.137 (>1.00) are valid (Hanafiah, 2020).

Table 4 Rotated Component Matrix

	Component				
	1	2	3	4	5
ENJOYED4	.746				
ENJOYED7	.714				
ENJOYED3	.697				
ENJOYED2	.673				
ENJOYED6	.673				
ENJOYED5	.661				
ENJOYED1	.655				
ENJOYED8	.653				
STRATEGY7		.721			
STRATEGY3		.711			
STRATEGY4		.687			
STRATEGY1		.683			
STRATEGY2		.674			
STRATEGY6		.650			
STRATEGY5		.643			
BENEFITS5			.734		
BENEFITS6			.732		
BENEFITS3			.670		
BENEFITS1			.625		
BENEFITS4			.614		
BENEFITS2			.612		
SKILLS3				.758	
SKILLS2				.724	
SKILLS4				.657	
SKILLS5				.655	
SKILLS1				.535	
Test2					.711
Test3					.680
Test1					.620

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

- a. Rotation converged in 6 iterations: Initial Eigenvalues = 1.137, Extraction Sums of Squared Loadings = 0.5600
- b. KMO = 0.914; Bartlett test: Approx. Chi-Square =2360, df=406, Sig.=0.000

Structural Equation Modeling

SEM extends the general linear model (GLM), allowing researchers to test multiple regression equations simultaneously. The SEM model combines all techniques, such as multivariate regression, factor analysis, and correlation analysis between factors, to investigate the model's complex relationship (Sarstedt, Ringle, & Hair, 2022). SEM simultaneously estimates the elements of the overall model, the causal relationship between latent constructs via indicators that combine both measurement and the structure of the theoretical model, and measures recursive and non-recursive relationships, direct and indirect effects, measurement error, and residual correlation (Feher et al., 2020; Sarstedt et al., 2022). The SEM model provides the flexibility to identify the most appropriate model among the proposed models.

Assess the fit of the SEM model need procedures Chi-Square (χ^2) testing, Root-Mean-Square Error of Approximation (RMSEA) with standardized-root-mean square residual (SRMR), Tucker-Lewis Index (TLI), and Comparative Fit Index (CFI) were reported. It is suggested that a good-fitting model should have values of CFI and TLI ≥ 0.90 , RMSEA, and SRMR ≤ 0.08 (Moshagen & Auerswald, 2018).

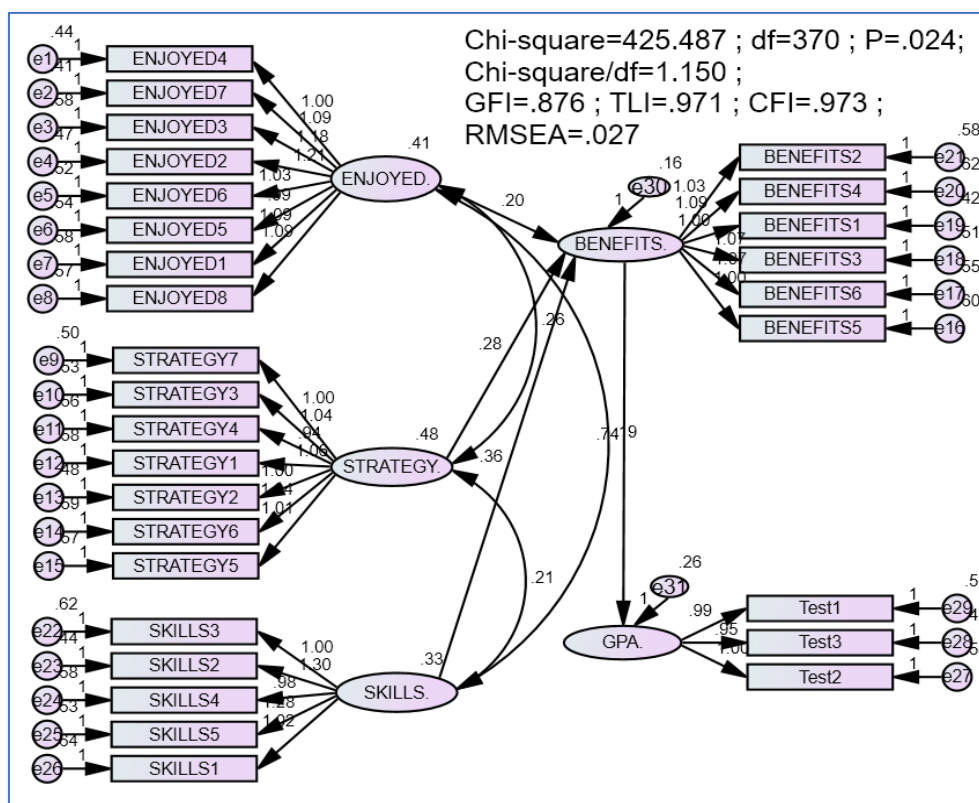


Figure 2 SEM analysis results

The analysis results (Figure 2) show that the model test coefficients satisfy the standard requirements of the SEM: Chi-square = 234.988; Df = 219; P-value = 0.218 (P-value > 0.05); Chi-square/df = 1.073; GIF = 0.908 (GIF>0.9); TLF = 0.988; RMSEA = 0.019 (Moshagen & Auerswald, 2018).

Table 5 Regression Weights

			Estimate	SE.	CR.	P.value	Outcome
BENEFITS	<---	ENJOYED	.203	.088	2.307	.021	Accepted
BENEFITS	<---	STRATEGY	.276	.085	3.239	.001	Accepted
BENEFITS	<---	SKILLS	.355	.106	3.341	***	Accepted
GPA	<---	BENEFITS	.737	.132	5.564	***	Accepted

The results of SEM analysis (Table 5) show that all hypotheses are accepted at a 95% significance level.

Discussion

Initially, Table 5 reveals that the enjoyed variable has a positive and statistically significant influence on the benefits variable, as indicated by the regression coefficient (= 0.203) and a 95% significance level (p.value = 0.025). With this result, hypothesis H1 is supported; the relished learning factor influences learning benefits positively and significantly. Thus, similar to the findings of previous research, cognitive language aids idiom learners to feel appealing, enjoyable, and addicted (Fang, 2015; Farjami, 2012).

Secondly, the results of this study (Table 5) indicate that the strategy variable has a positive and statistically significant influence on the benefits variable, with a regression coefficient of = 0.276 and a significance level of 95% (p = 0.001). Consequently, hypothesis H2 is supported; the general reasoning skills factor positively and significantly affects learning benefits. It confirms and supports previous research findings that cognitive language aids learners in analyzing literal or figurative idiom components (Honeck & Hoffman, 2018). In addition, the results of this study continue to demonstrate that cognitive language helps learners solve problems by deducing idiom meanings from etymological data and facilitating the processing of idioms within the context of the target language culture (Boers et al., 2007). It also demonstrates that cognitive language enables students to combine

individual words into a comprehensive thought. In addition, learners can rapidly learn the grammar structure with the help of logical reasoning and the flexibility to arrange many distinct and confusing parts of the grammatical structure system (Fang, 2015; Tabata-Sandom et al., 2020).

Thirdly, the results of this study (Table 5) demonstrate that the skills variable has a positive and statistically significant influence on the benefits variable, as indicated by a regression coefficient of 0.355 and a significance level of 0.000 at 95%. With this result, hypothesis H3 is confirmed, i.e., the learning strategy factor significantly and positively affects learning benefits. In addition, this study's results confirm and support previous research's findings indicating that the benefits of cognitive language teaching develop through communication and learning strategies (Hijazo-Gascón, 2018). Learners develop strategies to acquire idioms that enable them to accurately predict language and a strong desire to communicate with or learn from a community. When students have effective learning strategies, they are well-prepared, continually searching for patterns in the language and actively regulating their own and others' speech. Consequently, second language acquisition will significantly benefit learners (Boers & Lindstromberg, 2006, 2008; Pérez Serrano, 2015; Tabata-Sandom et al., 2020). This study's findings indicate that cognitive language can aid foreign language learners in acquiring metaphors and idioms and attaining effective long-term memorization (Liu, 2017).

Lastly, the results of this study (Table 5) indicate that the variable 'benefits' has a positive and statistically significant influence on the variable 'GPA' with a regression coefficient of = 0.737 and a significance level of 95% (p-value = 0.000). Consequently, hypothesis H4 is supported; the learning benefits factor positively and significantly impacts the grade point average. This result demonstrates that cognitive language acquisition assists language practice (Tabata-Sandom et al., 2020). Cognitive languages provide students with novel coping skills (Tabata-Sandom et al., 2020). In addition, the results of this study indicate that the cognitive linguistics approach to idioms, right from the start of its application in foreign language instruction, is believed to create favorable conditions for learning expressions, thereby facilitating the acquisition and long-term retention of idioms (Takimoto, 2020).

Conclusion

Culture and language are two interdependent categories. When language learners interact with another language, they also interact with its culture. Students cannot comprehend a culture without direct exposure to its language. Assume that learners are conversant with the target language relativity principle. In this case, it is stated that their worldview is directly affected by the language they use to discuss it. Cognitive language is a subset of metacognitive strategies that aid language learners in understanding and remembering text structure and semantics in various cultural contexts. Two linguistic and cognitive factors mediate the effect of latent causality on text comprehension and semantics.

Research Implications

There have been numerous studies on applying cognitive analysis to instruct English idioms, but the evidence for other languages is scant ([Ahmadi et al., 2020](#)). Therefore, teachers of idioms in the Vietnamese language must consider that the presence of idioms in memory is not conducive to achieving high performance in acquiring foreign languages. Before employing the cognitive linguistic approach, language learners must be aware of the prevalence of phrases in the language and their components. In addition, learners should be taught explicitly and unambiguously about the function and implications of cognitive-language strategy ([Takimoto, 2020](#)).

Limitations

As with other empirical studies, this study has limitations that must be considered when discussing the results. This survey method reflects the respondents' subjective perceptions of the investigated questions. Consequently, the data has inherent limitations that are difficult to eliminate in surveys ([Lin, Updegraff, & Pakpour, 2016](#); [Thanh et al., 2022](#)). This study's data were collected over two years. Due to the effects of the Covid 19 Pandemic during this period, there are restrictions on the accumulation, analysis, and evaluation of results

(Thanh et al., 2021; Xin et al., 2019). Therefore, future research should incorporate cross-sectional and longitudinal approaches for a deeper understanding. The purposeful sampling method has limitations and does not accurately represent population characteristics (Chien & Thanh, 2022; Strong, 2018). This survey was conducted within the cultural context of Vietnam, necessitating broader generalizations than are possible when employing the development research model and research conclusions to other nations (Chen et al., 2018). Benjamin, Newton, and Ebbels (2020) found that as participants aged, their idiom familiarity margins, transparency, and usage performance progressively improved (Benjamin et al., 2020).

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Conflict of interest

The author declares no conflict of interest.

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Appendix

THE QUESTIONNAIRE

ENJOYED	ENJOYED LEARNING	1	2	3	4	5
<i>ENJOYED1</i>	Cognitive methods help me solve second language problems easily.	1	2	3	4	5
<i>ENJOYED2</i>	Cognitive methods help me to see and understand the language better.	1	2	3	4	5
<i>ENJOYED3</i>	Cognitive methods help me see second language learning as a journey of discovery.	1	2	3	4	5
<i>ENJOYED4</i>	The cognitive approach makes me feel like learning a second language is like a never-ending road because there's always something new.	1	2	3	4	5
<i>ENJOYED5</i>	Cognitive methods make me feel like learning a second language is fluid and easy to understand; it's like construction and problem-solving.	1	2	3	4	5
<i>ENJOYED6</i>	Cognitive methods make it easier for me to deal with the complex and frustrating aspects of language learning.	1	2	3	4	5
<i>ENJOYED7</i>	The cognitive method motivates me to work harder and persevere in learning a second language.	1	2	3	4	5
<i>ENJOYED8</i>	Cognitive methods make me feel like learning a second language is a source of entertainment.	1	2	3	4	5

SKILLS	GENERAL THINKING SKILLS					
<i>SKILLS1</i>	Cognitive methods help me build a content system out of components and their uses and put them together to form a complete linguistic idea.	1	2	3	4	5
<i>SKILLS2</i>	Cognitive methods make it easy for me to slowly come to grips with the grammatical structure of a second language.	1	2	3	4	5
<i>SKILLS3</i>	Cognitive methods make me easy and flexible to arrange many separate, messy parts in the grammatical structure.	1	2	3	4	5
<i>SKILLS4</i>	The cognitive method helps me quickly and flexibly locate words and recognize the complex structures of a second language.	1	2	3	4	5
<i>SKILLS5</i>	The cognitive approach makes me feel like learning a second language is like watching a good TV series that needs to be synthesized and explored.	1	2	3	4	5
BENEFITS	LEARNING BENEFITS					
<i>BENEFITS1</i>	The cognitive method makes it easy for me to revive grammar.	1	2	3	4	5
<i>BENEFITS2</i>	Cognitive methods make it easier for me to guide the rules of language.	1	2	3	4	5
<i>BENEFITS3</i>	Cognitive methods help me quickly eliminate the formation of language habits through behavior.	1	2	3	4	5
<i>BENEFITS4</i>	The cognitive method helps me to develop error analysis skills.	1	2	3	4	5
<i>BENEFITS5</i>	Cognitive methods make it easy for me to apply contextual grammar.	1	2	3	4	5
<i>BENEFITS6</i>	Cognitive methods help me understand a grammar rule well before I practice it in meaningful contexts.	1	2	3	4	5

STRATEGY LEARNING STRATEGY						
<i>STRATEGY1</i>	I feel that I have the ability to predict language accurately.	1	2	3	4	5
<i>STRATEGY2</i>	I find myself strongly motivated to socialize or learn from a community.	1	2	3	4	5
<i>STRATEGY3</i>	I am not inhibited when communicating or learning from a community.	1	2	3	4	5
<i>STRATEGY4</i>	I am a well-prepared person, constantly looking for patterns in the language.	1	2	3	4	5
<i>STRATEGY5</i>	I am a person who focuses on language practice.	1	2	3	4	5
<i>STRATEGY6</i>	I am a person who can monitor my own words and those of others.	1	2	3	4	5
<i>STRATEGY7</i>	I am a person who often pays attention to the meaning of communication.	1	2	3	4	5

Note: 1=Strongly disagree, 2= Disagree, 3=Neither agree nor disagree, 4= Agree, 5= Strongly agree