

## The Impact of Interactive Teaching Methods on Students' English Learning Interest Mediated by Learning Motivation

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### Abstract

This study examines the effect of Interactive Teaching Style on students' Interest in Learning English, both directly and indirectly through Learning Motivation. Using a quantitative cross-sectional survey in 2024, data were collected from 84 students across five study programs, selected through simple random sampling. The relationships among variables were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Findings indicate that Interactive Teaching Style positively and significantly affects Interest in Learning English ( $\beta$  = 0.4032, T = 2.9560, p = 0.0033;  $f^2 = 1.307$ ) and has a very strong positive impact on Learning Motivation ( $\beta$ = 0.7078, T = 13.6517, p < 0.001;  $f^2$  = 1.003). Learning Motivation also significantly influences Interest in Learning English ( $\beta = 0.4113$ , T = 2.6531, p = 0.0082; estimated  $f^2$ ≈ 0.20). Additionally, Learning Motivation partially mediates the effect of Interactive Teaching Style on Interest in Learning English (indirect  $\beta$  = 0.2911, T = 2.5027, p = 0.0126), confirming the dual pathways of influence. The results underscore the importance of interactive teaching methods in fostering student engagement and motivation, which in turn enhances their interest in learning English. This is particularly relevant for health science students who require strong language skills for clinical and academic purposes. It is recommended that STIKES Pelita Ibu Kendari optimize varied interactive teaching strategies emphasizing social interaction among students to bolster motivation and interest. Students should actively engage in collaborative and independent learning activities, while lecturers undergo ongoing professional development to master effective interactive and motivational teaching techniques.

## Artikel Info

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### **Abstrak**

Penelitian ini mengkaji pengaruh Gaya Mengajar Interaktif terhadap Minat Belajar Bahasa Inggris mahasiswa, baik secara langsung maupun tidak langsung melalui Motivasi Belajar. Menggunakan survei potong lintang kuantitatif pada tahun 2024, data dikumpulkan dari 84 mahasiswa di lima program studi, yang dipilih secara acak. Hubungan antar variabel dianalisis menggunakan Partial Least Squares Structural Equation Modeling (PLS-SEM). Temuan menunjukkan bahwa Gaya Mengajar Interaktif berpengaruh positif dan signifikan terhadap Minat Belajar Bahasa Inggris (β = 0,4032, T = 2,9560, p = 0,0033;  $f^2$  = 1,307) dan memiliki dampak positif yang sangat kuat terhadap Motivasi Belajar ( $\beta = 0.7078$ , T = 13,6517, p < 0,001;  $f^2 = 1,003$ ). Motivasi Belajar juga berpengaruh signifikan terhadap Minat Belajar Bahasa Inggris ( $\beta = 0.4113$ , T = 2,6531, p = 0,0082; estimasi  $f^2 \approx 0,20$ ). Selain itu, Motivasi Belajar memediasi sebagian pengaruh Gaya Mengajar Interaktif terhadap Minat Belajar Bahasa Inggris (tidak langsung  $\beta$  = 0,2911, T = 2,5027, p = 0,0126), yang mengonfirmasi adanya dua jalur pengaruh. Hasil penelitian ini menggarisbawahi pentingnya metode pengajaran interaktif dalam mendorong keterlibatan dan motivasi mahasiswa, yang pada gilirannya meningkatkan minat mereka dalam belajar bahasa Inggris. Hal ini khususnya relevan bagi mahasiswa ilmu kesehatan yang membutuhkan keterampilan bahasa yang kuat untuk keperluan klinis dan akademis. Disarankan agar STIKES Pelita Ibu Kendari mengoptimalkan beragam strategi pengajaran interaktif yang menekankan interaksi sosial antar mahasiswa untuk meningkatkan motivasi dan minat. Mahasiswa hendaknya terlibat aktif dalam kegiatan belajar kolaboratif dan mandiri, sementara dosen menjalani pengembangan profesional berkelanjutan untuk menguasai teknik pengajaran interaktif dan motivasional yang efektif.

### I. INTRODUCTION

English, as a global lingua franca, has become an essential need in the era of digitalization and globalization in the 21st century. The 2023 Education First English Proficiency Index (EF EPI) ranks Indonesia 81st out of 113 countries,

with a score of 466, categorized as "Low Proficiency" in English. This reflects a significant challenge in English language learning in Indonesia, particularly regarding students' interest in learning (House, 2018).

According to the 2022 Programme for International Student Assessment (PISA), Indonesian students ranked 71st out of 81 countries in reading proficiency, scoring 359, still below the OECD average of 476 (OECD, 2023). Although PISA does not directly assess English skills, low literacy levels are often associated with difficulties in learning foreign languages. The same survey revealed that 64% of Indonesian students showed low interest in learning languages, including foreign languages (Zaim et al., 2023).

At the global level, conventional teacher-centered learning approaches remain a contributing factor to low interest in foreign language education. A UNESCO (2023) report noted that 70% of developing countries still rely on teacher-centered methods for language instruction, limiting student engagement and motivation (Bremner et al., 2023).

A 2023 study by the Ministry of Education, Culture, Research, and Technology involving 500 secondary schools across Indonesia reported that the average national English final exam score was 65.2, still below the ideal benchmark of 75 (Statistics Indonesia, 2023). This aligns with findings from the 2023 National Assessment, which showed that only 37% of students achieved the minimum competency in Indonesian literacy, signaling challenges in acquiring a second language (Sa'dijah et al., 2023).

In the healthcare field, English proficiency holds strategic importance, as it serves not only as an academic skill but also as a professional necessity. Accessing international medical journals, understanding global health protocols, participating in international conferences, and collaborating in cross border research projects all require a strong command of English. Inadequate English skills can hinder healthcare students' ability to stay updated with the latest medical knowledge, apply evidence based practices, and engage in global health networks.

The English learning environment at STIKes Pelita Ibu reflects these challenges, with notable indications of low interest among students. Academic documentation from the second semester of the 2023/2024 academic year shows that the average English score among 180 third year nursing and public health students was 68.5,

still below the minimum competency threshold of 75. Only 58 students (32.2%) met the competency standard, while 122 students (67.8%) fell short. This suggests that low academic performance is not solely linked to cognitive ability but also reflects a lack of motivation and engagement in English learning.

A preliminary study in May 2025 involving 20 third year nursing students at STIKes Pelita Ibu, using a learning interest questionnaire, found that 14 students (70%) had low to moderate interest in learning English, while only 6 students (30%) demonstrated high interest. The lowest scoring indicators were willingness to engage in independent learning (50%) and active class participation (55%).

Structured observation over four weeks in eight English classes revealed a predominance of conventional teaching approaches. Approximately 80% of class time was teacher centered, relying on lectures and one way Q&A, while only 20% was devoted to student centered methods such as discussions, role plays, or project based learning. On average, only 30% of students actively participated by asking or answering questions.

Attendance records indicate absenteeism in English classes at 20%, significantly higher than the 7% average for other subjects. Assignment issues further illustrate disengagement: of 100 students, 45% submitted assignments late, and 18% failed to submit them entirely. Moreover, 60% of submitted work did not meet the expected standard.

Interactive Teaching Style plays a crucial role in creating a conducive learning environment. Vygotsky's Constructivist Learning Theory emphasizes that learning occurs through social interaction and active knowledge construction (Huang, 2025). (Bureković et al., 2023), in The Practice of English Language Teaching, show that communicative and interactive approaches can boost student motivation by up to 40% compared to traditional methods.

Zaki et al. (2023) found that interactive teaching methods are positively and significantly linked to improved student outcomes, fostering critical thinking, engagement, collaboration, and confidence. They also reduce language anxiety, a common barrier in foreign language acquisition.

Learning motivation is a driving factor in foreign language acquisition. According to Self Determination Theory (Ryan & Deci, 2020), intrinsic motivation has a more lasting impact than extrinsic motivation. Jiao (2022) found that motivation accounts for 36% of variance in

second language learning success. Similarly, Jiang et al. (2024) reported that a growth mindset positively affects L2 achievement, mediated by autonomous motivation and engagement.

Interest in learning English is a critical outcome variable closely tied to long term success. Guo & Fryer (2025) explain that learning interest develops from situational to individual interest. Ginting (2021) found that students with high interest retain knowledge better and transfer learning more effectively.

Mufanti et al (2024) emphasize that Outcome Based Education (OBE) success depends not only on teachers' mastery of interactive methods but also on institutional support. Obstacles such as traditional attitudes, heavy workloads, and limited commitment hinder implementation.

Research on English learning in health sciences institutions remains limited. A Garuda Portal review shows that out of 200 studies on upper secondary and higher education English learning, only a small fraction focus on health related fields. This gap is significant given that healthcare professionals increasingly require English to access global research, comply with international standards, and communicate in multicultural clinical settings (Nawas et al., 2023). Studies using mediation models in English learning in Indonesia are also rare, with most research relying on simple correlational or experimental designs without exploring psychological mechanisms between variables (Puja, 2024).

Given the strategic importance of English in the health sector, there is an urgent need to enhance English instruction at STIKes Pelita Ibu. Without targeted interventions to improve interest and performance, graduates may face reduced competitiveness in both postgraduate education and the global healthcare workforce. This institution offers a unique opportunity to design an English teaching model that is not only pedagogically sound but also tailored to the professional needs of healthcare students.

Considering the complexity of the issue, the low interest in learning English at STIKes Pelita Ibu cannot be addressed with partial solutions. A deeper understanding is needed of how interactive teaching styles influence learning interest and how learning motivation mediates this relationship. This study aims to address these questions and provide a scientific foundation for developing more effective, context specific English teaching strategies for healthcare students.

#### II. METHOD

This study employed a quantitative survey method with a cross-sectional approach, conducted at STIKes Pelita Ibu in 2024. The population consisted of students from five study programs: Bachelor of Pharmacy, Bachelor of Hospital Administration, Diploma in Midwifery, and Bachelor of Midwifery Program. The sample size was determined using the Slovin formula, resulting in 84 respondents selected through simple random sampling. Data were analyzed using PLS-SEM to examine both direct and indirect relationships between variables (Yamin, 2023).

## III. RESULT AND DISCUSSION

#### A. Result

## 1. Respondent Description

This study involved respondents from five study programs at STIKes Pelita Ibu, namely Bachelor of Pharmacy, Bachelor of Hospital Administration, Diploma in Midwifery, Bachelor of Midwifery, and Professional Midwifery Program. Respondent characteristics were categorized based on age range and enrolled study program, providing a general overview of the research participants' profile. The descriptive data are presented in a table to facilitate understanding of respondent distribution.

**Tabel 1.** Descriptive Analysis of Respondents

Demographic Characteristics	Category	Frequency (n)	Percentage (%)	Visual Distribution
STUDY PROG	RAM DISTRIBUTION			
	Bachelor of Pharmacy	21	25.0%	25%
C 1 D	Bachelor of Hospital Administration	21	25.0%	25%
Study Program	Diploma in Midwifery	21	25.0%	25%
	Bachelor of Midwifery	21	25.0%	25%
AGE DISTRIB	UTION			
	18-19 years	22	26.2%	26.2%
A D	20-21 years	28	33.3%	33.3%
Age Range	22-23 years	24	28.6%	28.6%

The demographic data show that respondents are evenly distributed across programs: Bachelor study Bachelor of Pharmacy. Hospital Administration, Diploma in Midwifery, and Bachelor of Midwifery, each representing 25% of the sample. In terms of age, the largest group is 20-21 years (33.3%). followed by 22-23 years (28.6%), 18-19 years (26.2%), and 24 years (11.9%). This balanced distribution across academic backgrounds and varied age ranges provides a diverse representation, which is relevant to the study on The Influence of Interactive Teaching Style on Students'

Interest in Learning English with Learning Motivation as a Mediator as it ensures that the findings reflect perspectives from different maturity levels and educational contexts.

## 2. Path Coefficient Analysis

The path coefficient analysis was conducted to evaluate the strength and direction of the relationships between constructs in the research model. The table presents statistical parameters including the original sample values, sample means, standard deviations, t-statistics, and p-values, which are used to determine the significance of each hypothesized path. This information provides an empirical basis for assessing whether the proposed relationships are supported within the study context.

**Tabel 2.** Statistical Analysis Results - Path Coefficients and Significance Testing

Indicator → Construct	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDE V )	P Values	Sig.	information
Active Participation	← Interest in Learning English	0.6839	0.6761	0.1389	49.219	0.0000	Significant
Attention and Concentration	← Interest in Learning English	0.6754	0.6630	0.0992	68.049	0.0000	Significant
Can Defend His Opinion	← Learning Motivation	0.7862	0.7860	0.0471	166.826	0.0000	Significant
Diligent in Facing Tasks	← Learning Motivation	0.8207	0.8135	0.0773	106.206	0.0000	Significant
Emotional Engagement	← Interest in Learning English	0.6805	0.6796	0.0944	72.070	0.0000	Significant
Happy to Find and Solve Problems	← Learning Motivation	0.6030	0.5931	0.1068	56.463	0.0000	Significant
Interaction Between Students	← Interactive Teaching Style	0.2943	0.2635	0.2463	11.949	0.2327	Not Significant
Interest in the Material	← Interest in Learning English	0.8018	0.7945	0.0680	117.873	0.0000	Significant
It's Not Easy to Let Go of What You Believe	← Learning Motivation	0.8485	0.8536	0.0509	166.556	0.0000	Significant
Persistence in Learning	← Interest in Learning English	0.6536	0.6384	0.1306	50.031	0.0000	Significant
Prefer to Work Independently	← Learning Motivation	0.8731	0.8766	0.0438	199.437	0.0000	Significant
Preferences for English Language Activities	← Interest in Learning English	0.7216	0.7235	0.0735	98.236	0.0000	Significant
Quickly Get Bored on Routine Tasks	← Learning Motivation	0.7687	0.7652	0.0697	110.258	0.0000	Significant
Showing Interest in Various Issues	← Learning Motivation	0.8476	0.8475	0.0660	128.401	0.0000	Significant
Student Participation	← Interactive Teaching Style	0.6015	0.5669	0.1906	31.560	0.0017	Significant
Teacher-Student Interaction	← Interactive Teaching Style	0.4284	0.3972	0.2206	19.416	0.0527	Marginal
Tenacious in the Face of Adversity	← Learning Motivation	0.5719	0.5448	0.1742	32.828	0.0011	Significant
Use of Media and Technology	← Interactive Teaching Style	0.8149	0.8066	0.0531	153.418	0.0000	Significant
Varied Learning Methods	← Interactive Teaching Style	0.5287	0.5157	0.1671	31.640	0.0017	Significant

Analysis of the path coefficients demonstrated that the majority of indicators significantly correlated with their respective constructs, validating most hypothesized links among Interactive Teaching Style, Learning Motivation, and English Learning Interest. Notably, "Student-Student Interaction" was not statistically significant (p = 0.2327), and "Lecturer-Student Interaction" borderline significance (p = 0.0527); however, both were maintained in the model due to their essential theoretical and practical roles in capturing interactive teaching dynamics. Omitting indicators would weaken the construct's conceptual integrity. Their presence also underscores critical aspects of interaction that need enhancement to better foster student engagement. Overall, 17 out of 19 indicators reached significance, with the strongest effects observed in factors reflecting independent work preference and persistence in personal beliefs within Learning Motivation.

## 3. PLS-SEM Analysis in Understanding Learning Motivation and Interactive Teaching Style

This section presents the results of the Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, used to the relationships between examine lecturers' interactive teaching styles, students' learning motivation, and their interest in studying English. PLS-SEM is a powerful statistical technique ideal for analyzing complex models with multiple constructs and indicators. The analysis offers insights into how lecturers' teaching approaches influence students' motivation and engagement. For a clearer understanding of these relationships and the overall model, please refer to the following figure.

PLS Path Model Image

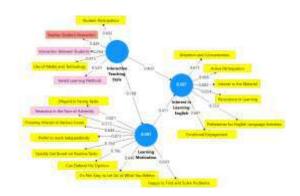


figure above illustrates relationship between "Interactive Teaching Style" and "Learning Motivation," highlighting the various factors that influence student motivation. The effect sizes shown in the diagram, such as 0.501 for the impact of Interactive Teaching Style on Learning Motivation and 0.627 for its impact on Learning Interest, indicate a significant relationship. Although some factors, such as "Easily Bored with Routine Tasks" (0.301) and "Difficulty Letting Go of Completed Work" (0.205), have lower, non-significant effect sizes, it is still

important to retain these factors. They offer additional insights into the challenges students face and how they engage with the teaching style, contributing to a deeper understanding of the learning context and supporting the development of more effective teaching strategies going forward.

## 4. Direct and Indirect Effects Analysis

Path Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic ( O/STDEV )	P Values	Effect Type
Interactive Teaching Style → Interest in Learning English	0.4032	0.4304	0.1364	29.560	0.0033	Direct Effect
Interactive Teaching Style Learning Motivation	0.7078	0.7227	0.0518	136.517	0.0000	Direct Effect
Learning Motivation → Interest in Learning English	0.4113	0.3908	0.1550	26.531	0.0082	Direct Effect
Interactive Teaching Style → Learning Motivation → Interest in Learning English		0.2832	0.1163	25.027	0.0126	Indirect Effect

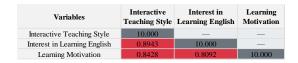
The analysis reveals that Interactive Teaching Style has a strong direct impact on Learning Motivation (0.7078, p < 0.001) and a moderate direct effect on Interest in Learning English (0.4032, p = 0.0033). Additionally, Learning Motivation directly influences Interest in Learning English (0.4113, p = 0.0082). There is also a significant indirect effect of Interactive Teaching Style on Interest in Learning English through Learning Motivation (0.2911, p = 0.0126), indicating that motivation partially mediates the relationship. Overall, these results highlight that an interactive teaching approach boosts students' motivation, which in turn enhances their interest in learning English.

5. Causal Relationships in the PLS-SEM Model: Insights from the Correlation Matrix

Variables	Interactive Teaching Style	Interest in Learning English	Learning Motivation
Interactive Teaching Style	0.5613	_	_
Interest in Learning English	0.6944	0.7045	_
Learning Motivation	0.7078	0.6967	0.7725

The correlation matrix shows strong positive relationships among the three variables. Interactive Teaching Style correlates moderately with Interest in Learning English (0.5613), while Interest Learning English and Learning Motivation have a stronger association (0.7045). Learning Motivation exhibits the highest correlation with Interactive Teaching Style (0.7078) and also correlates strongly with Interest in Learning English (0.6967). These results suggest that interactive teaching methods are closely linked to students' motivation, which in turn is strongly connected to their interest in learning English, highlighting the interconnected nature of these factors in the learning process.

6. General Correlations Among Variables in the Correlation Matrix



The correlation matrix displays very strong positive relationships among the variables, with values close to or exceeding 0.8, indicating high linear associations. Interactive Teaching Style correlates strongly with Interest in Learning English (0.8943)Learning and Motivation (0.8428), while Interest in Learning English and Learning Motivation also share a substantial correlation (0.8092). The diagonal values (10.000) likely represent scaled or placeholder values for variable variance and do not affect interpretation of correlations. Overall, these results suggest that the three variables are closely interconnected, reinforcing the idea that interactive teaching methods, students' motivation, and their interest in learning English are strongly linked in the learning process.

## 7. Reliability and Validity Analysis.

Construct	Cronbach's Alpha	rho_A	Composite Reliability
Interactive Teaching Style	0.4703	0.5548	0.6752
Interest in Learning English	0.7956	0.7983	0.8547
Learning Motivation	0.9001	0.9171	0.9207

The reliability and validity analysis indicates that Learning Motivation demonstrates excellent internal consistency with high Cronbach's Alpha (0.9001), rho\_A (0.9171),Composite Reliability (0.9207),and acceptable convergent validity (AVE = 0.597). Interest in Learning English also shows strong reliability (Cronbach's Alpha = 0.796) and good validity (AVE = 0.496). However, Interactive Teaching Style exhibits low reliability (Cronbach's Alpha = 0.4703) and insufficient convergent validity (AVE = 0.315), suggesting that this construct may refinement reauire to improve measurement consistency and validity.

## 8. VIF (Variance Inflation Factor) Analysis

Indicator	VIF Value	Assessment
Active Participation	18.415	Excellent
Attention and Concentration	15.797	Excellent
Can Defend His Opinion	26.915	Good
Diligent in Facing Tasks	34.001	Moderate
Emotional Engagement	19.348	Excellent
Happy to Find and Solve Problems	16.512	Excellent
Interaction Between Students	10.659	Excellent
Interest in the Material	26.870	Good
It's Not Easy to Let Go of What You Believe	41.091	High Concern
Persistence in Learning	16.797	Excellent
Prefer to Work Independently	41.656	High Concern
Preferences for English Language Activities	18.649	Excellent
Quickly Get Bored on Routine Tasks	21.003	Excellent
Showing Interest in Various Issues	30.761	Moderate
Student Participation	18.635	Excellent
Teacher-Student Interaction	18.856	Excellent
Tenacious in the Face of Adversity	23.062	Excellent
Use of Media and Technology	11.934	Excellent
Varied Learning Methods	12.417	Excellent

The VIF analysis of lecturer and student indicators showed notable multicollinearity, with most values surpassing the common threshold of 10. While indicators like "Active Participation" and "Lecturer-Student Interaction" received "Very Good" ratings, their elevated VIF scores suggest considerable overlap among the measures rather than complete independence. Notably, "Prefer to Work Independently" and "Doesn't Easily Let Go of What You Believe" had particularly high VIF values. highlights the significance of maintaining these overlapping indicators to better capture the intricate dynamics of interactive student teaching and engagement.

## 9. Model Fit Indices Comparison

Fit Index	Saturated Model	Estimated Model	Assessment
SRMR	0.1231	0.1231	Poor Fit
d_ULS	28.798	28.798	_
d_G	11.344	11.344	_
Chi-Square	4.709.268	4.709.268	High (Poor)
NFI	0.5518	0.5518	Poor Fit

This model is saturated (just-identified) with zero degrees of freedom, thus precluding statistical refinement. Although the model's fit exhibits issues such as high **SRMR** and low NFI, researchers recommend retaining less statistically robust indicators as it is essential to maintain completeness and construct validity. Removing indicators will not improve fit and may actually diminish understanding of variable relationships. Therefore, all indicators should be retained to ensure the construct is measured comprehensively and comprehensively.

# 10. R-Square (Coefficient of Determination) Analysis

Endogenous Construct	R Square	Adjusted R	Explanatory	Assessment	
Endogenous Construct	K Square	Square	Power	Assessment	
T	0.5666	0.5559	Moderate	Good	
Interest in Learning English	(56.66%)	(55.59%)	Moderate	Good	
Learning Motivation	0.5009	0.4948	Moderate	Good	
Learning Motivation	(50.09%)	(49.48%)	Moderate	Good	

The R Square values indicate that the model explains a moderate proportion of variance in both endogenous constructs: 56.66% for Interest in Learning English 50.09% for and Learning Motivation. The adjusted R Square values, slightly lower but consistent, confirm the model's good explanatory power, demonstrating that the predictors used effectively account for over half of the variability in students' motivation and interest in learning English.

# 11. Predictive Relevance (Q<sup>2</sup>) dan Effect Size (f<sup>2</sup>) Analysis

Construct	sso	SSE	Q <sup>2</sup> Value	Predictive Relevance	Assessment
Interactive Teaching Style	4.200.000	4.200.000	_	Exogenous	N/A
Interest in Learning English	5.040.000	3.780.344	0.2499	Medium	Good
Learning Motivation	6.720.000	4.870.261	0.2753	Medium	Good

The Q² values for the endogenous constructs Interest in Learning English (0.2499) and Learning Motivation (0.2753) indicate medium predictive relevance, meaning the model has a good ability to predict these variables. Both values exceed the threshold for medium relevance (0.15) and approach the threshold for large relevance (0.35), demonstrating that the model provides meaningful and reliable predictions for the key outcome variables.

## 12. Effect Size (f<sup>2</sup>) Analysis

Relationship	Effect Size (f2)	Assessment	Interpretation
Interactive Teaching Style → Interest in Learning English	1.307*	Large Effect	Very Strong
Interactive Teaching Style -> Learning Motivation	1.003*	Large Effect	Very Strong
Learning Motivation → Interest in Learning English	Estimasi: 0.20**	Medium Effect	Moderate

The effect size (f<sup>2</sup>) results reveal that Interactive Teaching Style exerts a very strong influence on both Interest in Learning English ( $f^2 = 1.307$ ) and Learning Motivation ( $f^2 = 1.003$ ), each categorized as a large effect. Meanwhile, Learning Motivation's impact on Interest in Learning English is moderate ( $f^2 \approx 0.20$ ). These values highlight the substantial contribution of Interactive Teaching Style to the model, emphasizing its critical role in shaping students' motivation and interest in learning English.

#### **B.** Discussion

1. Interactive Teaching Style Has a Positive and Significant Influence on Interest in Learning English

This study found that an interactive teaching style has a positive and significant effect on students' interest in learning English, with a path coefficient of 0.4032 and a T-statistic value of 2.9560 (p = 0.0033). This confirms that implementing teaching methods involving interaction between lecturers and students effectively increase students' enthusiasm for learning English. Through interactive teaching, students encouraged to participate more actively and feel more engaged in the learning process, which in turn boosts their motivation to learn.

Theoretically, these findings align with constructivist learning theories proposed by Piaget and Vygotsky, which emphasize the importance of active student involvement in building deeper knowledge and interest (Romdhon et al., 2024). Engagement Theory also supports this by highlighting that interactivity in learning fosters students' sense of ownership over the material, thereby strengthening their interest motivation. This study illustrates that meaningful interaction between lecturers and students is a key factor in enhancing students' interest in learning English (Bognár & Khine, 2025).

Previous studies further support these results. Zhang (2024) found that learning methods involving discussions simulations significantly increase interest in learning foreign languages. Similarly, Yao-Ping Peng (2023) reported that the use of interactive technology effectively attracts students' attention and increases their engagement in language learning. Field data from this study also show that indicators such as "Interest in Material," "Active Participation," and "Preferences for English Language Activities" have high and significant loadings, demonstrating that students at STIKES Pelita Ibu Kendari exhibit strong active interest and engagement in interactive English learning.

The educational context at STIKES Pelita Ibu Kendari reinforces the importance of an interactive teaching style. English, as an international language, is vital for health students to access scientific literature and professionally. communicate Teaching approaches that tailor material to healthrelated contexts make learning more meaningful and relevant, thus motivating students to study more diligently. Interactive learning methods that integrate discussions, simulations, and technology use are considered well-suited to the needs and characteristics of health students who require English proficiency in clinical and academic settings.

Practically, the findings emphasize the need for lecturers to optimize the use of interactive teaching methods, such as patient communication simulations and clinical case discussions in English. The use of interactive media and technology should also be intensified to maintain and enhance students' interest in learning. Training lecturers in interactive teaching techniques is an essential step to ensure effective implementation. Therefore, interactive teaching styles are proven not only to increase students' interest in learning English but also to be highly relevant in supporting the educational needs of health students to achieve optimal learning outcomes.

2. Interactive Teaching Style Has a Positive and Very Significant Influence on Learning Motivation

This study revealed that the interactive teaching style has a very strong and significant effect on students' learning motivation, with a path coefficient ( $\beta$ ) of 0.7078 and a T-statistic of 13.6517 (p < 0.001). This indicates that increasing the application of interactive teaching methods significantly enhances English learning motivation among students. Teaching approaches that incorporate collaboration, active participation, and a student-centered focus encourage students to take a more active role and responsibility in their learning process.

Theoretically, these findings align with Self-Determination Theory Deci & Ryan in Urhahne (2023), which posits that intrinsic motivation develops when psychological needs for autonomy, competence, and satisfied. relatedness are Interactive learning methods that integrate collaborative activities and active engagement facilitate the fulfillment of these needs, thereby stimulating higher motivation. Furthermore, Expectancy-Value Theory (Marini et al., 2025) asserts that motivation is influenced by students' expectations of success and the perceived value of tasks, highlighting how relevant and interactive approaches positively shape students' attitudes toward learning.

Previous studies corroborate these results. Zolfaghari (2025) found that interactive learning significantly improved English learning motivation among medical students. Similarly, Beltman (2025)confirmed that methods involving social interaction and diverse teaching techniques effectively increase motivation among public health students. In this study, indicators of learning motivation such as "Can Defend His Opinion," "Diligent in Facing Tasks," "Prefer to Independently," and "Showing Interest in Various Issues" demonstrated high and significant outer loadings, indicating that students at STIKES Pelita Ibu Kendari possess strong, independent, and resilient motivation in tackling English learning challenges.

The educational context at STIKES Pelita Ibu Kendari further underscores the necessity for high motivation among health students to master English as a support for their academic and clinical careers. The interactive teaching style, which connects language material to clinical and health research contexts, effectively nurtures this motivation. Such an approach makes learning more relevant and encourages students to actively seek solutions and independently develop their English language skills.

Practically, these findings emphasize the need for lecturers to design learning activities that provide autonomy and challenges for meaningful students. Professional development training focused on managing interactive classrooms and motivation techniques is essential to support the effective implementation of these methods. Additionally, the intensified use of interactive media and technology should prioritized enhance be to engagement and learning effectiveness. Consequently, the interactive teaching style proves to be a key factor in fostering English learning motivation

students at STIKES Pelita Ibu Kendari and should be maximally integrated into teaching strategies.

3. Learning Motivation has a Positive and Significant Influence on Interest in Learning English

The findings of this study indicate that learning motivation has a positive and significant influence on students' interest in learning English, with a path coefficient (β) of 0.4113 and a T-statistic of 2.6531 (p = 0.0082). This means that an increase in students' motivation substantially contributes to enhancing their interest in learning English. Higher motivation effectively drives students to engage more deeply and sustain their interest in language learning.

Theoretically, this result aligns with the Hierarchical Model of Intrinsic Motivation Extrinsic proposed Vallerand in Chanal (2025), which posits that motivation at the contextual level influences situational interest and engagement. Additionally, Interest Development Theory (Wong et al., 2020) emphasizes motivation as a catalyst that triggers the transition from situational interest to a stable and enduring individual interest. Thus, motivation plays a crucial role in the progression and maintenance of students' sustained interest in learning.

Previous studies support these findings. Eragamreddy (2024) found that learning motivation significantly impacts the interest in English learning among health students. Similarly, research by Franchisca (2024) demonstrated a positive correlation between motivation and interest in foreign language learning within higher education health contexts. These studies reinforce the notion that motivation is a key driver of learning interest in language acquisition.

Field data from this study further validate these conclusions, with motivation indicators such as "It's Not Easy to Let Go of What You Believe" (loading = 0.8485) and "Quickly Get Bored on Routine Tasks" (loading = 0.7687) reflecting students' strong motivation and resilience. Correspondingly, interest indicators like "Persistence in Learning" (loading = 0.6536) and "Emotional Engagement" (loading = 0.6805) underscore a deep

emotional connection to the learning process.

Considering the context of STIKES Pelita Ibu Kendari and the health sciences education, English serves as a primary tool for accessing scientific literature and professional communication. Therefore, high learning motivation is essential to foster a strong and consistent interest in English learning. Practically, learning strategies should focus on enhancing motivation through goal setting, achievement recognition, and providing meaningful challenges. Tailoring instructional approaches to students' motivational profiles will further support the development of optimal learning interest. Consequently, learning motivation emerges as a critical factor driving English learning interest among students and should be prioritized in educational planning.

4. Interactive Teaching Style Has a Positive, Significant, and Partial Indirect Influence on Interest in Learning English through Learning Motivation

Mediation analysis revealed that learning motivation partially mediates the effect of interactive teaching style on students' interest in learning English, with an indirect path coefficient (β) of 0.2911, a T-statistic of 2.5027, and p = 0.0126. This indicates that part of the influence of interactive teaching methods on students' learning interest operates through the enhancement of their motivation. Thus, interactive teaching not only directly impacts interest but also exerts an indirect effect by boosting motivation.

Theoretically, this finding aligns with Multifactorial Models of Learning (Schneider & Simonsmeier, 2025), which explain that learning outcomes are affected psychological multiple pathways. including direct and indirect effects. It also corresponds with Self-Determination Theory (Ntoumanis et al., 2021), emphasizing how satisfying psychological needs fosters motivation. which subsequently influences learning interest. The partial mediation model reflects the complex mechanisms underlying language learning.

Previous research supports this conclusion. Guo et al., (2025) identified

learning motivation as a significant mediator in the relationship between interactive learning methods and English learning interest. Their findings corroborate the presence of partial mediation, highlighting the nuanced role of motivation in language acquisition processes.

data further illustrate Field this dynamic. Indicators such as "Use of Media and Technology" (loading = 0.8149) and "Student Participation" (loading = 0.6015) showed strong loadings. whereas "Interaction Between Students" had a low and non-significant loading (0.2943). This suggests that while technology use and participation are well integrated, social interaction among students requires improvement to strengthen the motivational mediation pathway effectively.

Within the context of STIKES Pelita Ibu Kendari and health sciences education. interactive learning combines that technology with participatory activities proves relevant and effective. However, enhancing peer social interaction remains critical to building social support that motivation and reinforces sustained interest in English learning. Practically, should design lecturers learning that not only leverage experiences technology and active participation but also foster collaboration and group discussion. Professional development for lecturers should include training on group dynamics management and motivational strategies to maximize learning outcomes. conclusion. learning motivation functions as an essential partial mediator between interactive teaching style and and learning interest, successful implementation requires balanced integration technology. of active engagement, and robust social interaction.

## 5. Hypothesis Answer

- 1) Interactive Teaching Style has a positive and significant effect on Interest in Learning English ( $\beta$  = 0.4032, T = 2.9560, p = 0.0033) with a large effect size ( $f^2$  = 1.307).
- 2) Interactive Teaching Style exerts a positive and highly significant influence on Learning Motivation ( $\beta$  = 0.7078, T =

- 13.6517, p < 0.001) with a very large effect size ( $f^2 = 1.003$ ).
- 3) Learning Motivation has a positive and significant effect on Interest in Learning English ( $\beta$  = 0.4113, T = 2.6531, p = 0.0082) with a moderate effect size (estimated  $f^2 \approx 0.20$ ).
- 4) Interactive Teaching Style has a positive, significant indirect effect and partially mediates Interest in Learning English through Learning Motivation (indirect  $\beta$  = 0.2911, T = 2.5027, p = 0.0126) with a moderate effect size

## IV. CONCLUSION AND SUGGESTION

## A. Conclusion

- 1. Interactive teaching style has a positive and significant effect on interest in learning English with a moderate effect size.
- 2. Interactive teaching style has a positive and highly significant effect on learning motivation with a strong effect size.
- 3. Learning motivation has a positive and significant effect on interest in learning English with a moderate effect size.
- 4. Interactive teaching style has a positive, significant indirect effect and partially mediates interest in learning English through learning motivation with a moderate effect size.

## **B.** Suggestion

For STIKES Pelita Ibu Kendari, it is recommended to optimize implementation of more varied interactive teaching methods that emphasize increasing interaction among students strengthen motivation and interest in learning English. Students are encouraged to actively engage in various interactive learning activities and to develop independence and collaboration in the learning process. Additionally. lecturers and education administrators should undertake continuous professional development training to master effective interactive teaching techniques and motivational strategies, as well as conduct regular evaluations of the methods applied to ensure sustainability and improvement of learning outcomes.

## REFERENCES

Beltman, S., & Poulton, E. (2025). Strategies teachers use to maintain motivation. *Teaching and Teacher Education*, 155, 104882.

 $\frac{https://doi.org/https://doi.org/10.1016/j.}{tate.2024.104882}$ 

- Bognár, L., & Khine, M. S. (2025). The shifting landscape of student engagement: A prepost semester analysis in AI-enhanced classrooms. *Computers and Education:* Artificial Intelligence, 8, 100395. <a href="https://doi.org/https://doi.org/10.1016/j.caeai.2025.100395">https://doi.org/https://doi.org/10.1016/j.caeai.2025.100395</a>
- Bremner, N., Sakata, N., & Cameron, L. (2023).

  Teacher education as an enabler or constraint of learner-centred pedagogy implementation in low-to middle-income countries. *Teaching and Teacher Education*, 126, 104033.

  <a href="https://doi.org/https://doi.org/10.1016/j.tate.2023.104033">https://doi.org/https://doi.org/10.1016/j.tate.2023.104033</a>
- Bureković, M., Rizvić-Eminović, E., & Pilav, M. (2023). Review of five methods used in english language teaching. *Zbornik Radova Islamskog Pedagoškog Fakulteta u Zenici (Online)*, 21, 447–464. <a href="https://doi.org/10.51728/issn.2637-1480.2023.447">https://doi.org/10.51728/issn.2637-1480.2023.447</a>
- Chanal, J., Remolif, B., & Paumier, D. (2025). On the hierarchical and situational multidimensionality of motivation according to self-determination theory: further investigating the specificity hypothesis. In *Motivation and Emotion*. <a href="https://doi.org/10.1007/s11031-025-10139-9">https://doi.org/10.1007/s11031-025-10139-9</a>
- Eragamreddy, N. (2024). Motivation and Affective Factors To Learn English As Second Language. *Premise: Journal of English Education*, 13(2), 409. <a href="https://doi.org/10.24127/pj.v13i2.9629">https://doi.org/10.24127/pj.v13i2.9629</a>
- Franchisca, S., Nurmalia Sari, M., Kristine Nelloe, M., Mulyapradana, A., & Fitriani, N. (2024). The Impact of Motivation on Foreign Language Learning: A Longitudinal Study. *Journal on Education*, *06*(02), 11082–11093.
- Ginting, D. (2021). Student Engagement and Factors Affecting Active Learning in English Language Teaching. *VELES Voices of English Language Education Society*, 5, 215–228.

https://doi.org/10.29408/veles.v5i2.3968

- Guo, Z., Chen, C., & Guo, R. (2025). The impact of parental involvement, social support, and peer relationships on L2 learning motivation: A mixed-methods study of Chinese university EFL students. *Acta Psychologica*, 254, 104804. <a href="https://doi.org/https://doi.org/10.1016/j.actpsy.2025.104804">https://doi.org/https://doi.org/10.1016/j.actpsy.2025.104804</a>
- Guo, Z., & Fryer, L. K. (2025). What really elicits learners' situational interest in learning activities: a scoping review of six most commonly researched types of situational interest sources in educational settings. *Current Psychology*, 44(1), 587–601. <a href="https://doi.org/10.1007/s12144-024-07176-x">https://doi.org/10.1007/s12144-024-07176-x</a>
- House, J. (2018). The Impact of English as a Global Linaua Franca on Intercultural BTIntercultural Communication Communication in Asia: Education, Language and Values (A. Curtis & R. Sussex (eds.)). Springer International Publishing. https://doi.org/10.1007/978-3-319-69995-0 6
- Huang, D.-H. (2025). Innovative interactive instruction to enhance learning behaviors. *Journal of Innovation & Knowledge, 10*(1), 100641. <a href="https://doi.org/https://doi.org/10.1016/j.jik.2024.100641">https://doi.org/https://doi.org/10.1016/j.jik.2024.100641</a>
- Jiang, Y., Tian, L., & Lou, N. M. (2024). From growth mindset to positive outcomes in L2 learning: Examining the mediating roles of autonomous motivation and engagement. *System*, 127, 103519. <a href="https://doi.org/https://doi.org/10.1016/j.system.2024.103519">https://doi.org/https://doi.org/10.1016/j.system.2024.103519</a>
- Jiao, S., Jin, H., You, Z., & Wang, J. (2022).

  Motivation and Its Effect on Language
  Achievement: Sustainable Development of
  Chinese Middle School Students' Second
  Language Learning. In Sustainability (Vol.
  14, Issue 16).

  https://doi.org/10.3390/su14169918
- Marini, A., Safitri, D., Niladini, A., Zahari, M., Dewiyani, L., & Muawanah, U. (2025). Developing a website integrated with project-based learning: Evidence of stimulating creativity among elementary school students in Indonesia. *Social Sciences & Humanities Open, 11,* 101402.

- $\frac{https://doi.org/https://doi.org/10.1016/j.}{ssaho.2025.101402}$
- Mufanti, R., Carter, D., & England, N. (2024).

  Outcomes-based education in Indonesian higher education: Reporting on the understanding, challenges, and support available to teachers. *Social Sciences and Humanities Open*, 9(August 2023), 100873.

  <a href="https://doi.org/10.1016/j.ssaho.2024.100">https://doi.org/10.1016/j.ssaho.2024.100</a>
  873
- Nawas, A., Darmawan, I. G. N., & Maadad, N. (2023). Indonesian secular vs. Madrasah schools: assessing the discrepancy in English reading and listening tests. Language Testing in Asia, 13(1), 52. <a href="https://doi.org/10.1186/s40468-023-00266-w">https://doi.org/10.1186/s40468-023-00266-w</a>
- Ntoumanis, N., Ng, J. Y. Y., Prestwich, A., Quested, E., Hancox, J. E., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Lonsdale, C., & Williams, G. C. (2021). A meta-analysis of self-determination theory-informed intervention studies in the health domain: effects on motivation, health behavior, physical, and psychological health. *Health Psychology Review*, 15(2), 214–244. https://doi.org/10.1080/17437199.2020. 1718529
- Puja, I. B. P. (2024). The mediating role of online learning motivation in the influence of service quality, social media usage, and pedagogical teaching competence of teachers on student learning satisfaction. *Cogent Social Sciences*, *10*(1), 2396934. <a href="https://doi.org/10.1080/23311886.2024.2396934">https://doi.org/10.1080/23311886.2024.2396934</a>
- Romdhon, J., Masrifah, M., Shiyama, N. M., & Suharyati, H. (2024). Applying Constructivist Learning Theory to Enhance Student Learning Outcomes in Elementary Schools. *International Journal of Sustainable Development & Future Society*, 2(2), 62–69. https://doi.org/10.62157/ijsdfs.v2i2.73
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary* **Educational** Psychology, 61, 101860. https://doi.org/https://doi.org/10.1016/j. cedpsych.2020.101860

- Sa'dijah, C., Purnomo, H., Abdullah, A., Permadi, H., Anwar, L., Tejo dwi cahyowati, E., & Sa'diyah, M. (2023). Students' numeracy skills in solving numeracy tasks: Analysis of students of junior high schools. In *AIP Conference Proceedings* (Vol. 2569). <a href="https://doi.org/10.1063/5.0113664">https://doi.org/10.1063/5.0113664</a>
- Schneider, M., & Simonsmeier, B. A. (2025). How does prior knowledge affect learning? A review of 16 mechanisms and a framework for future research. *Learning and Individual Differences*, 122, 102744. <a href="https://doi.org/https://doi.org/10.1016/j.lindif.2025.102744">https://doi.org/https://doi.org/10.1016/j.lindif.2025.102744</a>
- Urhahne, D., & Wijnia, L. (2023). Theories of Motivation in Education: an Integrative Framework. *Educational Psychology Review*, 35(2), 45. <a href="https://doi.org/10.1007/s10648-023-09767-9">https://doi.org/10.1007/s10648-023-09767-9</a>
- Wong, L.-H., Chan, T.-W., Chen, W., Looi, C.-K., Chen, Z.-H., Liao, C. C. Y., King, R. B., & Wong, S. L. (2020). IDC theory: interest and the interest loop. *Research and Practice in Technology Enhanced Learning*, 15(1), 3. <a href="https://doi.org/10.1186/s41039-020-0123-2">https://doi.org/10.1186/s41039-020-0123-2</a>
- Yamin, S. (2023). SmartPLS 3, SmartPLS4, Amos & Stata. In *PT Dewangga Energi Internasional*. https://www.smartpls.com/
- Yao-Ping Peng, M., Xu, Y., & Xu, C. (2023). Enhancing students' English language learning via M-learning: Integrating technology acceptance model and S-O-R model. *Heliyon*, 9(2), e13302. <a href="https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e13302">https://doi.org/https://doi.org/10.1016/j.heliyon.2023.e13302</a>

- Zaim, M., Refnaldi, Zainil, Y., Tiarina, Y., & Zakiyah, M. (2023). The Implementation of the PISA Model of English Reading Literacy Assessment for Senior High School (Issue Icla). Atlantis Press SARL. <a href="https://doi.org/10.2991/978-2-38476-124-1">https://doi.org/10.2991/978-2-38476-124-1</a> 4
- Zaki, K. A., Rafiq, S., & Afzal, A. (2023). Impact of Teacher-Student Favoritism on Students' Learning Outcomes At University Level. *Journal of Social Research Development*, 4(01), 1–14. <a href="https://doi.org/10.53664/jsrd/04-01-2023-01-01-14">https://doi.org/10.53664/jsrd/04-01-2023-01-01-14</a>
- Zhang, Z., Gao, X. (Andy), & Liu, T. (2024). Enjoyment in foreign language learning: A systematic review. *Heliyon*, 10(17), e37215. <a href="https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e37215">https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e37215</a>
- Zolfaghari, Z., Karimian, Z., Zarifsanaiey, N., & Farahmandi, A. Y. (2025). Navigating challenges in medical english learning: leveraging technology and gamification for interactive education a qualitative study. *BMC Medical Education*, *25*(1), 1045. <a href="https://doi.org/10.1186/s12909-025-07511-1">https://doi.org/10.1186/s12909-025-07511-1</a>