



THE EFFECT OF LEARNING MOTIVATION AND WORDWALL MEDIA TOWARDS VOCABULARY ENHANCEMENT IN EFL LEARNERS

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Abstract: This study investigates the effect of learning motivation and the use of WordWall media on vocabulary enhancement among EFL learners. Conducted at SMPN 2 Jatiwangi and SMPN 2 Dawuan, the research involved 224 students who had experience using WordWall in English lessons. Employing a quantitative method with a survey design, data were collected through questionnaires and vocabulary tests. The coefficient of determination (R^2) shows a value of 0.648, indicating that 64.8% of students' vocabulary enhancement can be explained by the combined influence of learning motivation and WordWall media. The remaining 35.2% is influenced by other factors not covered in this study. These results suggest that while digital media like WordWall plays an important role in engaging students, intrinsic factors such as motivation remain the dominant contributor to vocabulary development. This highlights the importance of integrating psychological and technological aspects in EFL learning to foster more effective outcomes.

Keywords: Learning Motivation, Wordwall Media, Vocabulary Enhancement, EFL Learners

INTRODUCTION

Education is a systematically designed process that develops students' abilities, knowledge, and character through planned interactions between students, teachers, and the learning environment. In the current context of globalization, English language proficiency is an important skill that not only supports a career but also opens access to information and cross-cultural communication. Therefore, improving English language skills is a major focus in the education system in various countries, including Indonesia.

Although English has been part of the national curriculum in Indonesia for years, students' ability to master the language remains relatively low. According to the 2023 EF English Proficiency Index, Indonesia ranks 79th out of 113 countries. This ranking reflects the challenges of mastering English, particularly with regard to vocabulary. Vocabulary is the foundation of language learning because all language skills—reading, writing, speaking, and listening—depend on a person's vocabulary mastery. As Wilkins (in Thornbury, 2019) explains, communication without grammar is limited, and vocabulary is essential for effective communication.

Vocabulary mastery in the context of English as a Foreign Language (EFL) includes not only understanding the meaning of words, but also using words appropriately in various contexts. This aspect includes collocation, idiomatic expressions, and register. Richards and Renandya (2022) emphasize that good vocabulary mastery greatly affects core skills in English, such as reading comprehension, speaking fluency, writing clarity, and listening accuracy.

However, in reality, many students in Indonesia have difficulty developing their English vocabulary. Factors such as limited resources, less interesting learning methods, and lack of student motivation are obstacles in the vocabulary acquisition process. In this case, learning motivation is an important factor that determines the success of learning. Motivation is an internal or external drive that affects a person's intensity, direction, and persistence in learning. Dörnyei and Ushioda (2021) explain that students with high motivation tend to be more active in the learning process and are better able to maintain focus and effort in achieving their learning goals.

A high level of motivation is positively correlated with increased vocabulary mastery. Pratiwi et al. (2023) stated that students who have high intrinsic and extrinsic motivation are more likely to apply effective learning strategies, such as noting down new vocabulary, using digital applications, and practicing actively. In contrast, students with low motivation tend to get

frustrated easily when they have difficulty understanding or remembering vocabulary, which can hinder their learning progress (Hidayat & Sulisty, 2022).

To overcome these problems, the use of technology in learning has become a promising alternative. Digital innovation has enabled the creation of more interactive, flexible, and interesting learning media for students. One of the digital-based learning media currently widely used in vocabulary learning is WordWall. WordWall is an interactive platform that combines conventional teaching strategies with gamification elements. This platform allows teachers to create various educational games, such as quizzes, crosswords, and word matching, designed to increase student engagement in the learning process.

Research by Johnson et al. (2023) shows that the use of WordWall significantly increases students' vocabulary retention. Gamification features such as point systems, leaderboards, and virtual prizes can foster students' learning motivation, both intrinsic and extrinsic. In addition, WordWall is also in line with the principles of 21st-century learning that emphasize independent learning, critical thinking, and collaboration. Malik and Ibrahim (2023) emphasize that the use of media such as WordWall can create a student-centered learning environment and increase active engagement.

Thus, integrating learning motivation with WordWall media has great potential for improving EFL students' vocabulary mastery. Many studies have highlighted the importance of vocabulary and motivation in language learning. However, there is still a gap in the literature discussing the interaction between learning motivation, WordWall use, and vocabulary mastery in the context of EFL learning in Indonesia. This gap is an important basis for this study. This study aims to explore the influence of learning motivation and the use of WordWall media on EFL students' vocabulary improvement. This study will not only highlight the relationship between each variable but also analyze the synergy formed by the three in creating more effective, enjoyable, and relevant language learning with current technological developments and student needs.

METHODOLOGY

This study adopted a quantitative survey design to explore the relationship between learning motivation, the use of WordWall media, and vocabulary enhancement among junior high school EFL students. The research was carried out at two public junior high schools in Majalengka Regency: SMP Negeri 2 Jatiwangi and SMP Negeri 2 Dawuan, both of which had implemented

WordWall media as part of their English instruction. The overall research process took place over a four-month period from February to May 2025, covering instrument development, validation, coordination with schools, and data analysis. However, the actual data collection—distributing questionnaires and administering vocabulary tests—was conducted within a focused period of approximately three days in May 2025. This compact data-gathering timeline ensured efficiency while maintaining the quality and integrity of the collected responses. A structured questionnaire and a vocabulary test were used as the main research instruments. The questionnaire, comprising 20 items on a 5-point Likert scale, measured aspects of students' learning motivation and their experiences with WordWall media. The vocabulary test, also consisting of 20 multiple-choice items, was designed to assess students' mastery of vocabulary taught using WordWall, covering meanings, synonyms, antonyms, collocations, and contextual usage.

The study population included 510 students from the two schools, with 224 students selected as the sample using purposive sampling. This sample comprised 150 eighth-grade students from SMPN 2 Jatiwangi and 74 students from SMPN 2 Dawuan, all of whom had previously been exposed to vocabulary instruction through WordWall. The sampling size was calculated using the Slovin formula with a 5% margin of error to ensure statistical reliability. Only students meeting the criteria—active EFL learners with prior WordWall usage—were included to maintain relevance to the research focus. The independent variables were Learning Motivation (X1) and WordWall Media Use (X2), while the dependent variable was Vocabulary Enhancement (Y). Operational definitions for each variable were based on relevant theoretical frameworks. The questionnaire was piloted before distribution to check for reliability and validity, including both positive and negative statements to minimize response bias. The vocabulary test functioned as a receptive assessment tool to objectively evaluate vocabulary knowledge and was tailored to the content delivered via WordWall. Data were analyzed using SPSS software to identify correlations and effects among the variables. Overall, this methodology ensured that the research was both contextually grounded and methodologically rigorous, enabling the study to generate meaningful insights into how motivation and digital media integration impact vocabulary learning outcomes in EFL classrooms.

FINDINGS AND DISCUSSION

FINDINGS

This section presents the results of hypothesis testing conducted to determine the effect of Learning Motivation (X_1) and WordWall Media (X_2) on Vocabulary Enhancement (Y). The statistical analysis includes the t-test (partial effect), F-test (simultaneous effect), and R Square (coefficient of determination). All computations were carried out using SPSS version 27.

T Test

The t-test, also known as the partial test, was used in this study to determine whether each independent variable learning motivation (X_1) and WordWall media use (X_2) individually influences vocabulary achievement (Y). This test examines the contribution of each predictor variable in isolation. The analysis used a significance level of 0.05. If the t-count is greater than the t-table value or the significance value (Sig.) is less than 0.05, it indicates that the independent variable has a significant partial effect on the dependent variable, and thus the alternative hypothesis (H_a) is accepted while the null hypothesis (H_o) is rejected. On the other hand, if the t-count is less than the t-table or the significance value is greater than 0.05, it implies that the independent variable does not significantly affect the dependent variable, and therefore H_a is rejected while H_o is accepted. This test helped assess whether learning motivation and the use of WordWall media each played a meaningful role in enhancing students' vocabulary mastery.

Table 1. T Test

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Correlations Zero-order	
	B	Std. Error					
	(Constant)	-,505	,065	-7,808	,000		
1	Learning Motivation (X1)	,154	,0,16	,474	9,890	,000	,717
	Wordwall Media (X2)	,152	,0,17	,439	9,162	,000	.701

Source: Data processed using SPSS 27.0

The t-test, or partial significance test, was carried out to determine whether the independent variables—learning motivation and WordWall media—each have a significant individual influence on the dependent variable, namely vocabulary enhancement. This test helps identify whether each variable contributes meaningfully when examined separately. The critical t-table value used for comparison was 1.971.

The t-count for learning motivation was 9.890, with a significance value (Sig.) of 0.000. Since the t-count is greater than the t-table value ($9.890 > 1.971$) and the Sig. value is smaller than 0.05, it can be concluded that learning motivation has a significant partial effect on vocabulary enhancement. This finding indicates that students who are more motivated to learn tend to experience greater improvement in vocabulary. Motivation plays a crucial role in language learning—it drives students to study consistently, seek out new words, and stay engaged during the learning process. Highly motivated learners are also more likely to invest time and effort in mastering vocabulary, which in turn enhances their overall language competence.

Likewise, the t-count for WordWall media was 9.162, also with a Sig. value of 0.000. This result confirms that the use of WordWall has a statistically significant partial impact on students' vocabulary enhancement. WordWall provides an interactive, enjoyable learning environment that makes vocabulary more accessible and memorable. Through gamified learning activities, students are exposed to new words in a contextual and repetitive manner, which improves retention. The media also fosters learner autonomy, allowing students to engage with vocabulary at their own pace while maintaining a high level of interest.

In summary, the results of the t-test demonstrate that both learning motivation and WordWall media significantly affect vocabulary enhancement when examined separately. Both variables surpassed the required statistical thresholds, meaning the null hypotheses are rejected and the alternative hypotheses are accepted. These findings highlight that both psychological factors and digital learning tools are essential in supporting vocabulary growth among EFL students.

F Test

The F-test, also referred to as the simultaneous significance test, was conducted to determine whether the independent variables learning motivation (X_1) and WordWall media (X_2) simultaneously influence the dependent variable, vocabulary achievement (Y). The purpose of this test is to assess the overall effect of the model, rather than individual predictors. In this study, a significance level of 0.05 was used. If the F-count is greater than the F-table value or the significance value (Sig.) is less than 0.05, it indicates that the independent variables collectively have a significant effect on vocabulary achievement. This means that the model as a whole is statistically meaningful, and the alternative hypothesis (H_a) is accepted. However, if the F-count is smaller than the F-table value or the significance value is greater than 0.05, it suggests that the independent variables do not simultaneously affect the dependent variable, and thus H_a is rejected and H_o is accepted.

Table 2. F Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,557	2	1,778	203,230	,000 ^b
	Residual	1,934	221	,009		
	Total	5,491	223			

Source: Data processed using SPSS 27.0

The F-test, or simultaneous significance test, was conducted to determine whether the independent variables learning motivation and WordWall media together have a simultaneous effect on the dependent variable, namely vocabulary enhancement. This test helps answer whether the combination of both predictor variables can significantly predict or explain the improvement of students' vocabulary.

Based on the SPSS output, the F-count value obtained was 203.000, while the significance value (Sig.) was 0.000. This result is then compared with the F-table value at a significance level (α) of 0.05. According to the F-distribution table, the F-table value is approximately 3.04. Because

the F-count (203.000) is much greater than the F-table ($203.000 > 3.04$), and the Sig. value is less than 0.05, the result indicates that the model is statistically significant. This means that the independent variables, when considered together, have a significant joint effect on students' vocabulary enhancement. In other words, both students' internal motivation and the integration of interactive media like WordWall contribute collectively and meaningfully to improving vocabulary outcomes. It suggests that when students are not only motivated but also supported with engaging digital tools, the learning process becomes more effective. Their exposure to vocabulary increases, and they are more likely to retain and apply new words in various contexts.

Furthermore, the high F-count value reflects that the predictive model used in this research is strong. The combination of these two factors—psychological (motivation) and technological (WordWall)—explains a considerable portion of the variation in students' vocabulary mastery. This finding emphasizes the importance of integrated instructional strategies that focus not only on students' attitudes but also on the learning environment and the media used.

In conclusion, the F-test results indicate that learning motivation and WordWall media simultaneously have a significant effect on vocabulary enhancement. The null hypothesis (H_0), which states that both variables together have no effect, is rejected, while the alternative hypothesis (H_a) is accepted

R Square (R²)

The coefficient of determination (R^2) was used to evaluate how well the two independent variables together explained the variation in the dependent variable.

Table 3. R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,805 ^a	,648	,645	,09354

Source: Data processed using SPSS 27.0

The coefficient of determination (R^2) is used to measure how much the variation in the dependent variable vocabulary enhancement can be explained by the two independent variables, namely learning motivation and WordWall media. It provides insight into the effectiveness of the regression model as a whole.

Based on the SPSS output (Table 4.14), the obtained R Square value is 0.648, which means that 64.8% of the variance in students' vocabulary enhancement is explained by the combined influence of learning motivation and WordWall media. In other words, these two variables

contribute significantly to predicting how well students improve their vocabulary skills in the English language learning context. The remaining 35.2% of the variation is explained by other factors not included in this study. These may include teaching methods, students' individual learning styles, classroom environment, prior knowledge, family support, or access to external learning resources such as private courses or mobile learning applications. This indicates that while learning motivation and WordWall media are key contributors, vocabulary acquisition is still a complex process influenced by multiple variables.

These results show that both variables have substantial effects on vocabulary enhancement, with learning motivation contributing slightly more than WordWall media. This suggests that internal psychological factors, such as the student's own desire and persistence to learn, have a marginally greater influence compared to external tools, even when those tools are interactive and engaging like WordWall.

In conclusion, the R Square value of 0.648 indicates a strong model fit, where both independent variables meaningfully explain students' vocabulary development. While technological tools support learning efficiency and engagement, the students' internal drive to learn vocabulary remains the dominant factor in their overall vocabulary achievement.

DISCUSSION

The Effect of Learning Motivation on Students' Vocabulary Enhancement

To investigate the effect of learning motivation on students' vocabulary enhancement, a partial t-test was conducted. The statistical results indicated that the t-value was 9.890 with a significance value (Sig.) of 0.000. Since the t-value exceeded the t-table value (1.971) and the significance level was below 0.05, the result confirms that learning motivation has a significant and positive effect on vocabulary enhancement. This means that students with higher levels of motivation tend to achieve better outcomes in acquiring English vocabulary.

This result aligns with the view of Santrock (2009), who defines motivation as the process that initiates, directs, and sustains goal-directed behavior. Within the context of vocabulary learning, motivation functions as the internal drive that leads students to consistently engage in activities such as memorizing, reviewing, and applying new words. Motivated students are more likely to invest their time and effort in developing their vocabulary knowledge, even when faced with challenges.

The students' responses to the questionnaire also support these findings. A significant proportion of respondents more than 77% indicated a strong desire to improve their vocabulary. Furthermore, over 88% of students disagreed with negative perceptions of vocabulary learning, suggesting a positive emotional attitude. They also reported being motivated by both intrinsic factors (such as personal growth and interest) and extrinsic ones (such as academic success and communication goals). This combination of motivation types plays an important role in sustaining their vocabulary learning.

Motivation also influences the strategies students choose. For example, students with higher motivation were more likely to engage in independent vocabulary searches, frequent practice, and interaction with vocabulary-related media like Wordwall. Their level of motivation correlated with their willingness to adopt proactive and self-regulated learning strategies, which ultimately contributed to vocabulary mastery.

These results highlight that learning motivation is not only statistically significant but also practically impactful in shaping students' vocabulary growth. Therefore, it is essential for educators to cultivate and maintain student motivation through engaging instruction, goal-oriented tasks, and constructive feedback. When students perceive vocabulary learning as both meaningful and attainable, their motivation increases, resulting in better language development outcomes.

The Effect of Wordwall Media on Students' Vocabulary Enhancement

To examine the influence of Wordwall media on students' vocabulary enhancement, the researcher conducted a partial t-test. The result showed that the t-value for Wordwall Media (X_2) was 9.162, with a significance value of 0.000. Since the t-value is higher than the t-table value of 1.971 and the significance level is less than 0.05, it can be concluded that Wordwall media has a statistically significant effect on students' vocabulary achievement.

This result suggests that the use of interactive digital media like Wordwall positively contributes to students' ability to acquire and retain English vocabulary. Wordwall, as a gamified learning tool, provides students with an engaging and stimulating environment where they can practice vocabulary in dynamic ways. Its features such as matching games, quizzes, word categorization, and sentence construction enable repeated exposure and active recall, both of which are essential for vocabulary retention. Based on the questionnaire data, a majority of students responded positively to statements related to Wordwall usage. For instance, over 92% of respondents agreed or strongly agreed that Wordwall made learning vocabulary more interesting,

and 91.1% found that it helped them understand vocabulary more easily. These findings reflect not only the cognitive impact of the media but also the affective dimension—students were more motivated and enjoyed the learning process when using Wordwall.

This aligns with constructivist learning theories, which emphasize that learners actively construct knowledge when they are engaged in meaningful tasks. Digital tools like Wordwall transform passive vocabulary drills into interactive challenges that capture students' attention and sustain their interest. This high level of engagement encourages more frequent and autonomous vocabulary practice, both in and outside the classroom.

Moreover, the partial coefficient of determination shows that Wordwall contributes approximately 30.8% to vocabulary enhancement. This figure, while slightly lower than that of learning motivation, still indicates a substantial impact. It demonstrates that technological media can serve as effective scaffolding in vocabulary instruction—especially for EFL learners who benefit from visual and interactive aids. The effectiveness of Wordwall can also be attributed to its ability to cater to different learning styles. Visual learners benefit from images and layouts; kinesthetic learners are supported by interactive features; and auditory learners may engage through pronunciation tasks embedded in the games. As such, Wordwall helps students not only understand the meaning of words but also use them in different contexts.

In conclusion, Wordwall media significantly supports vocabulary enhancement by providing an engaging, accessible, and varied learning platform. While motivation remains a critical internal factor, the external support provided by Wordwall boosts students' exposure, practice, and retention of vocabulary items. The data from this study reinforce the notion that incorporating digital tools in language learning, particularly those designed with game-based elements, can enhance both the effectiveness and enjoyment of the vocabulary acquisition process.

The Effect of Learning Motivation and Wordwall Media Towards on Students' Vocabulary Enhancement

To answer this question, the researcher conducted an F-test (simultaneous test) using SPSS version 27. The F-value obtained was 203.205, and the significance value (Sig.) was 0.000. Since the significance value is less than 0.05, it can be concluded that the independent variables Learning Motivation (X_1) and Wordwall Media (X_2) have a significant simultaneous influence on Vocabulary Enhancement (Y) among EFL learners. This means that when students are both intrinsically motivated to learn and supported by engaging digital media like Wordwall, their

vocabulary achievement significantly improves. The result shows that the combined effect of internal (motivation) and external (media) factors creates a more powerful learning experience compared to relying on one factor alone.

The statistical result is further supported by the coefficient of determination (R^2), which is 0.648. This indicates that 64.8% of the variance in students' vocabulary enhancement can be explained by the combined influence of learning motivation and Wordwall media. The remaining 35.2% could be due to other variables outside this study's scope, such as teaching strategies, students' prior vocabulary knowledge, learning styles, or environmental factors. These findings reinforce the idea that effective vocabulary learning is multidimensional, involving both psychological readiness (motivation) and pedagogical tools (media). Students who are motivated tend to engage more deeply with the learning process, and when that motivation is supported by media like Wordwall which offers interactive, game-based, and repetitive exposure to vocabulary they tend to retain and apply the new vocabulary more effectively.

In addition, the partial determination values show that:

- a. Learning Motivation contributed 34.0%
- b. Wordwall Media contributed 30.8%

While Learning Motivation contributes slightly more, both factors are substantially influential, meaning the success of vocabulary enhancement is highly dependent on the synergy between learners' drive and the tools they use. From a pedagogical perspective, this implies that EFL teachers should not only cultivate students' motivation but also integrate effective educational technology like Wordwall into the curriculum. A motivated student who lacks effective media might not achieve optimal results, and likewise, good media alone might not work without learner engagement.

CONCLUSION

Conclusions should be written in very clear words. It should explain how the reasearch objectives were achieved. Based on the analysis and discussion in the previous chapter, we can draw several conclusions about the influence of learning motivation and WordWall media use on vocabulary enhancement among EFL learners. First, learning motivation significantly and positively impacts students' vocabulary development, contributing 34%. This indicates that students who possess higher levels of motivation whether intrinsic, such as enjoyment of learning English, or extrinsic, such as encouragement from teachers or the desire for achievement are more

likely to demonstrate better vocabulary mastery. Motivation drives students to be consistent in learning, seek out new words, and apply vocabulary in meaningful contexts. On the contrary, low motivation often leads to reduced engagement, less practice, and limited vocabulary development.

Second, WordWall Media also exerts a statistically significant effect on vocabulary enhancement, contributing 30.8%. This demonstrates that digital tools like WordWall can serve as powerful learning aids that not only capture students' attention through gamified content but also reinforce word retention and recall through repeated interactive practice. WordWall enables students to engage in active learning by providing enjoyable vocabulary activities, such as matching games, quizzes, and flashcards, which appeal to various learning styles and help bridge the gap between exposure and mastery.

Third, the simultaneous influence of both Learning Motivation and WordWall Media on vocabulary enhancement reaches 64.8%, meaning these two variables together account for nearly two-thirds of the improvement in students' vocabulary skills. This combined effect shows a strong synergy between internal factors (motivation) and external factors (learning media). It implies that motivated learners, when supported with the right digital tools, are more likely to engage meaningfully and effectively in vocabulary learning tasks. The remaining 35.2% may be attributed to other factors not examined in this study, such as prior English exposure, teaching methods, socio-cultural environment, learning styles, or parental involvement.

Moreover, this research supports the growing body of literature that highlights the importance of integrating technology in EFL instruction and confirms that technological tools can enhance learning outcomes when paired with psychological readiness such as motivation. It also emphasizes that language learning is a multifaceted process that cannot rely solely on one approach but must combine cognitive, emotional, and technological dimensions to achieve optimal results. Therefore, this study contributes to both theoretical understanding and practical application by showing that fostering learning motivation and integrating engaging digital tools like WordWall are essential strategies for vocabulary improvement in today's digital learning environment.

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