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THE EFFECT OF LOOPS AND LIES GAME ON EFL LEARNERS' VOCABULARY RETENTION IN ENGLISH LANGUAGE LEARNING.

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ABSTRAK

Kosakata retensi merupakan salah satu aspek penting dari pembelajaran Bahasa Inggris sebagai bahasa asing (EFL) dan sangat penting bagi para mahasiswa Program Studi Pendidikan Bahasa Inggris. Namun, pada kenyataannya, banyak mahasiswa lelah untuk mempertahankan penguasaan kosakata dalam jangka panjang sehingga diperlukan strategi pembelajaran yang lebih menarik dan efektif dalam meningkatkan kemampuan mereka. Penelitian ini bertujuan untuk menganalisis pengaruh penggunaan permainan Loops & Lies terhadap pemerolehan dan retensi kosakata mahasiswa Pendidikan Bahasa Inggris di Institut Prima Bangsa Cirebon dengan pendekatan deskriptif kuantitatif dan analisis data menggunakan SmartPLS 3. Hasil penelitian menunjukkan bahwa strategi Loops & Lies berpengaruh signifikan terhadap pemerolehan kosakata sebesar 0,562 dan retensi kosakata sebesar 0,501, sementara nilai R-square sebesar 0,998 menunjukkan bahwa model penelitian memiliki daya jelas yang sangat tinggi, sehingga dapat disimpulkan bahwa permainan Loops & Lies merupakan strategi pembelajaran berbasis permainan yang efektif untuk meningkatkan retensi kosakata mahasiswa EFL di perguruan tinggi.

Kata kunci: Retensi Kosakata, Game-Based Learning, Permainan Loops and Lies, Pembelajar EFL, Mahasiswa Pendidikan Bahasa Inggris

ABSTRACT

Vocabulary retention is one of the important aspects of learning English as a foreign language (EFL) and is very important for students of the English Language Education Study Program. However, in reality, many students are tired of maintaining vocabulary mastery in the long term so that more interesting and effective learning strategies are needed to improve their abilities. This study aims to analyze the effect of using the Loops & Lies game on vocabulary acquisition and retention of English Language Education students at the Prima Bangsa Institute Cirebon with a quantitative descriptive approach and data analysis using SmartPLS 3. The results showed that the Loops & Lies strategy had a significant effect on vocabulary acquisition of 0.562 and vocabulary retention of 0.501, while the R-square value of 0.998 indicated that the research model had very high explanatory power, so it can be concluded that the Loops & Lies game is an effective game-based learning strategy to improve vocabulary retention of EFL students in higher education.

Keywords:Vocabulary Retention, Game-Based Learning, Loops and Lies Game, EFL Learners, English Education Students

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PENDAHULUAN

Vocabulary represents a critical aspect of English language acquisition since it serves as a basis for listening, reading, speaking, or writing skills enhancement. Despite its importance, it has been observed that learners encounter problems when it comes to retaining new vocabulary into the medium or long-term memory since vocabularies are usually forgotten or used scarcely. Numerous previous studies have proved the concept that playing with words can increase vocabulary retention, specifically at the middle school level. For instance, (Nguyen et al., 2022). showed a greater rate of

retention when game-based activities were used as a means of teaching vocabulary as compared to the normal teaching process. But few studies exist concerning the efficiency of playing with words at higher educational levels. That explains why the objective of this specific research will be focused on the role of playing with words for improving vocabulary retention within English language acquisition beyond the secondary educational level.

Recent studies have identified game-based learning as an effective learning technique in boosting the motivation levels of learners in foreign language education. This is supported by findings from the study conducted by (Garbani, 2025) which found game-based learning to be an effective digital learning technique that boosts the learners' intrinsic motivation. There may be no available empirical studies, however, exploring the use of interactive games in the retention of vocabulary terms in higher education. This article, therefore, explores the effectiveness of the Loops and Lies game as an interactive learning technique in the retention of vocabulary terms for English Language Education students.

But some gaps still exist within the current body of literature on game-based learning. First, most current studies were directed at secondary school students or non-English majors, creating a lack of university-level English Education studies on this topic also. Second, it was noticed that current studies overwhelmingly targeted digital games, while few studies exist on physical games involving interaction, like Loops and Lies. Third, little attention was given to the topic of vocabulary retention within previous studies on this topic as well. A systematic review by (Cahya Susaniari & Santosa, 2024) pointed towards the necessity of exploring this topic some more, specifically targeting variations of the game in educational settings for languages. With these gaps in mind, the current research will utilize the Loops and Lies game on English Education majors, testing the effect on vocabulary retention with a time delay.

The relevance of the study is evident given that English Language Education students are going to be futureEnglish language teachers who will, at a later stage, transmit language skills to school children. Learned and retained vocabulary skills are basic components of language skills as they have a direct effect on school children's reading, speaking, and writing capabilities (Mukhtar et al., 2023) . Nevertheless, it has been shown by many studies that vocabulary retention is a significant problem encountered by EFL learners, causing permanent loss of comprehension of the learned vocabulary (Nguyen et al., 2022) .

Within these circumstances, innovative learning methods, such as gaming, have been demonstrated to enhance the students' level of enthusiasm and help them better recall vocabulary. (S. Nurfadilah et al., 2025) . Taking all these circumstances into perspective, the Loops and Lies game is chosen to investigate whether it may help English Language Education students better recall vocabulary. Conceptually, the study contributes to the body of research regarding vocabulary learning via gaming within higher education institutions; technically, it presents an intervention strategy that may be conducted by lecturers/researchers themselves and not necessarily require someone else to implement it; and lastly, it may offer an advantage to lecturers on how to incorporate gaming within vocabulary strategies.

Given the context of the study, the objectives of this research involve examining the relationship between playing the Loops and Lies game and the retention of vocabulary knowledge for students enrolled in English Language Education courses, using the structured model via the SmartPLS 3 application, which encompasses the following three research questions:

(1) In what manner is the integration of game-based learning influencing vocabulary retention among learners?

(2) Is the learning motivation of the students a mediating variable between the usage of the game and vocabulary retention?

(3) In what ways is the Loops and Lies game helpful to students' vocabulary learning and memory, or is it no more helpful than more conventional ways of learning vocabulary?

an context local. With thus, expected program this can give contribution real in reduce behavior speaking rough And increase quality of interaction children's social.

METHOD STUDY

Research Design Research

This study employed a descriptive quantitative research design, which emphasizes the collection and analysis of numerical data to describe research phenomena objectively (Mukhtar et al., 2023) . The data were collected using questionnaires, a widely used quantitative instrument that allows for systematic and consistent measurement of participants' responses (Ardiansyah et al., 2023) . Descriptive research aims to present an accurate and systematic depiction of characteristics or conditions within a particular population (Indrayadi, 2021) . Accordingly, this study

seeks to describe students' perceptions, learning experiences, and vocabulary retention following English learning activities that incorporate the Loops and Lies game.

Data analysis was conducted using SmartPLS 3, a variance-based structural equation modeling (SEM) software designed to examine relationships between latent variables and their indicators. As suggested by Hair & Alamer (2022), this method is particularly suitable for studies with small to moderate sample sizes and for research models that involve mediating or moderating variables.

Participants of the Research

The participants of this study were undergraduate students from the English Language Education Study Program at the Prima Bangsa Institute, Cirebon, aged between 18 and 22 years, who were learning English as a foreign language. The participants were selected using purposive sampling based on their enrollment in courses that implemented the *Loops and Lies* game. All participants took part in structured learning sessions that integrated the *Loops and Lies* game as an interactive and collaborative activity designed to enhance vocabulary retention.

Research Location

This study was conducted in the English Language Education Study Program at Institut Prima Bangsa Cirebon. The research site was selected due to its relevance to the research objectives and the accessibility of participants who met the study criteria. The participants were selected using purposive sampling from students enrolled in courses that implemented the *Loops and Lies* game. The data collection was carried out between November and December 2025.

Statistical Analysis

Statistical analysis *is the process of processing, interpreting, and summarizing data using mathematical and numerical techniques. The goal is to understand patterns, trends, or relationships in the data so researchers can make more accurate decisions or conclusions. (John W. Creswell, 2020)*

Data collected using questionnaires administered among students who played the Loops and Lies game was analyzed using a descriptive quantitative method with the aid of software called SmartPLS 3. The technique was employed to offer a richer insight into the students' motivation, engagement, and word retention levels following this gaming process. Through this approach, researchers were able to objectively observe student response patterns and measure how effectively the game was implemented in the English learning process.

The analysis stages are carried out as follows:

The measurement model was assessed to ensure each question asked in the questionnaire was capturing the intended subject it was meant to. In this step, the validity and reliability of the study instrument were assessed to ensure the data collected was valid and reliable. (Yarsasi et al., 2025).

After the instrument was proven valid and reliable, the data was analyzed to determine students' response patterns to the use of the Loops and Lies game. This analysis helped illustrate their learning motivation tendencies, engagement levels, and vocabulary recall abilities.

The results of this overall analysis were used to determine the extent of the Loops and Lies game's influence on English Language Education students' vocabulary recall. Previous research findings indicate that using language games can significantly improve vocabulary retention, so this analysis helps assess whether similar effects occur in this study context (Nguyen et al., 2022).

VARIABLES OF RESEARCH

No.	Variables	Information
1.	X	The influence of the game loops and lies
2.	Y	English Vocabulary Improvement

Likert Scale

No.	Response Category	Numerical Score
1.	Very Disagree	1

2.	Disagree	2
3.	Neutral	3
4.	Agree	4
5.	Very Agree	5

VARIABLE INDICATORS

Variable X

No.	Use of Loops and lies
1.	The Loops and Lies game makes me more enthusiastic about learning vocabulary.
2.	The rules of the game Loops and Lies are easy to understand.
3.	I am more focused when learning using Loops and Lies than the usual method.

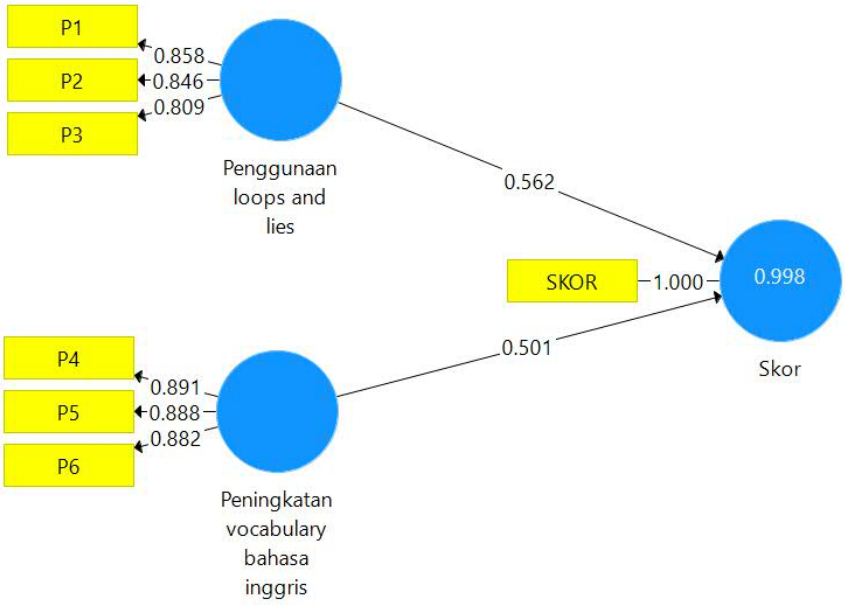
Variable Y

No.	English Vocabulary Improvement
1.	I can remember new vocabulary after playing Loops and Lies
2.	I can recite the words learned through the game.
3.	Loops and Lies helps me understand the meaning of vocabulary better.

DATA INDICATORS

No.	Variables X,Y	SST	ST	N	TS	STS	Score
1.	The Loops and Lies game makes me more enthusiastic about learning vocabulary.						
2.	The rules of the game Loops and Lies are easy to understand.						
3.	I am more focused when learning using Loops and Lies than the usual method.						
4.	I can remember new vocabulary after playing Loops and Lies						
5.	I can recite the words learned through the game.						
6.	Loops and Lies helps me understand the meaning of vocabulary better.						

RESULTS



Convergent Validity Test Results

Convergent validity was assessed to determine how well the indicators represented the intended constructs. The evaluation was based on outer loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). The results showed that all indicators met the recommended criteria, with outer loadings above 0.70, AVE values exceeding 0.50, and CR values greater than 0.70, indicating adequate convergent validity of the measurement model.

Calculation of AVE and Composite Reliability (CR)

1. Loops and Lies Game Usage Construct

The Loops and Lies Game Usage Construct consists of three indicators, namely P1, P2, and P3, with the outer loading values as follows:

- P1 = 0.858
- P2 = 0.846
- P3 = 0.809

Loading indicators: 0.858, 0.846, 0.809

AVE (Average Variance Extracted) = 0.713
CR (Composite Reliability) = 0.881

The Loops and Lies Game Usage construct demonstrated adequate convergent validity, with an AVE value of 0.713 and a Composite Reliability value of 0.881. All indicators exceeded the minimum outer loading criterion of 0.70, confirming that the construct is both valid and reliable for measuring the use of the Loops and Lies game.

2. English Vocabulary Enhancement Construct

The English Vocabulary Improvement construct is measured using three indicators, namely P4, P5, and P6, with the outer loading values as follows:

- P4 = 0.891
- P5 = 0.888
- P6 = 0.882

Loading indicators: 0.891, 0.888, 0.882

AVE (Average Variance Extracted) = 0.786
CR (Composite Reliability) = 0.917

The analysis shows that all indicators have outer loadings above 0.70, the AVE values exceed 0.50, and the Composite Reliability values meet the recommended threshold. These results confirm that the Multidimensional Lexical Analyser construct demonstrates adequate convergent validity and reliability.

3. Vocabulary Retention Score Construct

The Vocabulary Retention Score construct is measured by a single indicator (SCOR) with an outer loading of 1.000. As a single-indicator construct, it does not require separate AVE or Composite Reliability calculations to confirm convergent validity.

As the construct consists of a single indicator that shows a perfect loading value, then:

- **AVE (Average Variance Extracted) = 1,000**
- **CR (Composite Reliability) = 1,000**

Thus, the Vocabulary Retention Score construct is declared valid and reliable automatically as a reflective construct with a single indicator.

Summary of Convergent Validity Test Results

Construct	AVE	CR	Information
Use of the Game Loops and Lies	0.713	0.881	Valid & reliable
English Vocabulary Improvement	0.786	0.917	Valid & reliable
Vocabulary Retention Score	1,000	1,000	Valid (single indicator)

DISCUSSION

The result of this study reveals that the Loops and Lies game has a positive effect on the vocabulary retention. This phenomenon is represented by the path coefficient of 0.562, implying that the gamehas an important function in facilitating learners to remember English vocabulary they possess learned. It is concluded that vocabulary learning involving games may present learning possibilities. experience that is more engaging and effective than traditional teaching methods.

The Loops and Lies game allows for active participation of students in speech, listening, and Critical thinking in distinguishing true information from false information. This learning activity corresponds with active learning and constructivist learning theories, wherein students do not acquire knowledge by mere reception but develop vocabulary knowledge can be achieved through direct experience. This cognitive/social interaction is an important part of improving the retention of vocabulary.

Moreover, this research also revealed that boosting English vocabulary has a positive influence on vocabulary retention. This was acknowledged because it has a path coefficient of 0.501. This further reinforces that the better mastery of a student's vocabulary skills, the greater their vocabulary retention ability. This indicates that not only is vocabulary retention dependent on the learning process but it is also dependent on how much improvement has been accomplished.

With a value of 0.998, it is evident that the combination offered in the Loops and Lies game and the development of English vocabulary is able to explain almost all the variance in terms of students' vocabulary retention. This also establishes that the research model is extremely effective, and learning via games is also an extremely effective method in the field of foreign EFL learning.

Findings obtained from this research support the views developed by other researches on the increase in the level of motivation, engagement, and accomplishment within language learning through the use of game-based learning methods. Since language games are employed in the learning process, the learning context is made more enjoyable and less stressful, making the students feel more confident when using the newly gained vocabulary to convey meaning. This, in turn, encourages exposure and understanding of the vocabulary, which is essential in vocabulary maintenance.
Therefore, the Loops and Lies game becomes not only a source of entertainment for the individual but also a learning tool for enhancing vocabulary retention skills in the English language. The implementation of this game becomes a valuable option for a teacher to develop a communications-based vocabulary learning module.

CONCLUSION

This study concludes that the Loops and Lies game has a positive and significant impact on vocabulary retention in English language learning. Analysis using SmartPLS 3 shows that game-based learning, particularly through Loops and Lies, makes a significant contribution to long-term vocabulary acquisition and retention, as supported by a very high model apparent power value (R-square = 0.998). This finding confirms the research's contribution in demonstrating the effectiveness of interaction-based physical games for vocabulary learning at the college level. Practically, the Loops and Lies game can be applied as an alternative strategy to create interactive, communicative, and engaging vocabulary learning. Further research is recommended to examine the long-term impact of this game on various learner characteristics, learning duration, and different game-based learning designs.

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