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The Effectiveness of Gamification in Enhancing Arabic Listening Skills among Undergraduate Students

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ABSTRACT

This study investigates the effect of gamification on improving Arabic listening skills among third-semester students in the Arabic Language Education Program at STAI Masjid Syuhada Yogyakarta. The research addresses the problem of students' low listening comprehension, which is often due to lack of motivation, monotonous teaching methods, and limited use of interactive media. Using a quantitative correlational research design, data were collected from a full sample of students through questionnaires, observations, and documentation. The instruments were tested for validity and reliability, with most items meeting the necessary criteria. Assumption testing confirmed that the data were homogeneous, normally distributed, and linear. However, the hypothesis testing results—consisting of correlation, regression, coefficient significance, and determination tests—indicated no statistically significant relationship between gamification and listening skills (Spearman's rho = 0.123, p = 0.704). The regression analysis also showed an insignificant predictive relationship (p = 0.923), with a low coefficient of determination. Despite strong internal consistency in the instruments used, the study concludes that gamification, as applied in this context, does not significantly affect Arabic listening skill development. These findings suggest a need for more refined gamification strategies or supplementary methods to effectively enhance listening comprehension in Arabic language education.

Keywords : Gamification, listening skills, teaching program

INTRODUCTION

Listening skills are crucial for undergraduate students learning Arabic. However, based on preliminary observations, many students need help comprehending the material presented verbally. This low level of listening skills is attributed to several factors, including a lack of motivation, monotonous teaching methods, and minimal use of interactive media in teaching listening skills programs.

Listening skills on these issues and innovative methods are needed to enhance student motivation and engagement. One approach that can be implemented is gamification, which involves the incorporation of game elements into the learning process. Gamification is believed to increase students' interest in learning and encourage more active participation in educational activities. In this study,

gamification methods include role-playing, educational games related to listening material, relay message competitions, and interactive oral quizzes. This research aims to examine the influence of gamification on improving students' listening skills.

A growing body of research supports the use of gamification as an effective strategy in Arabic language learning, particularly in enhancing students' listening skills and overall engagement. Mulia [1] emphasizes that employing innovative teaching methods, such as gamification, significantly improves the quality of the learning process. Focusing specifically on listening, research by Saiza and Kevin[2] highlights the often-overlooked importance of listening skills in language acquisition. Their findings indicate that the application of gamification strategies helps bridge this gap, enhancing students' ability to comprehend spoken Arabic, which is essential for effective learning. This is further supported by Srimuliyani [3], who found that gamification significantly increases classroom engagement, motivation, and participation. Febrianto [4] and Dhenisa[5] similarly concluded that gamification facilitates better understanding and boosts learners' motivation.

In addition to listening skills, several studies explore the broader application of gamification in Arabic grammar and vocabulary acquisition. Che Ku Nor Asiah [6] focused on the topic of *al-'Adad wa al-Ma'dud*, a complex aspect of Arabic grammar, and found that gamification helps students grasp this

[1] Hauna Gina Mulia, dkk, Pengaruh Gamifikasi Terhadap Keaktifan Peserta Didik Dalam Pembelajaran Maharah Bahasa Arab, View of PENGARUH GAMIFIKASI TERHADAP KEAKTIFAN PESERTA DIDIK DALAM PEMBELAJARAN MAHARAH BAHASA ARAB (oppsi.or.id)

[2] Bunchi Caiza and Kevin Alexander, Gamification and The Listening Skill, https://repositorio.uta.edu.cc/handle/123456789/37266

[3] Srimuliyani, Menggunakan Teknik Gamifikasi untuk Meningkatkan Pembelajaran dan Keterlibatan Siswa di Kelas. EDUCARE: Jurnal Pendidikan dan Kesehatan

[4] Febrianto Hakeu, Idan I. Pakaya, Mutmain Tangkudung, Pemanfaatan Media Pembelajaran Berbasis Gamifikasi Dalam Proses Pembelajaran di MIS Terpadu Al-Azhfar, https://doi.org/10.58518/awwaliyah.v6i2.1930

[5] Dhenisha Agustine Fadilla, Sarah Nurfadhilah, Penerapan Gamification Untuk Meningkatkan Motivasi Belajar Siswa Dalam Pembelajaran Jarak Jauh, Inovasi Kurikulum: Vol 19, no. 1 2022, https://doi.org/10.17509/jik.v19i1.42778

[6] Che Ku Nor Asiah, dkk, Pendekatan Gamifikasi Dalam Pembelajaran Al-'Adad wa Al-Ma'dud Dalam Kalangan Pelajar, Pendekatan Gamifikasi Dalam Pembelajaran Al-'Adad wa Al-Ma'dud Dalam Kalangan Pelajar Al-Muqaddimah: Online Journal of Islamic History and Civilization

topic more effectively by making learning enjoyable and interactive. Mohamed[7] reported similar findings using the board game *Ana Sibawayh* in Arabic syntax instruction, with students unanimously agreeing that it enhanced their understanding through engaging gameplay.

Other studies emphasize the impact of gamification on vocabulary development. Jaffar [8] developed a gamification model for Arabic vocabulary acquisition, showing positive teacher perceptions and improved student interest and proficiency. Halinah[9] also confirmed that gamification increases motivation among students learning Arabic cohesive devices. Furthermore, community-based initiatives such as the one led by Jubaidah [10] demonstrate the use of gamified digital tools like Genially to train Arabic teachers in creating interactive reading games. Brilliant[11] highlights the effectiveness of real-time feedback in tools like Gimkit, showing that they enhance engagement and comprehension, contributing to improved academic outcomes.

Although gamification has been shown to enhance Arabic language learning—particularly in grammar, vocabulary, and student engagement—research specifically examining its effectiveness in improving Arabic listening skills remains limited. Most studies have not focused on listening as a primary skill, especially among undergraduate students. Therefore, this study aims to address that gap by investigating how gamification can enhance Arabic listening comprehension and learner engagement at the university level.This study differs from previous research in several ways, including the theme of focusing on the influence of gamification in listening skills learning for students at STAI Masjid Syuhada

[7] Yuslina Mohamed, dkk, *Effectiveness of Arabic Grammar Gamification "Ana Sibawayh" in Teaching and Learning: A Survey Study on FPBU Students at USIM, Al-Azkiyaa International Journal of Language and Education, DOI: https://doi.org/10.33102/alazkiyaa.v1i1.12*

[8] Mohammad Najib Jaffar, dkk, *Development of Arabic Vocabulary Gamification Model: A Pilot Study, Journal of Advance Research in Computing and Application, DOI: https://doi.org/10.37934/arca.34.1.118*

[9] Nurul Hanilah Mohd Ismath, dkk, *The effectiveness of gamification in learning Arabic cohesive devices, The Journal Attarbawiy Malaysian Journal of Education, DOI: https://doi.org/10.53840/attarbawiy.v6i2.96*

[10] Siti Jubaidah, dkk, Peningkatan Kompetensi Bahasa Arab Guru RA Maria Ulfah Melalui Pendekatan Gamifikasi Berbasis Genially, Vol. 5 No. 6 (2024): Vol. 5 No. 6 Tahun 2024, https://doi.org/10.31004/cdj.v5i6.35922

[11] Ian Brilliant, dkk, Pengaruh Penggunaan Media Pembelajaran Gimkit sebagai Gamefikasi Terhadap Pembelajaran Bahasa Indonesia di Kelas 5 Sekolah Dasar, Seminar Nasional Sosial Sains, Pendidikan, Humaniora (SENASSDRA), Volume 3 No 3, 610-618, 2024, SEMINAR NASIONAL SOSIAL, SAINS, PENDIDIKAN, HUMANIORA (SENASSDRA)

Yogyakarta, which aims to improve listening skills in Arabic. This study employs a quantitative research design.

METHOD

This study employs a quantitative approach with a correlational method. It uses correlation to measure the effect of gamification on listening skills learning. It helps to understand the extent to which the application of gamification elements relates to students' learning outcomes in terms of listening skills.

This Research Design will measure the relationship between the application of gamification and listening learning outcomes by using interviews to collect data on how often and how intensively gamification elements are used in the classroom, as well as to assess students' performance in listening tests.

This study's population consists of third-semester students from the Arabic Language Education program for the 2024/2025 academic year, odd semester, at STAI Masjid Syuhada Yogyakarta. The sample for this study is taken entirely all students.

The instruments used in this study include a questionnaire designed to measure students' abilities and perceptions regarding gamification-based learning. Data will be collected through questionnaires, observations, and documentation. The questionnaire will be used to assess the development of students' listening skills and the impact of gamification.

Observation is a method used to study nonverbal behavior in research. The success of this method depends on the observer's ability to observe and listen to the research subject. The observer then draws conclusions based on their observations[12]. Observations will involve direct observation of student activities during gamification-based learning. Documentation will support other data.

Data will be analysed using the following techniques are assumption testing consists of homogeneity, normality, and linearity tests and hypothesis testing consists of correlation tests, regression tests, significance tests of coefficients, and determination tests.

[12] Muri Yusuf, 2014, *MetodePenelitian: Kuantitatif, Kualitatif, Dan Penelitian Gabungan,* Jakarta: Kencana, hlm.384.

RESULT AND DISCUSSION

This study aims to determine the effect of gamification on improving students' listening skills in Teaching listening skills program at Islamic College of Syuhada Mosque Yogyakarta for third-semester students in the Arabic Language Education program, totalling 8 students.

In this section, the stages of presenting the research data will be outlined and divided into three phases: 1) Research Instruments, 2) Assumption Testing, and 3) Hypothesis Testing. Each phase will be detailed as follows:

a. Research Instrument Testing

The research instrument that has been developed will be tested through two evaluations, namely:

1. Validity Test

The validity test is used to determine whether the items in the questionnaire are valid. The instrument used for measurement in this study is a questionnaire, which consists of 12 items for the gamification variable and 12 items for the listening skills variable. Referring to the existing theory, an item is considered valid if the calculated r (r count) is greater than the table r (r table) with a minimum coefficient of 0.30. If an item has a coefficient below 0.30, it is considered invalid. Below are the results of the validity test for each research variable:

Table 1: Recapitulation of the Validity Test for the Effect of Gamification

No	Item	Coefficient	Description
1	Item 1	0,437176	Valid
2	Item 2	0,383502	Valid
3	Item 3	0,844581	Valid
4	Item 4	0,082374	Invalid
5	Item 5	0,790279	Valid
6	Item 6	0,737512	Valid
7	Item 7	0,674066	Valid
8	Item 8	0,471538	Valid
9	Item 9	0,726496	Valid
10	Item 10	0,443975	Valid
11	Item 11	0,497027	Valid
12	Item 12	0,054654	Invalid

The validity test was conducted to assess whether each item in the gamification questionnaire was suitable for measuring the intended construct. The criterion used refers to the correlation coefficient value (r count) compared to the critical r value (r table), with a minimum threshold of **0.30**. An item is considered **valid** if its r count > 0.30, and **invalid** if below this threshold.

Based on Table 1, out of the 12 items tested for the **gamification variable**, **10 items** were found to be **valid** with r count values ranging from **0.383 to 0.844**, indicating a good level of correlation with the total score. These valid items are Item 1, 2, 3, 5, 6, 7, 8, 9, 10, and 11. Meanwhile, **2 items**—**Item 4** (**r = 0.082**) and **Item 12** (**r = 0.055**)—were categorized as **invalid**, as their correlation coefficients fell below the 0.30 threshold.

This result indicates that most of the items designed to measure the gamification variable are reliable and suitable for further analysis, although Item 4 and Item 12 may need to be revised or removed in subsequent studies to improve the overall instrument validity.

Table 2: **Recapitulation of the Validity Test for Listening Skills**

No	Item	Coefficient	Description
1	Item 1	0,321781	Valid
2	Item 2	-0,08407	Invalid
3	Item 3	0,371382	Valid
4	Item 4	0,900053	Valid
5	Item 5	-0,51808	Invalid
6	Item 6	0,100787	Invalid
7	Item 7	0,165115	Invalid
8	Item 8	0,566319	Valid
9	Item 9	0,916972	Valid
10	Item 10	0,916972	Valid
11	Item 11	0,626155	Valid
12	Item 12	0,655763	Valid

The validity test was carried out to determine the appropriateness of each item in measuring the **listening skills** variable. As per the established criterion, an item is considered **valid** if its correlation coefficient (r count) is greater than **0.30**; otherwise, it is considered **invalid**.

Referring to Table 2, out of the 12 items tested:

- **8 items** were declared **valid**, with r count values above the 0.30 threshold. These include Item 1 (0.322), Item 3 (0.371), Item 4 (0.900), Item 8 (0.566), Item 9 (0.917), Item 10 (0.917), Item 11 (0.626), and Item 12 (0.656). These values suggest that the items have a good correlation with the total score and are suitable for further use in the research instrument.
- However, **4 items** were found to be **invalid** due to r count values below 0.30. These are Item 2 (-0.084), Item 5 (-0.518), Item 6 (0.101), and Item 7 (0.165). The negative and low coefficients indicate that these items do not sufficiently reflect the construct of listening skills and may introduce noise into the data if retained.

In conclusion, while the majority of the items in the listening skills instrument are valid, a review or revision of the four invalid items is recommended to enhance the overall reliability and precision of the questionnaire.

2. **Reliability Test**

The method used to calculate reliability is Cronbach's Alpha. The reliability test itself is calculated using SPSS version 22, with the following results:

Table 3: **Results of the Reliability Test for the Effect of Gamification**

Reliability Statistics

Cronbach's Alpha	N of Items
,968	12

Source: Data processed using SPSS 22

The reliability of the questionnaire items for the **gamification** variable was tested using the **Cronbach's Alpha** method through SPSS version 22. This method assesses the internal consistency of multiple items within a single construct. A Cronbach's Alpha value of **0.70 or above** is generally considered acceptable, while values above **0.90** indicate excellent reliability.

Based on the results shown in Table 3, the gamification variable achieved a **Cronbach's Alpha of 0.998** with **12 items**, indicating **extremely high internal consistency**. This suggests that the items used to measure the effect of gamification are highly reliable and consistently reflect the same underlying concept.

Table 4: **Results of the Reliability Test for Listening Skills**

Reliability Statistics

Cronbach's Alpha	N of Items
,933	12

Source: Data processed using SPSS 22

The reliability test for the **listening skills** variable was carried out using the **Cronbach's Alpha** method via SPSS version 22. Cronbach's Alpha is a standard measure to assess the internal consistency of a set of questionnaire items. A coefficient value of **0.70 or higher** is considered acceptable, while a value above **0.90** indicates **excellent reliability**.

As presented in Table 4, the **Cronbach's Alpha score for the listening skills variable is 0.933** with a total of 12 items. This value demonstrates a **very high level of internal consistency**, indicating that the items are highly correlated and consistently measure the construct of Arabic listening skills. Thus, the questionnaire instrument for listening skills is **reliable** and appropriate for use in further stages of the research, such as hypothesis testing and data interpretation.

b. **Assumption Testing**

Assumption testing consists of three stages: homogeneity test, normality test, and linearity test. The data for these three tests are presented below:

1. **Homogeneity Test**

The homogeneity test can be explained as follows: if the significance value is greater than 0.05, the data is considered homogeneous or similar; conversely, if the significance value is less than 0.05, the data is considered non-homogeneous or different. Below are the results of the homogeneity test:

Table 5: Results of the Homogeneity Test

ANOVA

Gamifikasi

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,326	6	,054	,658	,690
Within Groups	,413	5	,083		
Total	,739	11			

A homogeneity test was conducted using the **One-Way ANOVA** method to determine whether the data across groups have equal variances. This is an essential assumption before proceeding to certain parametric tests. The main reference in this test is the **significance value** (**Sig**.), where:

a. If **Sig**. **> 0.05**, the data is considered **homogeneous** (variances are equal).

b. If **Sig**. **< 0.05**, the data is considered **non-homogeneous** (variances differ significantly).

Based on the ANOVA table above, the **significance value is 0.690**, which is **greater than 0.05**. Therefore, it can be concluded that the data is **homogeneous**. This indicates that the variances among the different groups in the gamification variable are equal, and the data meets the assumption of homogeneity required for further parametric statistical analysis.

2. Normality Test

In the normality test, if the significance value is greater than 0.05, the data is considered normal; however, if it is less than 0.05, the data is considered non-normal. Below are the results of the normality test using SPSS 22:

Table 6: Results of the Normality Test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Ganifikasi	,147	12	,200*	,913	12	,230
Standardized Residual for Mendengar	,167	12	,200*	,944	12	,548

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

To determine whether the data for the **gamification** and **listening skills** variables are normally distributed, a normality test was conducted using both the **Kolmogorov-Smirnov** and **Shapiro-**

Wilk tests. These tests assess whether the sample distribution significantly deviates from a normal distribution. The decision rule is:

a. If the **Sig**. **value > 0.05**, the data is considered **normally distributed**.

b. If the **Sig**. **value < 0.05**, the data is considered **not normally distributed**.

Gamification Variable

a. **Kolmogorov–Smirnov Sig**. = 0.200

b. **Shapiro–Wilk Sig**. = 0.230

Both significance values are greater than 0.05, indicating that the data for the **gamification** variable is **normally distributed**.

Listening Skills Variable

a. **Kolmogorov–Smirnov Sig**. = 0.200

b. **Shapiro–Wilk Sig**. = 0.548

Similarly, these values are above 0.05, indicating that the data for the **listening skills** variable is also **normally distributed**.

3. Linearity Test

The linearity test is conducted through Deviation from Linearity. If the significance value is greater than 5% (or 0.05), it indicates that the relationship between the independent variable and the dependent variable is non-linear. Conversely, if the significance value is less than 5% (or 0.05), it indicates that there is a linear relationship between the independent variable and the dependent variable. The results of the linearity test in this study are as follows:

Table 7: Results of the Linearity Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,001	1	,001	,010	,923[b]
	Residual	,730	10	,073		
	Total	,731	11			

a. Dependent Variable: Gamifikasi

b. Predictors: (Constant), Mendengar

Uji linearitas dilakukan untuk mengetahui apakah terdapat hubungan yang linear antara variabel bebas (Listening Skills) dan variabel terikat (Gamification). Salah satu cara untuk menguji linearitas adalah melalui analisis ANOVA, dengan fokus pada nilai **signifikansi** (**Sig**.) pada baris "Regression".

a. Jika nilai **Sig**. **< 0.05**, maka terdapat hubungan yang **signifikan dan linear** antara kedua variabel.

b. Jika nilai **Sig**. **> 0.05**, maka **tidak terdapat hubungan linear** yang signifikan.

Berdasarkan hasil ANOVA pada tabel:

1. **F hitung = 0.010**
2. **Sig**. **= 0.923** (lebih besar dari 0.05)

c. Hypothesis Testing

In the final stage of testing the research instruments, the hypothesis test is conducted, which consists of four tests: a) correlation test, b) regression test, c) significance test of coefficients, and d) determination test. Below are the results of the tests:

1. Correlation Test

This study uses Spearman's formula. The purpose of this test is to determine the relationship or influence between the two variables. Below are the results of the correlation test:

Table 8: Results of the Correlation Test

Correlations

			Gamifikasi	Mendengar
Spearman's rho	Gamifikasi	Correlation Coefficient	1,000	,123
		Sig. (2-tailed)	.	,704
		N	12	12
	Mendengar	Correlation Coefficient	,123	1,000
		Sig. (2-tailed)	,704	.
		N	12	12

This study aims to investigate the relationship between **gamification** and **listening skills**. Based on the Spearman's rho correlation output:

a. The **correlation coefficient** between gamification and listening is **0.123**, indicating a **very weak positive relationship** between the two variables.

b. The **significance value** (**Sig. 2-tailed**) is **0.704**, which is much higher than the conventional alpha level of 0.05. This means the correlation is **not statistically significant**.

c. The number of respondents (N) involved in the analysis is **12**.

2. Regression Test

The regression test is conducted using a simple analysis aimed at determining the value of the simple regression equation. The regression test will be calculated using SPSS version 22. Below are the results of the regression test:

Table 9: Results of the Regression Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,001	1	,001	,010	,923[b]
	Residual	,730	10	,073		
	Total	,731	11			

a. Dependent Variable: Gamifikasi

b. Predictors: (Constant), Mendengar

The table above presents the results of an ANOVA test conducted to examine whether **listening skills** significantly predict **gamification**.

a. The **F-value** is **0.010**, with a **significance value** (**Sig.**) **of 0.923**.

b. Since the p-value (0.923) is far above the conventional alpha level of 0.05, it can be concluded that the **regression model is not statistically significant**.

c. This means that **listening skills do not significantly predict the level of gamification**.

d. The **Sum of Squares** for regression is 0.001 compared to the **residual** sum of 0.730, showing that almost all the variance in gamification is **not explained** by listening skills.

3. Significance Test of Coefficients

The significance test of the correlation coefficient is conducted using SPSS version 22. Based on the calculations, the data obtained is as follows:

Table 10: Results of the Significance Test of Coefficients

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,072	1	,072	1,081	,323[b]
	Residual	,667	10	,067		
	Total	,739	11			

a. Dependent Variable: Gamifikasi

b. Predictors: (Constant), Kemampuan Mendengar

The ANOVA table above presents the results of a regression analysis examining whether **listening ability** (**Kemampuan Mendengar**) significantly predicts **gamification**.

a. The **F–value** is **1.081**, with a **significance** (**Sig.**) **value of 0.323**.
b. Since the p-value is **greater than 0.05**, the model is **not statistically significant**.
c. This means that **listening ability does not significantly influence or predict gamification** in this sample.
d. The **Sum of Squares for regression is 0.072**, while the **residual sum is 0.667**, indicating that most of the variation in gamification is **not explained** by listening ability.

4. Determination Test

The calculation of the coefficient of determination is conducted to determine the extent of the influence of variable X on variable Y, expressed as a percentage. The calculation is performed using SPSS 22, with the following results:

Table 11: Results of the Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,031[a]	,001	-,099	,27023

a. Predictors: (Constant), Mendengar

b. Dependent Variable: Gamifikasi

The table summarizes the regression model in which **listening skills** (**Mendengar**) are used to predict **gamification**.

a. The **correlation coefficient** (**R**) is **0.031**, indicating a **very weak positive relationship** between listening skills and gamification.

b. The **coefficient of determination** (**R Square**) is **0.001**, meaning that **only 0.1% of the variance** in gamification can be explained by listening skills.

c. The **Adjusted R Square** is **–0.099**, which is negative—this often occurs when the model does not improve upon simply using the mean as a predictor. It suggests that the **model fits the data very poorly**.

d. The **Standard Error of the Estimate** is **0.27023**, indicating the average distance that the observed values fall from the regression line.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,520	,143		3,629	,005
	Mendengar	-,027	,270	-,031	-,099	,923

a. Dependent Variable: Gamifikasi

This table provides the coefficients for the regression model in which **listening skills** (**Mendengar**) are used to predict **gamification**.

a. The **unstandardized coefficient** (**B**) for listening is **–0.027**, which means that for every one-unit increase in listening ability, gamification is predicted to decrease by 0.027 units. However, this effect is **extremely small and negative**.

b. The **standardized coefficient** (**Beta**) is **–0.031**, also indicating a **very weak and negative relationship**.

c. The **t–value** for the listening variable is **–0.099** and the corresponding **Sig**. (**p–value**) is **0.923**. This is far above the commonly accepted threshold of 0.05, which indicates that **the effect of listening on gamification is not statistically significant**.

d. The **constant** (**intercept**) is **0.520**, with a **significant p–value of 0.005**, meaning that the baseline level of gamification (when listening = 0) is statistically different from zero.

Discussion

This study aimed to investigate the relationship between listening skills and gamification in the context of Arabic language learning. The analysis involved several key stages, including instrument validation, reliability testing, assumption checks, and hypothesis testing.

a. Instrument Validity and Reliability

The validity test showed that most items in both the gamification and listening skills questionnaires were valid. Specifically, 10 out of 12 items for the gamification variable and 8 out of 12 items for listening skills demonstrated correlation coefficients above the threshold of 0.30. This indicates that the majority of the items effectively measured the intended constructs. However, several items (2 for gamification and 4 for listening skills) were found invalid and may require revision or removal in future studies to improve measurement precision.

Reliability analysis using Cronbach's Alpha yielded very high internal consistency scores:

1. 0.998 for gamification
2. 0.933 for listening skills

These results confirm that the questionnaire instruments are highly reliable and suitable for further statistical analysis.

b. Assumption Testing

Before conducting hypothesis testing, assumption checks were carried out to ensure data suitability for parametric tests:

1. Homogeneity: The data met the assumption of homogeneity (Sig. = 0.690 > 0.05), indicating equal variances across groups.

2. Normality: Both the Kolmogorov-Smirnov and Shapiro-Wilk tests indicated that data for gamification and listening skills followed a normal distribution (all Sig. values > 0.05).
3. Linearity: The linearity test revealed a non-significant result (Sig. = 0.923 > 0.05), suggesting no linear relationship between listening skills and gamification.

These findings indicate that while the data met most parametric assumptions, the lack of linearity might influence regression results.

c. Hypothesis Testing

The results of the hypothesis testing do not support a significant relationship between listening skills and gamification:

1. Correlation Test:
    a. The Spearman's rho correlation coefficient was 0.123, indicating a very weak positive relationship.
    b. The p-value (0.704) was much greater than 0.05, suggesting the correlation is not statistically significant.
2. Regression Test and Coefficient Significance:
    a. Regression analysis produced an F-value of 0.010 with a Sig. of 0.923, indicating that listening skills do not significantly predict gamification.
    b. The unstandardized coefficient (B = -0.027) and standardized Beta (-0.031) were both negative and minimal, further confirming a negligible effect.
    c. The t-value (-0.099) and corresponding p-value (0.923) from the coefficients table reinforce that the predictor variable is statistically insignificant.
3. Determination Test:
    a. The R Square value was 0.001, meaning only 0.1% of the variation in gamification could be explained by listening skills.
    b. An Adjusted R Square of -0.099 suggests that the model fits the data worse than a simple mean model, indicating very poor explanatory power.

d. Interpretation and Implications

The results indicate that listening skills do not have a significant effect on gamification levels. This might imply that while both constructs are important in language learning, they operate independently in the context of the intervention or sample studied. It is possible that other factors—such as visual learning preferences, interactive tasks, or intrinsic motivation—play a more prominent role in how gamification influences learning.

Another consideration is that the sample size (N = 12) was relatively small, which may have limited the power to detect significant effects. Future research should consider increasing the sample size and exploring additional variables that may mediate or moderate the relationship between gamification and language learning outcomes.

CONCLUSIONS

Based on the results of the instrument testing, assumption testing, and hypothesis testing, the following conclusions can be drawn:

1. **Research Instrument**:
    a. **Validity**: Most items in the **gamification** variable (10 out of 12 items) and **listening skills** variable (8 out of 12 items) were found to be valid, with correlation coefficients above 0.30. However, several items were invalid and should be revised or removed in future research.
    b. **Reliability**: The reliability tests yielded very high Cronbach's Alpha values: 0.998 for gamification and 0.933 for listening skills, indicating excellent internal consistency and instrument reliability.
2. **Assumption Testing**:
    a. **Homogeneity**: The data is homogeneous, as indicated by a significance value of 0.690 (> 0.05).
    b. **Normality**: The data for both variables is normally distributed, supported by significance values above 0.05 in both the Kolmogorov-Smirnov and Shapiro-Wilk tests.

c. **Linearity**: No linear relationship was found between listening skills and gamification, as the *Deviation from Linearity* significance value was 0.923 (> 0.05).

3. **Hypothesis Testing**:

a. **Correlation**: The relationship between listening skills and gamification was very weak (r = 0.123) and statistically insignificant (Sig. = 0.704).

b. **Regression and Coefficient Significance**: The regression model was not significant (Sig. = 0.923), and listening skills did not significantly predict gamification (t = -0.099; Sig. = 0.923).

c. **Determination Coefficient**: The R Square value was only 0.001 (0.1%), indicating that listening skills explained only 0.1% of the variance in gamification, with the remaining variance likely influenced by other factors.

This study concludes that **there is no significant relationship or influence between Arabic listening skills and the implementation of gamification in learning**. Therefore, it is recommended to explore other variables that may have a stronger impact on gamification effectiveness, such as learning motivation, student interest, or media interactivity.

Reference

Ade Irpan Hidayat, et al. (2024). *Perancangan gamifikasi pada aplikasi pembelajaran Bahasa Arab menggunakan metode G.A.M.E. e-Proceeding of Engineering, 11*(4), 4869.

Bunchi Caiza, K. A. (n.d.). *Gamification and the listening skill*. Universidad Técnica de Ambato. https://repositorio.uta.edu.ec/handle/123456789/37266

Che Ku Nor Asiah, et al. (n.d.). *Pendekatan gamifikasi dalam pembelajaran Al-'Adad wa Al-Ma'dud dalam kalangan pelajar*. *Al-Muqaddimah: Online Journal of Islamic History and Civilization*.

Dhenisha Agustine Fadilla, & Sarah Nurfadhilah. (2022). Penerapan gamification untuk meningkatkan motivasi belajar siswa dalam pembelajaran jarak jauh. *Inovasi Kurikulum, 19*(1). https://doi.org/10.17509/jik.v19i1.42778

Febrianto Hakeu, Pakaya, I. I., & Tangkudung, M. (n.d.). *Pemanfaatan media pembelajaran berbasis gamifikasi dalam proses pembelajaran di MIS Terpadu Al-Azhfar*. https://doi.org/10.58518/awwaliyah.v6i2.1930

Fitri Nur Mahmudah. (n.d.). *Analisis data penelitian kualitatif manajemen pendidikan berbantuan software Atlas.TI 8*. Yogyakarta: UAD Press.

Hauna Gina Mulia, et al. (n.d.). *Pengaruh gamifikasi terhadap keaktifan peserta didik dalam pembelajaran maharah Bahasa Arab*. OPSI. https://oppsi.or.id/index.php/oppsi/article/view/XXX

Ian Brilliant, et al. (2024). Pengaruh penggunaan media pembelajaran Gimkit sebagai gamefikasi terhadap pembelajaran Bahasa Indonesia di kelas 5 sekolah dasar. *Seminar Nasional Sosial Sains, Pendidikan, Humaniora (SENASSDRA), 3*(3), 610–618.

Ismath, N. H. M., et al. (n.d.). The effectiveness of gamification in learning Arabic cohesive devices. *The Journal Attarbawiy: Malaysian Journal of Education*. https://doi.org/10.53840/attarbawiy.v6i2.96

Jaffar, M. N., et al. (n.d.). Development of Arabic vocabulary gamification model: A pilot study. *Journal of Advance Research in Computing and Application*. https://doi.org/10.37934/arca.34.1.118

Jubaidah, S., et al. (2024). Peningkatan kompetensi Bahasa Arab guru RA Maria Ulfah melalui pendekatan gamifikasi berbasis Genially. *Cendekia: Jurnal Ilmiah Pendidikan, 5*(6). https://doi.org/10.31004/cdj.v5i6.35922

Mohamed, Y., et al. (n.d.). Effectiveness of Arabic grammar gamification "Ana Sibawayh" in teaching and learning: A survey study on FPBU students at USIM. *Al-Azkiyaa International Journal of Language and Education*. https://doi.org/10.33102/alazkiyaa.v1i1.12

Muri Yusuf. (2014). *Metode penelitian: Kuantitatif, kualitatif, dan penelitian gabungan*. Jakarta: Kencana.

Srimuliyani. (n.d.). Menggunakan teknik gamifikasi untuk meningkatkan pembelajaran dan keterlibatan siswa di kelas. *EDUCARE: Jurnal Pendidikan dan Kesehatan*.

Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.