

Attitudes of English majors towards the use of the Quizizz platform in English language learning

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ABSTRACT

This mixed-methods study explores the attitudes of English majors towards the use of Quizizz in their English language learning and examines variations in these attitudes based on gender and English proficiency levels. The study included 200 English majors from a Vietnamese university who responded to questionnaires. Fifteen students consented to participate in focus group discussions, representing each year of the study program. In contrast to previous research, this study revealed that participants expressed negative attitudes toward the use of Quizizz, as they did not find it beneficial or useful for their learning. There were no significant differences in students' attitudes, including affective, behavioral, and cognitive components, towards the use of Quizizz across different demographic variables. This study provides several recommendations for the effective utilization of Quizizz in EFL (English as a Foreign Language) classrooms. It also underscores the need for further research to investigate the correlation between English majors' attitudes toward Quizizz and other relevant factors in EFL settings.

1. Introduction

In an age of technological advancement, technology has exerted a significant influence on virtually every aspect of life, particularly in the realm of education. Technology serves as a potent tool with the capability to enhance education through various means. For instance, it aids educators in creating instructional materials more effortlessly and introduces novel avenues for collaborative learning and interaction (Zhao, 2019). The progress of technology and the emergence of innovative ideas have led to the emergence of the novel concept known as gamification, which holds considerable sway over the field of education. Gamification involves incorporating elements and principles from games into non-game activities (Kiryakova, Angelova, & Yordanova, 2014). Among the gamification tools widely embraced for learning and teaching across the globe, Quizizz stands out as one of the most popular because it is accessed and used easily, available on any device, and free of charge (Basuki & Hidayati, 2019; Suharni, Amelia, & Asty, 2021). In Vietnamese foreign language classrooms, Quizizz has become a familiar companion for a majority of students (Pham, 2022), being an indispensable resource that offers numerous benefits for both learning and teaching. The advantages of using Quizizz in language classrooms include promoting student engagement, active learning, individualized learning, flexibility, and formative feedback (Mohamad, Kadhim, Santos, & Taha, 2021; Pham, 2022; Suharni et al., 2021). However, Quizizz comes with its own set of challenges. It can create technology barriers, high anxiety levels, generation gaps, data privacy, and cheating concerns

(Junior, 2020; Mohamad et al., 2021; Zuhriyah & Pratolo, 2020). Generally, research on the use of Quizizz in EFL (English as a Foreign Language) settings can offer evidence-based insights that inform pedagogical decisions, support professional development for educators, and contribute to the ongoing advancement of effective language teaching practices.

In the Vietnamese context, scholars have explored important aspects of Quizizz, such as students' learning experiences with Quizizz and its role as an assessment tool (Nguyen, 2022). They have also investigated Quizizz's effects as a supportive learning tool in EFL classrooms (Bui & Vu, 2022; Nguyen, Do, & Vu, 2021; Pham, 2023), as well as students' attitudes toward Quizizz in English classrooms (Pham, 2022; Vo, Pham, & Huynh, 2021). According to Pham (2022), scholars have not paid much attention to understanding learners' attitudes towards the use of Quizizz in language learning (p. 279). Therefore, this study was conducted to explore the attitudes of English majors towards the use of Quizizz in learning English within the Vietnamese context. It aims to investigate whether there were significant differences in English majors' attitudes toward Quizizz based on gender and English proficiency level. Understanding how male and female students perceive the use of Quizizz can help educators tailor their instructional methods. For example, if one gender finds Quizizz more engaging or effective, instructors can adapt their teaching strategies accordingly. Investigating attitudes based on gender can reveal potential gender biases or disparities in the use of educational technology. If there are significant differences, it may prompt educators to explore strategies to make technology-enhanced learning more inclusive for all students. In addition, investigating attitudes toward the use of Quizizz based on proficiency levels can help educators identify whether this tool is more beneficial for certain proficiency groups. It can guide decisions on when and how to incorporate Quizizz into the curriculum.

To obtain the above aims, the present study addresses the following research questions:

1. What are English majors' attitudes towards the use of Quizizz in English language learning?
2. Are there significant differences in students' attitudes toward Quizizz based on gender and English proficiency levels?

2. Theoretical basis

2.1. Quizizz

Quizizz represents an educational platform based on games, introducing interactive multiplayer activities within the classroom. It incorporates game-like attributes such as engaging themes, music, and customizable avatars, fostering competition among participants and igniting their curiosity and involvement in the learning process (Zhao, 2019). Quizizz functions as an online platform, accessible from any internet-connected device, offering students the opportunity to engage in gaming, quizzes, and interactions with both their peers and instructors (Pavita & Nirmala, 2021). Quizizz can be structured as a live game or as homework, culminating in the presentation of correct answers and a review of each question upon completion (Zulfa & Ratri, 2022). Quizizz serves as a versatile tool in the educational setting, adding an element of excitement to lessons and inspiring students' enthusiasm for learning. In addition, this platform can serve as an immediate means to assess students' knowledge (Patisung, 2020). Teachers can oversee the progress of quizzes and generate reports to evaluate students' performance without manually calculating the scores (Junior, 2020). For many EFL teachers, Quizizz is the right educational tool that is helpful in English classrooms and can facilitate the learning process of students.

2.2. Attitudes

Joshi, Kale, Chandel, and Pal (2015) indicated that attitudes signify a favoured manner of reacting or behaving in specific situations, shaped and acquired through prolonged social interactions, and grounded in beliefs and concepts concerning objects, subjects, or ideas. Patisung (2020) defined attitudes as an individual's sentiments and opinions regarding something. Attitudes serve as a mechanism for evaluating the positivity or negativity of objects, entities, or individuals. Montano and Kasprzyk (2008) explained that attitudes stem from the internal beliefs an individual holds about the consequences or qualities associated with engaging in a certain behaviour (behavioural beliefs), which are further influenced by evaluations of those outcomes or attributes. Hence, an individual with steadfast convictions that performing a certain behaviour yields favourable outcomes will possess a positive attitude toward that behaviour, while someone convinced that the behaviour leads to unfavourable consequences will harbour a negative attitude. Put differently, attitudes are a tool for assessing entities based on a person's thoughts, feelings, observations, experiences, and beliefs about them.

This study adopted the tri-component model of attitudes, commonly referred to as the ABC Model of attitudes (Pickens, 2005), which encompasses three components: the affective, cognitive, and behavioural components. Pham (2022) elaborated that the affective component pertains to an individual's emotions, feelings, and psychological states towards an activity, signifying our emotional stance towards something (e.g., I have a fondness for rural living). The cognitive component alludes to advanced cognitive processes and skills proposed by Bloom and Krathwohl (2020), indicating intellectual reflections regarding something (e.g., I believe that living in the countryside is advantageous due to its tranquillity and reduced pollution levels). Meanwhile, the behavioural component involves an individual's responses or reactions, indicating actions related to something (e.g., I aspire to relocate to the countryside). Pickens (2005) explained that while the emotional and cognitive elements of attitudes reside within an individual, it is possible to observe a person's attitude through their subsequent actions (p. 44).

2.3. Students' attitudes toward the use of Quizizz in EFL classrooms

Research on the use of Quizizz in EFL settings has primarily focused on two themes: using Quizizz as an assessment instrument and as a tool to enhance English language learning. Regarding Quizizz's role as an assessment tool, the majority of findings from previous research have shown that students hold a favorable view of Quizizz (Amalia, 2020; Rahayu & Purnawarman, 2019). For example, Zuhriyah and Pratolo (2020) undertook a qualitative case study focused on students' perspectives concerning the utilization of Quizizz as an assessment tool in an EFL class in Indonesia. The students found Quizizz to be an engaging tool that bolstered their self-assurance, heightened their motivation, and contributed to the enhancement of their reading skills. According to the students, prizes were announced using memes that appeared alongside the answer results, triggering positive emotions and reducing anxiety. Besides, the students were given a second chance to rectify their mistakes, which motivated them to analyse incorrect answers. The findings of this research unveiled that students held positive attitudes towards the incorporation of Quizizz due to its engaging nature and the availability of beneficial assessment features. In a similar vein, Mohamad et al. (2021) conducted a quantitative study to explore 91 postgraduate students' views of Quizizz as an online game-based formative assessment in a Malaysian EFL teaching class. Using a questionnaire consisting of 32 question items, the authors found out that students perceived Quizizz as a positive and effective learning tool, which provided positive reinforcement, motivation, and immediate feedback, although they encountered some challenges when using the tool, such as learning anxiety. In the Vietnamese

context, Nguyen (2022) examined the online formative assessment processes used by Quizizz for practicing mock English tests and students' perceptions of Quizizz. The researcher conducted a mixed-method study with 97 English majors at Hanoi University of Industry. The study confirmed that using Quizizz for formative assessment successfully improved students' performance during the teaching-learning process, and Quizizz was positively viewed as an effective and engaging online formative assessment tool.

In the context of employing Quizizz as a supportive learning tool in EFL classrooms, prior research has also documented students' positive attitudes towards the platform (Dhamayanti, 2021; Halim, Hashim, & Yunus, 2020). This positivity was influenced by Quizizz's interactive and gamified approach coupled with its ability to provide immediate feedback and personalized learning experiences. For instance, Pham (2022) conducted an investigation into university students' attitudes towards Quizizz through the employment of a 24-item questionnaire and semi-structured interviews. Findings showed that 116 students had positive attitudes towards the incorporation of Quizizz in their EFL learning experiences. This positive reception was attributed to Quizizz's ability to enhance learning motivation, engagement, and memory retention. Participants reported that Quizizz games assisted them in recalling lessons in detail, leading to improved memory of vocabulary and grammar concepts. Besides, the resulting dashboard of a Quizizz game enabled the students to review and analyse wrong answers, thereby facilitating a deeper understanding of the lessons. The students also expressed their excitement since Quizizz heightened their competitiveness and engagement during game sessions.

The findings from previous studies have consistently affirmed students' positive attitudes toward the integration of Quizizz in EFL classrooms. However, upon closer examination of the participants in these studies, it becomes evident that more research should be conducted involving Vietnamese participants. Furthermore, despite the widespread exploration of this topic in the literature, few studies have sought to compare differences in students' attitudes across variables. Additionally, many of these studies lack crucial information regarding the psychometric properties of the instruments employed. For instance, Suharni et al. (2021) utilized a questionnaire to investigate students' attitudes toward Quizizz, yet they omitted details regarding the validity and reliability of the questionnaires. This omission raises concerns about the meaningfulness of the obtained scores and poses a potential threat to the interpretations of the results. Hence, this study aims to address the existing gap in the literature by examining the attitudes of Vietnamese students majoring in English toward the utilization of Quizizz in EFL classrooms.

3. Methodology

3.1. Research context

At the faculty where the study was conducted, the current curriculum for EFL majors spans four years, with the first two years dedicated to building foundational skills and knowledge. During this period, coursework, including general education requirements, is taught in Vietnamese. Concurrently, English macro skills, grammar, vocabulary, and electives in areas of interest within the broader field of English and language studies are introduced in English. In the last two years, the curriculum has shifted towards more advanced coursework and specialization subjects, all delivered in English. This phase aims to progressively enhance students' language proficiency while fostering a deep understanding of English literature, linguistics, and teaching methodologies.

Online lessons make up 20% of the total course periods, as required by university regulations. In the context of English as a Foreign Language (EFL) classrooms, instructors are encouraged to integrate game-based activities. There is a range of game-based tools and applications available, including Kahoot!, Socrative, Quizlet, and Quizizz. While teachers received official comprehensive training on the use of Quizizz and gained experience with it during the Covid-19 pandemic, they were not provided with specific instructions regarding the integration of Quizizz activities into EFL teaching, nor were there guidelines on its frequency within the courses. The preparation and decision-making were left entirely to the teachers' discretion. Consequently, Quizizz, rather than other game-based tools, was selected as the focus of investigation in the present study.

3.2. Participants

A convenient sampling method was employed to select participants for the present study. Invitations to participate in the research were sent via email to English majors at a Vietnamese university. Participants consisted of 82 males (41%) and 118 females (59%). Seniors made up 32% of the participants, followed closely by sophomores with 30%. Freshmen and juniors each accounted for 19% of participants. Regarding English proficiency, 35.5% of students were classified as upper-intermediate, followed by 33.5% at the intermediate level. While 11.5% were at the elementary level, 9.5% were at an advanced level. Eight percent of the participants were beginners and merely 2% were at the proficiency level. All students had experience using Quizizz as a tool for learning English.

3.3. Methods

This study employed a mixed-methods methodology to get a more comprehensive understanding of students' attitudes toward the use of Quizizz in English language learning (Riazi, 2017). Using a mixed-methods methodology allowed the author to address the limitations of a single method and add richness and meaning to the analysis.

3.4. The questionnaire

This study used Pham's (2022) questionnaire to assess students' attitudes toward Quizizz toward the use of Quizizz. The original questionnaire underwent a discussion between the author and teachers who had experience with Quizizz in their language classrooms to ensure it addressed the most pertinent issues. Given that the participants were English majors, the questionnaire was administered in English. Because the questionnaire was intended for online delivery, it was tested with a small sample of 50 English majors who were randomly selected from the target population and were not part of the actual study. This was done to minimize technical difficulties and potential ambiguities in meaning. First, a database of potential participants at the faculty was created. Subsequently, the random number function in Microsoft Excel was used to generate random numbers. Perneger, Courvoisier, Hudelson, and Gayet-Ageron (2014) suggested that a sample size of at least 30 students is recommended for a pre-test of a questionnaire. The author contacted the 50 selected participants to invite them to participate in the pre-test. The responses from the pre-test participants were collected and subjected to analysis. No revisions or adjustments were made to the questionnaire. After this initial testing, the questionnaire was finalized.

The questionnaire was composed of two sections. Section 1 gathered information on students' demographics, including gender, years of study, English proficiency levels, and prior Quizizz experience. Section 2 consisted of a self-rating scale with 23 questions, rated on a scale from 1 (strongly disagree) to 5 (strongly agree). The five-point Likert scale's intervals in this

study were understood as follows: From 1.00 to 1.80 indicated “Strongly disagree,” from 1.81 to 2.60 indicated “Disagree,” from 2.61 to 3.40 indicated “Neutral,” from 3.41 to 4.20 indicated “Agree,” and from 4.21 to 5.00 indicated “Strongly agree.” The attitude scale encompassed three subscales, aligning with three components of attitudes, as proposed by Pickens (2005): the affective subscale (items 1 - 8), the behavioural subscale (items 9 - 17), and the cognitive subscale (items 18 - 23). Reliability, as measured by Cronbach’s Alpha, was found to be .948, .954, and .935 for the affective subscale, the behavioral subscale, and the cognitive subscale, respectively. This indicates that the questionnaire exhibited a high level of reliability.

3.5. Focus group discussion

In this study, focus group discussions were used to complement the quantitative data. Data derived from these discussions allowed the author to gain insights into students’ experiences, perceptions, and the contexts in which participants found themselves (Creswell, 2012). This, in turn, facilitated a deeper understanding of how and why students held positive or negative attitudes. Examples of questions posed during the focus group discussions included: ‘Do you like Quizizz? Why or why not?’, ‘What challenges, if any, do you face when participating in Quizizz games in the classroom?’, and ‘Would you recommend the use of Quizizz in the classroom? Why or why not?’ The author read the literature review, with a focus on the objectives of the current study, and consulted other teachers who have used Quizizz in their EFL classrooms to generate questions for the focus group discussions. The discussions were conducted in English because the participants were English majors.

3.6. Data collection and analysis

At the outset, the researcher obtained consent from the university’s faculty leaders and then proceeded with the informed consent procedure. An email invitation was sent to three hundred English majors at the university, inviting them to participate in the study. The email explicitly outlined that participation in the research was entirely voluntary, would not affect their academic progress or performance, and guaranteed complete anonymity throughout the study. Subsequently, the questionnaire was distributed to potential participants through Google Forms. After a two-week period, 229 responses were received, of which 200 were deemed valid and utilized in the present study. Additionally, 15 students consented to participate in focus group discussions, with representation from each year of the study group, resulting in five participants per discussion group. These discussions were scheduled one week after the questionnaire’s completion. Each discussion lasted approximately 30 minutes and was audio-recorded with the participant’s consent.

Quantitative data were analyzed using SPSS 25.0 for Windows. Descriptive statistics were employed to calculate the mean scores of participants’ attitudes towards the use of Quizizz. Furthermore, a one-way MANOVA was conducted to assess potential differences in students’ attitudes based on various demographic variables. A relatively high standard deviation was observed in the present study, which is likely attributable to the diversity among students and variations in teachers’ utilization of Quizizz. Participants in the study exhibited varying levels of English proficiency, and their experience with Quizizz depended on the individual choices of teachers in the EFL classroom, without any oversight from the faculty.

Qualitative data were analyzed using the thematic analysis technique recommended by Braun and Clark (2006). The process started with a comprehensive review of the focus group data to become acquainted with its content. During the transcript review, the author identified text segments that initially served as codes relevant to the research focus, which centered on students’ attitudes toward the use of Quizizz. Subsequently, the author systematically applied

these initial codes to the entire dataset and manually highlighted corresponding sections of text. After coding the data, the author grouped similar codes into preliminary categories, forming initial themes. To refine and define these themes, the author thoroughly reviewed and analysed the content within each category. The qualitative data revealed three themes: negative emotions, Quizizz challenges, and teachers' preparation and selection of Quizizz activities.

4. Results and discussion

4.1. Results

4.1.1. Students' attitudes towards the use of Quizizz in English language learning

The results in Table 1 and Table 2 indicate that students displayed negative attitudes towards the use of Quizizz. Mean scores range from 2.40 to 2.64. The students disagreed with nearly all items on the three subscales, except for two items: 'I look forward to playing Quizizz games' (Item 10) and 'I study harder to win Quizizz games' (Item 16), where their attitudes were neutral. The mean scores for the affective, behavioral, and cognitive subscales were 2.47, 2.52, and 2.51, respectively. Overall, the students had negative emotions, lacked positive experiences with Quizizz in their language classroom, and did not perceive Quizizz as useful for their learning process.

Table 1

Mean scores of participants' attitudes

Components	N	Min.	Max.	Mean	SD
Affective	200	1	5	2.47	1.02
Behavioral	200	1	5	2.52	1.00
Cognitive	200	1	5	2.51	.986

Table 2

Mean scores of the three subscales

	Mean	SD	N
The affective subscale			
1. I feel motivated when I play Quizizz games.	2.43	1.13	200
2. I feel excited when I win Quizizz games.	2.40	1.21	200
3. I am eager to learn via Quizizz.	2.48	1.19	200
4. I find Quizizz competitive.	2.44	1.18	200
5. I feel happy about my results in Quizizz games.	2.49	1.19	200
6. I feel energetic when I play Quizizz games in class.	2.49	1.23	200
7. I feel more confident choosing the correct answers.	2.52	1.18	200
8. I feel relaxed in Quizizz sessions.	2.51	1.19	200
The behavioural subscale			
9. I focus on the questions in Quizizz games.	2.52	1.17	200
10. I look forward to playing Quizizz games.	2.64	1.12	200
11. I focus on the answers in Quizizz games.	2.46	1.25	200
12. I respond as quickly as possible to each question.	2.52	1.09	200
13. I respond as accurately as possible to each question.	2.56	1.17	200

	Mean	SD	N
14. I maintain collaboration in Quizizz games.	2.46	1.19	200
15. I maintain competitiveness in Quizizz games.	2.47	1.17	200
16. I study harder to win Quizizz games.	2.61	1.14	200
17. I expect Quizizz to be used in every lesson.	2.49	1.19	200
The cognitive subscale			
18. Quizizz helps me remember more details in my lessons.	2.60	1.11	200
19. Quizizz helps me understand my lessons better.	2.51	1.05	200
20. Quizizz helps me solve problems in my lessons faster.	2.46	1.23	200
21. Quizizz helps me compare and contrast different kinds of terms in my lessons.	2.50	1.13	200
22. Quizizz helps me make judgements about the information in my lesson.	2.52	1.12	200
23. Quizizz helps me gain more knowledge and develop more skills.	2.51	1.16	200

During their discussions, all students overwhelmingly expressed their dissatisfaction towards the use of Quizizz in their language classroom. Three themes were identified in the present study: negative emotions, Quizizz challenges, teachers' preparation and selection of Quizizz activities.

Negative emotions

All participants agreed that Quizizz games often triggered negative feelings, including anxiety, boredom, and sadness.

I feel bored using Quizizz. I think Quizizz cannot encourage my imagination and critical thinking skills. Most of the activities are memory games. I think the games are childish and easy. I wish my teachers had chosen the activities more carefully. (S1FG1)

I think I am too nervous when answering the questions. I don't like competitive games. I always perform better with paper and pen quizzes. (S2FG3)

When I play Quizizz games, I always lose because I'm nervous. When I lose a game in Quizizz, I feel sad and bored because my friends always win and they may look down on me. I don't like Quizizz. (S2FG2)

Quizizz challenges

The majority of students joining the discussions faced difficulties while using Quizizz due to a poor internet connection, making the learning experience challenging. Additionally, the tool created disruptions both inside and outside the classroom, and some students resorted to cheating during their learning activities.

I think using Quizizz in learning English at our university is not suitable. The Internet connection is not reliable. (S2FG2)

The university does not provide free Wi-Fi. I use my prepaid connection, but the connection is often lost on the fourth floor where my class is located. My slow Internet speed caused me some trouble as I could not join the games or move to the next questions. (S2FG1)

My class is too noisy when we play Quizizz. There are more than forty students in my classroom. Some of them always shout loudly when winning or losing a point. (S3FG3)

I find that the background music is too noisy. We have neighboring classes and I think the teachers and students in these classes are not happy at all because the wall is not noise-proof. (S5FG2)

If the university improves the Internet connection in every classroom, I will definitely recommend the use of Quizizz here. (S1FG3)

My classmates copy each other while playing Quizizz. Some of them ask one another for the answers and don't need to think hard. (S2FG3)

Teachers' preparation and selection of Quizizz activities

Four students attributed their dissatisfaction to the teachers, citing the selection of easy games and a lack of review for grammar and spelling mistakes before using Quizizz games in the classroom. One student said:

I could spot some mistakes in Quizizz games. They are often grammar and spelling mistakes. Sometimes, I found the instructions were not accurate. I would recommend Quizizz if the teacher spends more time reviewing the game before administrating it in the classroom. (S4FG1)

A consensus emerged among students that Quizizz did not enhance their critical thinking skills or imagination; instead, it primarily served to reinforce their memory.

I think the tests on Quizizz reinforce our memory of what we learned in our previous lesson. For higher levels of thinking as critical thinking skills, Quizizz does not help. (S5FG3)

I feel bored using Quizizz. I think Quizizz cannot encourage my imagination and critical thinking skills. Most of the activities are memory games. I think the games are childish and easy. I wish my teachers had chosen the activities more carefully. (S1FG1)

4.1.2. Differences in students' attitudes toward Quizizz based on gender, English proficiency level, and years of study

Differences in students' attitudes toward Quizizz based on gender

The one-way MANOVA was conducted to examine whether there is a difference between males and females in their attitudes toward Quizizz on the affective, cognitive, and behavioural components. Descriptive statistics for the three dependent variables (subscales) within each gender are presented in Table 3.

Table 3

Descriptive statistics

		Mean	SD	N
Behavioral components	Male	2.56	.967	82
	Female	2.49	1.03	118
	Total	2.52	1.00	200
Affective components	Male	2.41	.92	82
	Female	2.51	1.08	118
	Total	2.47	1.01	200
Cognitive components	Male	2.49	.95	82
	Female	2.53	1.01	118
	Total	2.51	.99	200

The multivariate test of the main effect of gender was statistically insignificant, indicating that there is no difference in students' attitudes (behavioural, affective, and cognitive components) Quizizz based on gender, $F(3, 196) = 1.948$, $p = 0.740$; Wilk's lambda = 0.971; partial eta squared = 0.029 (refer to Table 4). In other words, the results of the one-way MANOVA suggest that there is no significant difference in students' attitudes toward Quizizz between male and female students.

Table 4Multivariate tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.870	438.686 ^b	3.000	196.000	.000	.870
	Wilks' Lambda	.130	438.686 ^b	3.000	196.000	.000	.870
	Hotelling's Trace	6.715	438.686 ^b	3.000	196.000	.000	.870
	Roy's Largest Root	6.715	438.686 ^b	3.000	196.000	.000	.870
Gender	Pillai's Trace	.029	1.948 ^b	3.000	196.000	.123	.029
	Wilks' Lambda	.971	1.948 ^b	3.000	196.000	.123	.029
	Hotelling's Trace	.030	1.948 ^b	3.000	196.000	.123	.029
	Roy's Largest Root	.030	1.948 ^b	3.000	196.000	.123	.029
a. Design: Intercept + Gender							
b. Exact statistic							

Differences in students' attitudes toward Quizizz based on English proficiency levels

The one-way MANOVA was conducted to examine whether there are significant differences in students' attitudes toward Quizizz across English proficiency levels. Descriptive statistics for the three dependent variables (subscales) within each proficiency level group are presented in Table 5.

Table 5

Descriptive statistics

English language proficiency level		Mean	SD	N
Behavioral components	Beginner	2.84	.83	16
	Elementary	2.62	.95	23
	Intermediate	2.46	1.02	67
	Upper-Intermediate	2.43	.99	72
	Advanced	2.67	1.08	18
	Proficient	2.83	1.29	4
	Total	2.52	1.0	200
Affective components	Beginner	2.89	.81	16

English language proficiency level		Mean	SD	N
	Elementary	2.69	1.02	23
	Intermediate	2.36	1.04	67
	Upper-Intermediate	2.35	1.01	72
	Advanced	2.57	1.04	18
	Proficient	2.71	1.35	4
	Total	2.47	1.02	200
Cognitive components	Beginner	2.71	.89	16
	Elementary	2.64	.91	23
	Intermediate	2.43	1.02	67
	Upper-Intermediate	2.44	.99	72
	Advanced	2.77	.96	18
	Proficient	2.79	1.45	4
	Total	2.51	.97	200

The multivariate test of the main effect of English proficiency levels was statistically insignificant, indicating that there is no difference in students' attitudes toward Quizizz based on their proficiency level, students' attitudes (behavioural, affective, and cognitive components) Quizizz based on proficiency levels, $F(15, 530) = .701, p = 0.785$; Wilk's lambda = 0.947; partial eta squared = 0.018 (refer to Table 6). In other words, the results of the one-way MANOVA suggest that there are no significant differences in students' attitudes toward Quizizz across proficiency levels.

Table 6

Multivariate tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.761	204.045 ^b	3.000	192.000	.000	.761
	Wilks' Lambda	.239	204.045 ^b	3.000	192.000	.000	.761
	Hotelling's Trace	3.188	204.045 ^b	3.000	192.000	.000	.761
	Roy's Largest Root	3.188	204.045 ^b	3.000	192.000	.000	.761
Proficiency Level	Pillai's Trace	.053	.704	15.000	582.000	.782	.018
	Wilks' Lambda	.947	.701	15.000	530.429	.785	.018
	Hotelling's Trace	.055	.698	15.000	572.000	.788	.018
	Roy's Largest Root	.036	1.400 ^c	5.000	194.000	.226	.035

a. Design: Intercept + Proficiency Level

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level

4.2. Discussions

In this research, students displayed negative attitudes toward Quizizz as a tool for learning English. This finding contrasts with the majority of findings in prior research. In studies conducted by various researchers, such as Pavita and Nirmala (2021), Pham (2022), Suharni et al. (2021), participants expressed excitement, motivation, and engagement when using Quizizz games in language classrooms. They considered Quizizz to be a valuable and beneficial resource, leading to better comprehension of lessons and improved academic performance.

In the present study, however, students did not have positive feelings when playing Quizizz games, nor did they have positive overall experiences with Quizizz. They did not perceive Quizizz as cognitively beneficial. During focus group discussions, students emphasized that Quizizz had the potential to reinforce their memory but did not contribute significantly to their critical thinking skills or imagination. Furthermore, participation in Quizizz games frequently elicited feelings of anxiety, boredom, and sadness among the students. The students commonly described the games as ‘childish and easy’, pointed out ‘grammar and spelling mistakes’ in the games, and noted ‘inaccurate instructions.’ These criticisms likely contributed to their negative emotional experiences during Quizizz games. In addition, students in this study encountered difficulties when using Quizizz due to a poor internet connection at the university, which resulted in an unpleasant learning experience. Furthermore, the tool had the potential to disrupt the classroom environment and promote cheating during the learning process. One possible explanation for the differences in attitudes between the students in this study and those in other studies may be attributed to the English proficiency levels of the participants. The majority of students in this study (more than 78%) were at an intermediate level or higher, and they majored in English. These participants reported that their teachers primarily utilized Quizizz to reinforce their memory, and the games were relatively easy for most of them.

In contrast, participants in other studies were often non-English majors with potentially lower proficiency levels. English was just one subject among many, not their primary focus. Additionally, it is plausible that participants in other studies did not encounter issues like noise or a poor internet connection, which could have negatively affected their attitudes, leading to a more positive perception of Quizizz. Some of the unpleasant experiences listed by participants in this study resembled those in Mohamad et al.’s (2021) study. In the study conducted by Mohamad and colleagues, students expressed concerns about experiencing high levels of anxiety, encountering technology barriers, and facing issues related to cheating while using Quizizz in their language classroom.

There were no significant differences in students’ attitudes (affective, behavioral, and cognitive components) toward the use of Quizizz in learning English across different demographic variables. Previous research has consistently demonstrated a positive correlation between students’ attitudes and satisfaction with the use of Quizizz in EFL settings (e.g., Pham, 2022), a positive correlation between students’ attitudes and performance when Quizizz is used as a supportive tool (Jiemsak & Jiemsak, 2020), and the effectiveness of Quizizz in improving students’ language performance (Eltahir, Alsalhi, Al-Qatawneh, AlQudah, & Jaradat, 2021; Munawir & Hasbi, 2021). However, in the context of language learning, few studies have explored the correlation between students’ attitudes toward Quizizz and demographic variables. The findings of this study underscore the need for further research to investigate the correlation between English majors’ attitudes towards Quizizz and other relevant factors in EFL settings.

5. Conclusions and recommendations

This paper investigates English majors' attitudes towards the use of Quizizz in their English language learning and examines differences in their attitudes based on various demographic variables. Unlike prior research, this study reveals that students expressed negative attitudes toward Quizizz. This educational platform was not found to be useful or beneficial for their learning. They did not anticipate playing games on Quizizz with excitement or engagement during the learning process. Reasons cited for their boredom, sadness, and anxiety included unsupportive infrastructure and teachers' choices and designs for Quizizz games.

This study offers several suggestions for the effective use of Quizizz in EFL classrooms. Teachers should carefully select Quizizz activities that align with the English proficiency levels of their students. While Quizizz is primarily utilized for reinforcing knowledge and skills at lower cognitive levels, such as recall and comprehension, it can serve as a valuable supplementary tool to enhance the teaching and learning process. To establish a robust foundation for deeper understanding and critical thinking, educators may consider integrating Quizizz with other instructional methods and resources, such as the Flipped Classroom approach. Furthermore, teachers should thoroughly review Quizizz games, meticulously checking for any grammar and spelling errors to ensure the accuracy and educational quality of the content provided to their students. Additionally, the university may consider enhancing the campus's internet connectivity and installing soundproof walls in classrooms. These improvements would facilitate the use of Quizizz.

This study is without limitations. The tendency to respond in a socially desirable manner could influence students' truthfulness when responding to interview queries and filling out questionnaires (Baker & DeDonno, 2020). Furthermore, this research takes place in a distinct context, involving English majors in Vietnam as the study's participants. Extending the findings of this study to other contexts might pose challenges. Nevertheless, despite these limitations, the insights gained from this research hold significance for crafting educational tasks and exercises using Quizizz in diverse environments.

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