Investigating the Acceptance of Kahoot! for Warm-up Activities: A Case Study in Higher Education in Vietnam

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Abstract – **Gamification has been applied in language education by many educators all over the world. Kahoot!, known as a gamified learning platform, has a positive effect on English language education when it is utilized as a useful teaching tool in educational institutions. Despite multiple attempts to assess this gamified tool, not much research has concentrated on how well Vietnamese students accept the use of Kahoot! for warm-up activities. Employing a 22-item questionnaire using a five-point Likert scale and a semi-structured interview with the participants of 175 university students, the study aims to explore students' acceptance of using Kahoot! for warm-up activities. The survey questionnaire was created using the technology acceptance model (TAM) as the fundamental framework to investigate students' acceptance of using Kahoot! for warm-up activities. Results indicate that participating students highly appreciated and were satisfied with the use of Kahoot! for warm-up activities because of its pedagogical benefits. It is to suggest practical implications for language educators in using Kahoot! for warm-up activities in different educational settings.**

Keywords – **Gamification, Kahoot, warm-up activities, EFL, higher education.**

1. Introduction

While the world is changing quickly due to the digital revolution, many facets of people's lives are also changing including education [1], [2]. Gamification is a recent development in language instruction that aims to engage students and promote active involvement [3]. Gamification, according to Sailer *et al.* [4], is the use of games' emotional and motivational forces for objectives other than the game's primary entertainment function. Another goal can be to get students involved and active during class or even to influence their attitude towards their learning [5]. There are a variety of technological equipment and applications used to improve the teaching and learning of languages. According to Kaur and Nadarajan [6], the implementation of "gamification"-based aids like Kahoot! in language education settings can influence and improve language learning outcomes.

Numerous studies have demonstrated that using Kahoot! in courses in other areas enhances learning outcomes and engagement with teachers and students in an elementary school [7], another study by Chiang [8] investigated students' attitudes towards using Kahoot! in reading class with the Chinese participants from a college class in Taiwan, or a study from Wang and Tahir [9] explored the effectiveness of using Kahoot! for classroom activities among US K-12 students. It is apparent that Kahoot! has shown its popular use in many parts of the world. Yet, research on the application of Kahoot! in a Vietnamese educational context has been unexplored. Therefore, the investigation into students' acceptance of using Kahoot! for warm-up activities appears to be timely. Furthermore, previous research has focused primarily on this population in other countries in the world. Few studies have looked into students' acceptance of using Kahoot! for warm-up activities in language classrooms, especially in Vietnamese teaching and learning context. Consequently, the study aims to shed some light on students' acceptance of using Kahoot! for warm-up activities and to seek the reasons for their acceptance.

The study employed the Technology Acceptance Model (TAM) [10] since the model has been used to examine users' acceptance of new technology, which focuses on the two main variables that affect a user's behavioral intention to use new technology: perceived usefulness and ease of use [11]. This model is used as the fundamental framework to investigate students' acceptance of using Kahoot! for warm-up activities.
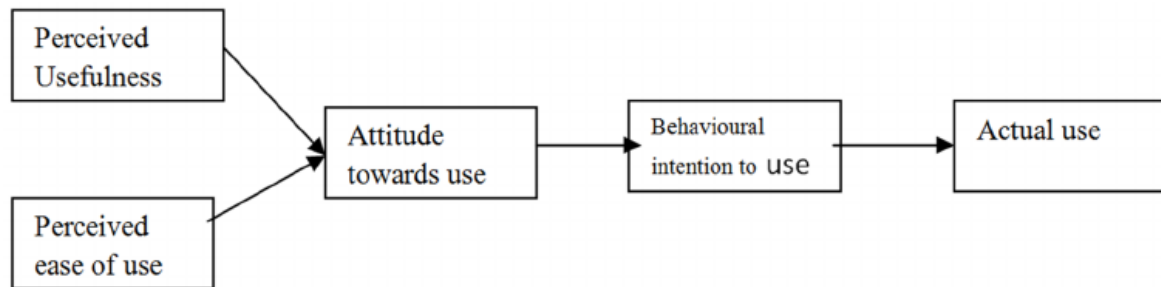

Figure 1. Technology Acceptance Model (TAM) (Davis, 1989)

The significance of this article is twofold. First, this research explores the extent university students perceived the acceptance of using Kahoot for warm-up activities. Second, this research attempts to investigate students' satisfaction with the use of Kahoot! for warm-up activities. Therefore, two research questions are presented:

1. To what extent do university students perceive the acceptance of Kahoot! for warm-up activities?

2. How are university students satisfied with the use of Kahoot! for warm-up activities?

2. Literature Review

To gain insights into students' acceptance of Kahoot! for warm-up activities in higher education, the literature review was categorized into three parts, Kahoot! and its features, strengths and weaknesses of Kahoot!, and Kahoot! for warm-up activities.

2.1. Kahoot! and its Features

The platform Kahoot! has been available since September 2013 [12]. With Kahoot!, the teacher hosts a game show in the classroom and the students compete for prizes [12], [13]. Kahoot! is the first game-based learning system (GSRS) to use game design strategies from the ideas of inner motivation [14] and game flow [15]. As a result, Kahoot! involves interaction from the participants, role-playing, and the utilization of video and multimedia resources.

The Kahoot! platform is simple for teachers to use to generate questions, offer assignments, and examine users' results. Students can join without registering, play anonymously, enjoy the quiz games, compete with other users, and learn [12]. Kahoot! contains some available features such as quizzes, conversations, and polls to challenge students' knowledge and engage them in the learning process [16].

With the Kahoot! platform, questions with multiple choices can be created in a debate format and played with all students [17]. According to Bicen and Kocakoyun [18], students use the Kahoot! games to select the correct response to a question that was prepared in advance and displayed on the screen using an internet-enabled device. For each correct response, students gain points. When a game is prepared in advance, youngsters participate voluntarily and classroom motivation rises.

2.2. Strengths and Weaknesses of Kahoot!

Several studies reveal the findings mentioning the benefits of using Kahoot! including improved collaboration in the classroom, supportive opinions, and beneficial effects on tests [19], [20]. In particular, it increases the classroom ambiance and educational evaluation [21], increases the opportunity that students will tackle problems in class [22]), and promotes the presence of students [23]. Kahoot! can be used to review students' understanding as well as a joyful task in the classroom [9]. According to Wang [12], Kahoot! includes gamification components that make learning enjoyable and engaging. It encourages students to learn actively, which affects their involvement in class, cooperation with other students, and information sharing. Kahoot! is also a particularly effective tool to increase passive learners' engagement and fostering competitive learning [7], [24], [25].

However, despite being so advantageous in many ways, Kahoot! has certain disadvantages of its own. A research by Rajabpour [20] lists some of the flaws as access problems, growing boredom, and poor design. The first drawback of Kahoot! is that many users experience technical or access problems when doing the quizzes [8], [9], [26], as the majority of students share a network that can occasionally cause issues due to overcrowding [20].

Second, as they become accustomed to a game-show learning environment, students could get bored [27]. Rajabpour [20] also claims that Kahoot's design, with its simple forms and colors, offers the least amount of setting freedom.

2.3. Kahoot! for Warm-up Activities

A warm-up stage is normally the first step that lets students unwind and creates a productive learning environment [28]. Warm-up is also defined as a brief initial engagement exercise [29]. Velandia [30] states that warm-ups are a variety of exercises that encourage students to think in English, recall previously covered information, and show interest in the class. Kay and LeSage [21] mention the "initial orientation" for a language learning course is the warm-up stage to make the students feel at ease in the classroom and to get them thinking in English, so a warm-up activity is essential by getting students involved in the meaningful learning activities.

Warm-up activities are crucial in language instruction. They serve as the launch pads for the upcoming new materials. Warm-up activities are necessary while teaching a language since for certain students it can be challenging to get directly into an English session [7]. Warm-up activities are important for developing relationships, motivating people, and maintaining attention [13]. Pakdel and Khodareza [16] believe that warm-up exercises will assist learners in blocking out the outer world and concentrating on their tasks at hand. Students would be ready for a new lesson. Additionally, by engaging in preparatory activities in English class, teachers may assist students in getting ready to study and make sure they get the most from their lessons [7].

The gamified tool Kahoot! for warm-up activities is widely used in English classrooms since it fosters engagement and enjoyable learning lessons [12]. Moreover, English learners are more engaged as Kahoot! games are competitive and collaborative which makes a good ice-breaker for students in a new lesson [24]. Warm-up activities are in various forms of reviewing previous lessons or introducing a topic for a new lesson, Kahoot! games can motivate English learners to participate in classroom activities or be ready to explore new knowledge in their new lessons [9], [25].

3. Methodology

The methodology section describes the research design, participants, and instruments used to collect data for analysis.

3.1. Research Design

The study employs a descriptive research design, the two major data collection tools include semi-structured interviews and a questionnaire. Hence, this study used a mixed-method approach [31]. This approach was used because it is believed to achieve broader and more detailed data about a phenomenon compared to the research solely undertaken with a qualitative or quantitative approach [32]. Thus, by analyzing both statistical data (from the questionnaire) and in-depth viewpoints (from interviews), the researcher was better able to thoroughly comprehend the issue under study when using both approaches.

3.2. Participants

The population was based on a convenience sampling technique. The t-Test from G*Power software (version 3.1) to measure the total sample size was run (a two-tailed test, d =.3, α = .05, the required level $(1 − β) = .8$). The required total sample size result from the t-test should be 90. Therefore, the number of participants in this study was 175 EFL university students at a Vietnamese private university, which was satisfactory as a reliable sample size.

For the second phase, ten randomly chosen participants were asked to take part in semi-structured interviews where they expressed their thoughts on the acceptance of using Kahoot! for warm-up exercises. For at least one semester of English language instruction at their school, which lasts approximately 10 weeks, those ten participants got used to using this platform for warm-up exercises in their English classes. The informed consent was obtained by all of the participants before the data collection process.

3.3. Instruments

A questionnaire and semi-structured interviews were employed for data collection procedures. For quantitative data collection, a survey questionnaire was used. To form the questionnaire, a scale for the measurement of the student's acceptance of using Kahoot! for warm-up activities has been adapted from the framework of the technology acceptance model (TAM) [10] and is formed of four dimensions including (i) perceived usefulness, (ii) perceived ease–of–use, (iii) attitude towards using Kahoot!, (iv) behavioral Intention to use Kahoot!. Satisfaction was also examined to view which sector students felt satisfied with when Kahoot! was used for warm-up activities.

The questionnaire includes 22 questions based on a 5-point Likert scale (from 1 = "strongly disagree" to 5 = "strongly agree"). The Cronbach's alpha value was .98, indicating that the questionnaire was reliable. In the second part, the qualitative data were collected from semi-structured interviews to shed more light on students' acceptance of using Kahoot! for warm-up activities. The questions in semi-structured interviews enable the researchers to guide the respondents into providing more in-depth answers. There are five open-ended questions in the interviews which are based on the five themes from the questionnaire.

The degree of adoption was then determined by the mean scores of each construct. Data were then interpreted using interpretation scores adapted from Oxford [33]. The value of the means score is divided into four ranges including i) a low level = mean 1 to 2.4, ii) a medium level = mean 2.5 to 3.5, iii) a high level when the mean score is from 3.6 - 4.4, (4) at a very high level when the mean score is from 4.5 to 5.

4. Results

The section presents the results analyzed from the questionnaires by a descriptive statistic test and interview results by thematic analysis.

4.1. Results from the Questionnaires

A descriptive statistics test was computed to determine the level of acceptance of using Kahoot! for warm-up activities. Table 1 below shows the data regarding students' acceptance of using Kahoot! for warm-up activities in English class from 175 respondents.

Table 1. Mean score of students' acceptance of using Kahoot! for warm-up activities

	N	Mean	SD
Students' acceptance of using Kahoot!	175	3.99	.80

Table 1 demonstrates that the students' acceptance of using Kahoot! for warm-up activities in English class (M= 3.99, SD= .80) was at a high level. Five constructs, namely perceived usefulness, perceived ease–of–use, attitude toward using Kahoot!, behavioral intention to use Kahoot!, and satisfaction were examined by a descriptive statistics test.

Table 2. Mean score of five constructs

	N	Mean	SD
Perceived Usefulness	175	4.13	.83
Perceived Ease of Use	175	4.00	.87
Attitude	175	4.06	.90
Behavioral Intention	175	3.62	.93
Satisfaction	175	4.01	.88

As can be seen from Table 2, the mean scores were from 3.62 to 4.13 (at a high level). Specifically, the following indicators include perceived usefulness (M=4.13, SD= .83), perceived ease–of–use (M=4.00, SD= .87), attitude toward using Kahoot! (M=4.06, SD= .90), behavioral intention to use Kahoot! (M=3.62, SD= .93), and satisfaction (M=4.01, SD= .88) got a high level of agreement. Among those indicators, perceived usefulness got the highest mean score (M=4.13, SD= .83).

To conclude, as shown by the results of the first indicator, perceived usefulness has the highest figure of 4.13. It is indicated that the students accept the usefulness of Kahoot! for warm-up activities. However, the fourth indicator, behavioural intention, got the lowest mean score of 3.62. The data in Table 2 is described in detail in the following parts.

4.1.1. Perceived Usefulness

Table 3 displays the students' acceptance of the usefulness of Kahoot! for warm-up activities was at a high level (M=4.13, SD= .83). The five questions about the

usefulness of Kahoot! for warm-up activities are presented in this section. The responses from the students to this section are listed in Table 3.

Table 3. Students' acceptance of using Kahoot! for warm-up activities in terms of perceived usefulness

	N	Mean	SD
Using Kahoot! For warm-up activities would enable me to accomplish lessons more quickly.	175	4.11	.95
Using Kahoot! for warm-up activities would help me to study better.	175	4.30	.89
Using Kahoot! for warm-up activities would increase my productivity.	175	4.03	.94
Using Kahoot! for warm-up activities would make my study easier.	175	4.07	.94
I would find Kahoot! useful for warm-up activities.	175	4.11	.96

The results from Table 3 show that students believed that using Kahoot! for warm-up activities would help them study better, gaining the highest level of agreement (M=4.30, SD= .89). Secondly, students believed that using Kahoot! for warm-up activities would enable them to accomplish lessons more quickly, and they found Kahoot! useful for warm-up activities. Both items got the same mean score M= 4.11, which was at a high level.

Next, they held the belief that using Kahoot! for warm-up activities would make them study easier (M=4.07, SD= .94). Finally, the respondents believed that using Kahoot! for warm-up activities would increase their productivity, with the lowest level of agreement (M=4.03, SD=.94). To sum up, among those indicators mentioned above, it was believed that using Kahoot! for warm-up activities would help students to study better, and Kahoot! was also believed to be useful for warm-up activities.

4.1.2. Perceived Ease of Use

Table 4 shows that students' acceptance of using Kahoot! regarding perceived ease of use was perceived positively (M=4.00, SD= .87). The responses from the students to the six items in this section are presented in Table 4.

Table 4. Students' acceptance of using Kahoot! for warm-up activities in terms of perceived ease of use

	N	Mean	SD
Learning to operate Kahoot! would be easy for me.	175	3.98	.96
I find it easy to get Kahoot! to do warm-up activities	175	4.05	.90
My interaction with Kahoot! would be clear and understandable.	175	4.09	.92
I would find the instructions in Kahoot! clear and understandable.	175	4.03	.96
I am skillful at using Kahoot! for warm-up activities.	175	3.89	1.04
I find Kahoot! easy to use for warm-up activities.	175	4.00	.96

As shown in Table 4, students believed that their interaction with Kahoot! would be clear and understandable, achieving the highest level of agreement (M=4.09, SD=.92). Following this, students expressed that it was easy to get Kahoot! to do warm-up activities (M=4.05, SD=.90). Followed by those who would find the instructions in Kahoot! be clear and understandable (M=4.03, SD=.96). Next, most of the respondents found Kahoot! easy to use for warm-up activities (M=4.00, SD= .96). Next, the participants thought that learning to operate Kahoot! would be easy (M=3.98, SD= 96). Finally, students indicated that they were skillful at using Kahoot! for warm-up activities, with the lowest figure (M=3.89, SD= 1.04). In conclusion, all of the six items in this section gaining the mean scores were at a high level. Among those factors, clear and understandable interaction with Kahoot! was perceived with the highest agreement.

4.1.3. Attitude Towards Using Kahoot!

Table 5 depicts that students' attitude towards using Kahoot! was high (M=4.06, SD= .90). This section includes four items displayed in Table 5 below.

Table 5. Students' attitude towards using Kahoot! for warm-up activities

	N	Mean	SD
Using Kahoot! for warm-up activities is a good idea.	175	4.07	.99
Kahoot! makes warm-up activities more interesting.	175	4.17	.94
Using Kahoot! for warm-up activities is fun.	175	4.06	.96
I like using Kahoot! for warm-up activities.	175	3.94	1.03

The results indicate that the respondents supported the claim that Kahoot! made warm-up activities more interesting (M=4.17, SD= .94). Besides, students also supported that using Kahoot! for warm-up activities was a good idea (M=4.07, SD= .99). Followed by those who believed that using Kahoot! for warm-up activities was fun, which gained the mean score of 4.06. Finally, students liked using Kahoot! for warm-up activities (M=3.94, SD=1,03). To conclude, all of the indicators of students' attitudes towards using Kahoot! for warm-up activities got a high level of agreement as they believed that Kahoot! made warm-up activities more interesting.

4.1.4. Behavioral Intention

The mean score of students' behavioral intention to use Kahoot! for warm-up activities shown in Table 6 was relatively high (M=3.62, SD= .93). This section has three items as seen in Table 6 below.

Table 6. Students' behavioral intention to use Kahoot! for warm-up activities

	N	Mean	SD
I intend to use Kahoot! in the next 3 months	175	3.59	1.05
I predict I would use Kahoot! for warm-up activities in the next 3 months	175	3.68	1.00
I plan to use Kahoot! in the next 3 months	175	3.57	1.01

As shown in Table 5, students predicted they would use Kahoot! for warm-up activities in the next 3 months, which gain the highest mean score of 3.68. Secondly, most of them showed their intention to use Kahoot! in the future (M=3.59, SD=1.05).

Followed by those students who planned to use Kahoot! in the future (M=3.57, SD= 1.01). In general, the mean scores of all those items in this specific section was highly appreciated. This illustrated that students' behavioral intention to use Kahoot! for warm-up activities shortly was high.

4.1.5. Satisfaction

Table 7 shows that students' satisfaction level with using Kahoot! for warm-up activities was high (M=4.01, SD= .88). There are four items making up this section.

Table 7. Students' satisfaction with the use of Kahoot! for warm-up activities

	N	Mean	SD
I am satisfied with the usefulness of Kahoot!	175	3.97	.98
I am satisfied with the easy use of Kahoot!	175	4.03	.95
I am satisfied with the functions of Kahoot!	175	3.99	.94
I approve the use of Kahoot! for warm-up activities.	175	4.07	.97

Table 7 reveals in terms of students' satisfaction with using Kahoot! for warm-up activities, the majority of participants approved the use of Kahoot! for warm-up activities (M=4.07, SD=.97), which got the highest level of agreement. Secondly, students felt satisfied with Kahoot! ease of use (M= 4.03, SD= .95). Next, they also showed their satisfaction with the functions of Kahoot! (M=3.99, SD= .94). Finally, participants were satisfied with the usefulness of Kahoot! (M= 3.97, SD=98). All of the items in this section got a high level of agreement. Among those items, the last one gained the highest mean score, which illustrated that students approved of the use of Kahoot! for warm-up activities.

4.2. Results from the Interviews

The results from the interviews were analyzed according to five themes, perceived usefulness, perceived ease of use, attitudes towards using Kahoot!, behavioral intention, and student satisfaction.

4.2.1. Perceived Usefulness

To get deeper understanding about students' acceptance of using Kahoot! for warm-up activities in English classes, ten students were asked questions based on the five clusters from the questionnaire. The interview results reveal that most participants believed that Kahoot! was useful since it was a good

game-based learning platform for their English learning since it helps them to learn better. They shared that using Kahoot! in English classes, especially for warm-up activities was a good idea because it brings some benefits.

"I think Kahoot! is useful for checking vocabulary or grammar. It is a good way to review the previous lessons when it is used for warm-up activities" (Student 1)

"When playing Kahoot!, I compete with my classmates to win the games. I think it makes me try to learn harder to get the correct answers in the quiz. Therefore, it helps improve my learning." (Student 2)

4.2.2. Perceived Ease of Use

When asked about the ease of use of Kahoot!, most of the students agreed that Kahoot! is an easy-to-use platform, and they also thought that the instructions in Kahoot! are clear and understandable.

"I think I have no problems with using Kahoot because it is easy. I just look at the questions on the screen and click on the answer on my phone. It does not require many steps to log in." (Student 3)

"Using Kahoot! is simple because it is easy to access it by using my phone or laptop. Its features are user-friendly, and the instructions are simple, too" (Student 4)

However, one out of ten participants shared that she is not skillful at using this game-based learning platform. She said,

"If the quiz is created by my teachers, I find it easy to play, but I think it a bit difficult for me to create the quiz myself. Therefore, I grade my skillfulness about 6/10". (Student 5)

4.2.3. Attitude Towards Using Kahoot!

In terms of their attitude towards using this platform for warm-up activities, 90% of participants indicated that they held a positive attitude since it is a kind of game so it can make the learning atmosphere fun and interesting. Those students also mentioned some conditions for their answers. Among ten participants, one of them shared that he did not like or hate it.

"Yeah… I think Kahoot! is a kind of game, so it makes my class happy and interested when playing Kahoot!. For example, when I see I am in the top five, I feel happy; or when my friends are disappearing from the list of top five, it makes me laugh." (Student 6)

"I think I like Kahoot! and it is fun if questions of the quiz are relevant to my lessons. Also, if you give many questions in a quiz, I think it is not fun anymore. Therefore, I think the questions should be relevant." (Student 7)

"I think I am neutral, I do not like or hate it. If my teachers ask me to do the quiz on Kahoot, I will use it. But I think we should use Kahoot! twice or three times a week." (Student 8)

4.2.4. Behavioral Intention

Regarding their behavioral intention to use Kahoot!, all of them indicated that they predict to use it soon. However, 80% of participants shared that they planned to use this platform since they pointed out some drawbacks of Kahoot!.

"I would use Kahoot in the future because it is easy to use and fun. It helps me to review vocabulary effectively." (Student 9)

"I predict to use Kahoot! in the next 3 months since it is very popular at my school. Most of my teachers use this platform for their warm-up activities, so I think we will use it in the future." (Student 10)

"I do not plan to use Kahoot! since we use it very often in each level/ course at school. Therefore, I feel a little bit bored. I also think that the design and pictures or colors on Kahoot! are childish" (Student 7)

"I think it is free when we access some basic features. If we want to use the upgraded ones, we have to pay, and the costs are high. Besides, sometimes with a poor internet connection, I can do the quiz on Kahoot! well." (Student 5)

4.2.5. Satisfaction

All of the participants had a similar idea that they approve of the use of this platform, and they all emphasized the easy use of Kahoot! was the major reason for their choice.

"Yes, I would approve the use of Kahoot! for warm-up activities, but it should be moderate as I mentioned above" (Student 7)

"One thing that makes me satisfied with using Kahoot! for warm-up activities the most is that it is simple and easy to use." (Student 1)

"I totally agree that we use Kahoot! for warm-up activities since it is fun and it helps students to learn better." (Student 2)

5. Discussion

This paper's primary purpose is to investigate students' acceptance of using Kahoot! for warm-up activities in their writing classes. This study reveals that the degree of the student's acceptance of using this platform, in general, is high (M= 3.99, SD= .80). Therefore, the findings from the analysis show that the students' acceptance of using Kahoot! for warm-up activities was positive.

This finding is supported by several studies [7], [19], [20], concluding that students' perceptions of the use of Kahoot! were positive. Specific findings from both the questionnaire and interviews are discussed in detail in the following parts.

Firstly, the findings prove that students found Kahoot! useful for their warm-up activities because it enabled them to review vocabulary in previous lessons better. This finding is supported by a study conducted by Wang and Tahir [9], who stated that Kahoot! allowed students to review prior knowledge, for formative assessment. Besides, it promoted active learning of students. This is consistent with other studies [7], [24], [25] which addressed that promoting competitive learning was one of the benefits of Kahoot!.

In addition, the results also indicate that students accepted the ease of use since they claimed that it was easy for them to use this online tool for their learning at the pre-stage of the lessons, and students acknowledged the understandable and clear instruction provided by Kahoot!. This finding aligns with the expert's claim that this platform was simple for teachers to generate the quizzes as well as for students to join [12].

Participating students found Kahoot! useful for their warm-up activities since they thought this platform could make their learning fun and interesting. This aligns with some research implemented by several scholars [7], [21], [24], [25], who stated using Kahoot! created a fun learning environment, and it increased students' enjoyment. Moreover, Kahoot! could motivate students in their learning, which is supported by the study of Wang et al. [24] and Wu et al. [25].

However, the results from the interviews reveal that some of the participants indicated some drawbacks of using Kahoot! for their warm-up activities such as technical problems, getting bored when Kahoot! was excessively used, childish design, colors, and pictures. These findings are supported by some previous studies [9], [20], who mentioned one of the demerits of Kahoot! was that students could face some technical errors or access problems in Kahoot! quizzes due to over-crowdedness. However, this result is not in line with the previous study by Wang [12] who mentioned the entertaining and vibrant sounds and pictures that Kahoot! uses could boost student engagement.

6. Conclusion

The study reveals that Kahoot! is a useful gamified tool for warm-up activities since it brings EFL students several benefits.

It is clear that Kahoot is a highly beneficial platform in language education classes for creating an enjoyable learning setting for students; improving their motivation, enjoyment, and engagement; reinforcing knowledge; and promoting competitive learning. These results indicate that gamification can be successfully incorporated into lessons utilizing Kahoot!. Therefore, it is advised that instructors or English educators use Kahoot! to assist in teaching and learning, especially for the warm-up activities. Kahoot! should include more motivating features in addition to a scoring system to boost students' enthusiasm. Additionally, teachers ought to create quiz questions that are associated with the lessons when creating gamification tasks on Kahoot! so that students would consider it useful and meaningful for their learning and are aware that their instructors are actually encouraging and ready to collaborate with them in an encouraging setting of competition. However, users should bear in mind the highlighted drawbacks of this application and utilize this platform in moderation to intensify its effectiveness. Additionally, Kahoot! developers should upgrade Kahoot! features to make it more attractive and interactive.

7. Limitations and Further Research

Although this current study succeeded in achieving its objectives, there are two inherent shortcomings. Firstly, because the population in this study was from a single region in the Mekong Delta, it is impossible to generalize the results to all Vietnamese students in schools. The study was conducted at a point of time, so the examination of students' acceptance using Kahoot for warm-up activities over time was considerable due to time constraints, which was the second factor.

Furthermore, it is strongly encouraged that future studies look at using Kahoot! to improve different language skills to understand more about this form of gamification, especially at different stages in an EFL classroom. It is important to research verbal lesson activities to better understand the efficacy of gamification techniques. Different groups, including scholars, school administrators, and instructors, will be affected differently by the process of integrating gamification techniques employing Kahoot! into conventional education. Therefore, additional research into these groups' studies is necessary.

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