

# **Unveiling EFL students' views on gamified learning experience: A survey study**

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## **ABSTRACT**

Gamification has gained power in education for its potential to boost student motivation through engaging, game-like experiences. However, the specific dimensions driving its effectiveness in language learning remain underexplored. This study investigates English as a Foreign Language (EFL) students' perceptions of gamified learning tools (e.g., Classcraft, Kahoot! Quizizz, Duolingo) in enhancing their English acquisition. A cross-sectional survey design was employed, utilizing the GAMEFULQUEST online questionnaire to capture immediate responses from 155 EFL students at a state university in Central Java, Indonesia. Participants, selected via purposive sampling, had experience with gamified learning platforms inside and outside the classroom. Findings revealed high satisfaction across all seven dimensions of the gamified experience, with no significant variations by gender or age. These results highlight the universal appeal of gamification in EFL contexts and provide a foundation for future research.

**Keywords:** *English learning; Gamification; Gameful experiences*

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## **1. Introduction**

In the past few years, a growing focus has been on integrating technology into higher education. According to Mahbubah and Anam (2022), technology in many areas has led educators and other academic practitioners to innovate and design educational processes to assist students in establishing 21st-century skills. Nevertheless, an ongoing debate exists about how educators can efficiently maximize these technologies to create learning atmospheres that are both fascinating and enjoyable for college students (Armanda & Priyana, 2023). To overcome this ongoing obstacle, Armanda and Indriani (2023) state that educators must employ creative and strategic methods to deliver captivating digital learning experiences that greatly improve classroom achievement. Thus, it is essential to acknowledge the characteristics of college students nowadays. They were born in the technology era, known as digital natives, who are acquainted with computers, mobile phones, the internet, video games, and many such digital tools (Prensky, 2001; Kıyançık & Uzun, 2022). This creates an immersive learning experience tailored to today's students—digital natives—while fostering motivation, engagement, and higher learning expectations.

Considering the growing prevalence of digital technology in higher education, Witari et al. (2021) note that gamification has emerged as a response to elevating the class's mood in the learning process. The popular definition of gamification comes from Deterding et al. (2011), who claimed “the use of game-design elements in non-game contexts”. Furthermore, Chou (2015) divides gamification into explicit and implicit forms. The concept of explicit gamification refers to using applications that clearly have game-like characteristics. Meanwhile, implicit gamification refers to a design concept that subtly incorporates game elements and techniques for gamification into the user experience. Points, challenges, badges, and leaderboards are the most typical game elements in gamified learning settings (Majuri et al., 2018). In the learning context, Armstrong and Landers (2017) state that gamification can be called gamified learning. In addition, Landers (2014) argues that some studies have endeavored to investigate the relation between gamification and learning by establishing a gamified learning framework. The proposed framework provides four components, which are instructional material, behaviors and attitudes, game elements, and academic achievement. This framework expects a favorable indirect impact of gamification on academic achievement (Sailer & Homer, 2019). Driving by this concept, implementing gamification has demonstrated significant potential in enhancing motivation, engagement, and educational achievements across multiple fields, including language instruction (Wulantari et al., 2023).

The emergence and implementation of digital gamification have been noticed in teaching and learning for English as a Foreign Language (EFL) and English as a Second Language (ESL) in recent decades (Dehghanzadeh et al., 2019). As Wulantari et al. (2023) stated, gamification in English Language Teaching (ELT) has significantly expanded the opportunities for creating more engaging and interactive learning

experiences. Some common learning tools that provide gamified services such as Simplr, Quizziz, Duolingo, Kahoot! Classcraft, Vocabulary.com, etc.

Regarding Teaching English as a Foreign Language (TEFL) at higher education settings, a study by Huseinović (2023) found that the integration of gamification has positively impacted students' motivation to learn English skills and academic achievement. Further, De La Cruz et al. (2021) reported that gamified tools to teach English have more satisfactory reception and predisposition because of its popularity and capability to drive learning more engaging. For example, Kahoot! is a practical game-based application that fosters learning engagement, motivation, and involvement in EFL settings (Tao & Zou, 2021). Pursuing this further, Arunsirot (2020) suggested that implementing gamification in English classes has the potential to significantly enhance the English syntactic knowledge of students who enrolled in the English major.

While the impacts of implementing gamification on EFL students at higher education levels have now been well-documented, the specific dimensions that lead to this phenomenon have been far less extensively explored to date. Toward the individual level, there should be evidence to evaluate how game elements affect the learning experience and recognize how different gamification implementations can help students change their behavior. At the same time, González-González et al. (2022) suggested that forthcoming research might emphasize the personalization of games, which the players' intentions on gameful elements and preferred platforms/devices based on demographic aspects, such as age and gender. Thus, it is intriguing to investigate whether the effectiveness of someone's experience in gamification may vary based on the gender and age of the participant (Polo-Pena et al., 2020). As expected, understanding demographics can facilitate the adaptation of gamification systems worldwide and drive global transformations (Koivisto & Hamari, 2014; Bittner & Shipper, 2014; Sillaots et al., 2020). Even more, game experience sometimes could not be identified once gamified services were implemented due to subtly employing game elements and gamification techniques with the students. Driven by these concerns as gaps in the current literature, this study set out to inspect the answers to the following research questions:

1. What are the perceived levels of EFL students' gamified learning experience according to its dimensions for learning English?
2. Do EFL students' gamified learning experience levels vary based on demographic characteristics?

## **2. Literature review**

### *2.1. The game experiences*

Before discussing gamification, it is necessary to examine its underlying concept. Gamification refers to the adaptation of technology to have more game-like characteristics, aiming to elicit similar enjoyable experiences and motivation as games (the gameful experience) and impact user behavior (Högberg et al., 2019). Besides, the impact of gamification on the target behavior is influenced by the gameful experience

that gamified services provide (Werbach, 2014; Seaborn & Fels, 2015; Huotari & Hamari, 2017; Landers et al., 2018). Game or gameful experience refers to the interconnected combination of a player's sensations, cognitive processes, emotional responses, behaviors, and interpretation of meaning inside a gaming environment (Vargo & Lusch, 2004; Huotari & Hamari, 2017; Högberg et al., 2019). Within this concept, a game or gameful experience belongs to the interaction of students as a player with the game itself, which leads to a change of the targeted behavior through gamified service.

#### *2.1.1. Gamified learning experience*

As clarified, gamified learning refers to gamification in the learning context (Landers, 2014; Armstrong & Landers, 2017). Gamified learning approaches enhance or transform the learning process to produce an altered version that users perceive as game-like (Landers et al., 2018). Effective educational content is necessary for successful gamification, as it is typically used to enhance instruction rather than replace it (Landers, 2014). Bear in mind that gamification's goal is to directly influence learning-related attitudes and behaviors (Sailer & Homner, 2020). Gamification may modify or mediate the relationship between instructional material and academic achievement, depending on the behaviors and attitudes it influences (Landers, 2014). The learning process may be more enjoyable and engaging through gamification, which involves clearly stated goals, rules, visual techniques, and procedures (Urh et al., 2015). For that reason, gamified learning can boost student performance, promoting their progress and assimilation of information (Ozhan & Kocadere, 2020). Gameful systems strive to influence the flow experience, which is a crucial one (Oliveira et al., 2021). A student's potential can be unlocked through this experience, leading to their maturity and success (Sillaots, 2014). The objective of designing such interactive experiences is to stimulate motivation for both ongoing satisfaction with the service and for a specific desired action (Högberg et al., 2019). Hence, the desired impact of a gamified service extends beyond the gameplay period and includes the postgame stage.

#### *2.1.2. Dimensions of the game experience*

Regarding users' game experience when using gamified applications, some scale validation studies develop instruments for measuring gameful experience. The most prominent measures are GAMEX (Eppmann et al., 2018) and GAMEFULQUEST (Högberg et al., 2019). The GAMEX identifies six experiential dimensions: enjoyment, absorption, creative thinking, activation, absence of negative affect, and dominance. GAMEX enables us to evaluate how successfully gamified applications produce gameful experiences and highlight experiential qualities that need improvement. However, as a part of its dimension, the term "enjoyment" is too broad to describe the actually distinctive notion of gameful experience accurately (Cairns et al., 2014). While acknowledging the significance of affect and enjoyment in gamification, Högberg et al. (2019) concur with Eppmann et al. (2018) and propose that these factors should be regarded as consequences

of the gameful experience, rather than dimensions of it. Based on this concern, Högberg et al. (2019) developed the Gameful Experience Questionnaire (GAMEFULQUEST) to investigate the perceived gamefulness of system use. They have final dimensions: accomplishment, challenge, competition, guided, immersion, playfulness, and social experience. GAMEFULQUEST facilitates the investigation of the complete spectrum of experiences provided by gamified services. Consequently, our study proposes this scale to be used in order to identify students as users of gamified learning tools, whether intentional or unintentional.

This section also briefly describes each dimension of the game experience presented by Högberg et al. (2019). First, accomplishment expresses feeling like they had achieved something related to attaining goals and completing tasks created by the service. Second, challenges identified as obstacles can both be fun and motivating, derived from the difficulty of a task in order to test the user's ability. Third, competition describes having a feeling of competitiveness in the service and there being winners among users. Fourth, guided refers to the provision of assistance to users by the service, such as receiving feedback on their performance in relation to their progress towards their stated goals. Then, immersion belongs to immersive experiences such as emotional responses to a story provided by the service. Next, playfulness is described as pleasurable using the service because users can do something for imagination and creativity. Lastly, the social experience could be in the form of feeling accountable when other users observe whether the objective is accomplished or having support and encouragement from others.

Thus far, a series of factorial analysis studies across disciplines has contributed to the psychometric investigation of the GAMEFULQUEST. Junior et al. (2024) successfully validated a reliable instrument for measuring users' gameful experience in playful platforms in the Brazilian context, as they were concerned with overcoming the language barrier. Besides, Saini et al. (2024) evaluated the GAMEFULQUEST of reproductive and sexual health education (ReReki) among adolescent boys in the Malaysian context. They found five domains (i.e., competition, accomplishment, guidance, playfulness, and social experience) with 16 items from seven constructs initially.

Exploring this further, several experimental studies on evaluating students' perceptions of the gameful experience through GAMEFULQUEST are well documented. Montes et al. (2021) confirmed that high school students experienced a favorable gameful encounter, with the ratings of girls marginally surpassing those of boys. In addition, they also found no gender differences in the test results. Studies on tertiary education also acknowledge that the implementation of gamification for college students is considered to have an impact. According to GAMEFULQUEST scores obtained from first-year nursing students, Kim et al. (2025) revealed a significant difference between the experimental group, which shows a notably higher level of game experience dimensions than the control group. Yet, no statistically significant difference in knowledge retention was found between the two groups. Furthermore, Cespón and Toyos (2025) administered

the survey to pre-service teachers with master's degrees in Teaching English as a Foreign Language (MTEFL) and Bilingual Education (MBE). Their participants showed high levels of satisfaction in gameful experience, leading to the enjoyment and sense of accomplishment that are received from completing activities. Lastly, Macías-Guillén et al. (2021) confirmed that their participants regarded the experience as a game, which enhanced their motivation and fostered an emotional connection to the subject, their academic performance remained consistent.

## *2.2. Gamification in English language teaching (ELT)*

With the increasing popularity of gamification in education, a wide range of digital informative games is now accessible (Permana et al., 2021). When it comes to acquiring English or other languages, Huseinović (2023) stated that students increasingly rely on gamification-based applications like Duolingo, Busuu, Babbel, and Memrise, which offer organized and mini courses. Huseinović also mentioned that there are some significant reasons why students are gradually more attracted to mobile language learning applications, such as the accessibility of these mobile applications lies in their ability to facilitate learning anytime and anywhere. Accessible on any mobile device with internet connectivity, these applications provide a free way to learn vocabulary, grammar, writing, and/or pronunciation in several foreign languages at any time and from any location, which makes it more engaging and enjoyable through the gamified service offered.

Multiple studies have demonstrated that gamification can enhance the acquisition of English skills (Kriyakova et al., 2014). As targeted to change students' behavior, gamification fosters active student engagement and enhances the English language, promoting an inclusive and fear-free learning environment (e.g., Flores, 2015; Lam, 2016). An experimental study by Arunsirot (2020) in higher education settings revealed that a gamification approach significantly enhances students' English syntactic knowledge. In addition, Huseinović (2023) found that gamification can boost student motivation, academic achievement, and specialized language skills. Based on this evidence, gamification underscores the positive effect in the areas of English Language Teaching (ELT).

### *2.2.1. Demographic differences in adoption of gamified learning*

The debate over how gender roles affect students' engagement and motivation in the classroom is important but understudied, especially regarding gender-specific data on EFL students (Almusharraf et al., 2023). Even more, it is undefined if there are age and gender differences in how people use gamified services like there are in other digital game settings (Koivisto & Hamari, 2014). In the gamification context, age and gender reflect viewpoints on games and gameplay whereby variety and preferences have long been mostly ignored by the industry and to some degree even by academics (Griffiths et al., 2003; Williams et al., 2008; Greenberg et al., 2010). Prior research has tried to investigate this case, Kappen et al. (2017) claimed that younger participants apparently had more

positive responses toward game elements (e.g., points and leaderboards) than older generations. Meanwhile, the findings of earlier studies involving gender and gamification suggest that men and women have distinct ways of perceiving game elements and game design elements (Koivisto & Hamari, 2014; Codish & Ravid, 2017; Palmquist & Jedel, 2021). In the EFL context, Ismail & Mohammad (2017) uncovered that male students do better in game-based classrooms than female students. Contradicting this result, some studies discovered no differences between male and female students' performance when involving digital games in EFL classrooms (Chiang, 2020; Korkmaz & Oz, 2021; Wang et al., 2021). Given this evidence, the literature on age and gender differences in perceived benefits from gamification has been explored. Thus, our study attempts to offer the notion of demographic differences in adopting gamified services used for English learning in higher education.

### **3. Method**

This study performed a quantitative cross-sectional design using a survey questionnaire to investigate EFL students' perceived levels of gamified learning experience toward using gamification tools in learning English and measure to what extent its levels vary based on the demographic characteristics of participants. A total of 155 EFL students from the English Education Department at a state university in Central Java, Indonesia, participated in this study. The participants were recruited using purposive sampling to ensure the selection of individuals with relevant experiences. Specifically, participants were chosen based on their prior exposure to gamified learning in English language education, whether through formal classroom instruction or informal platforms such as mobile apps, online games, or web-based learning tools. Additional criteria included their current enrollment in English courses and their willingness to provide detailed reflections on their learning experiences. This approach was intended to gather rich, relevant data from students who could meaningfully contribute to the study's aims. In accordance with the gamified learning experience, the Gameful Experience Questionnaire (GAMEFULQUEST) instrument by Högberg et al. (2019) was adopted to obtain participants' views toward its dimensions. To demonstrate their response, it was put on a 4-level Likert Scale (1: Strongly disagree to 4: Strongly agree). Then, the GAMEFULQUEST was tested for validity and reliability, which reported that all items were valid due to the  $r$ -value obtained were higher than 0.159 ( $r$ -table), and it was also considered reliable based on the internal consistency reliability estimate for all items results ( $0.91 > 0.7$ ).

To uncover the research results, descriptive analyses (such as percentage, mean, and standard deviation) were executed. Since the data was categorized as ordinal, an inferential analysis, the Mann-Whitney U test was performed to compare participants' average scores according to gender and age as the answer to the second research question.

#### 4. Findings and discussion

This section will cover the statistical analysis results of descriptive and inferential calculations, revealing the answers to the proposed research questions. To begin with, the current study portrays the EFL students' demographics in terms of gender and age in order to extract the survey results from the participants' profiles.

##### 4.1. Distribution of the sample

**Table 1**

Descriptions of EFL students' demographics.

Demographics		N	%
Gender	Male	39	25.2%
	Female	116	74.8%
	Total	155	100%
Age	< 18	0	0%
	19 years old	105	67.7%
	20 years old	32	20.6%
	21 years old	18	11.6%
	> 22	0	0%
	Total	155	100%

Table 1 shows that 155 participants reported their gender, and among them, approximately a quarter (25.2%) were male, while a significant majority (74.8%) were female. The age distribution of the participants, who come from 19 to 21 years old, can be observed in the foregoing table, with the majority lying on 19-year-old students (N=105). Interestingly, there were no participants who were under 18 or over 22 years old. Accordingly, the demographic of age will be grouped into 3 age groups.

##### 4.2. EFL students' participants' gamified learning experience

As mentioned previously, this study adopted the Gameful Experience Questionnaire (GAMEFULQUEST) instrument by Högberg et al. (2019) in order to identify EFL students' learning experience toward gamified services both inside and outside classrooms. To clarify, for EFL students who selected deliberately to participate in this study, some of their lecturers implemented gamification tools in the class, such as Classcraft to teach reading, Kahoot! or Quizziz for quick assessment, and many others. Meanwhile, most of them also reported that they utilized Duolingo or Vocabulary.com to learn vocabulary outside of classrooms. This contextual information supports the initial overview of students' perceived experience levels and contributes to answering the first research question by illustrating the kind of gamified tools in which these perceptions were formed.



#### 4.2.1. EFL students' participants' perceived levels of gamified learning experience

To answer the first research question (What are the perceived levels of EFL students' gamified learning experience according to its dimensions for learning English?), the statistical data were classified into two sections: the score distribution of participants' gamified learning experience and mean scores and standard deviations of its dimensions.

**Table 2**

Mean scores and standard deviations of the gamified learning experience and its subscale.

Dimension	N	Mean	Std.Dev
Accomplishment	155	3.08	0.64
Challenge	155	3.14	0.62
Competition	155	3.26	0.57
Guided	155	3.18	0.53
Immersion	155	2.75	0.70
Playfulness	155	3.17	0.52
Social Experience	155	3.04	0.56
Overall	155	3.08	0.62

Among the seven dimensions, the highest mean scores perceived by EFL students were competition ( $M=3.26$ ;  $STD=0.57$ ), followed by guided ( $M=3.18$ ;  $STD=0.53$ ), playfulness ( $M=3.17$ ;  $STD=0.52$ ), challenge ( $M=3.14$ ;  $STD=0.62$ ), accomplishment ( $M=3.08$ ;  $STD=0.64$ ), and social experience ( $M=3.08$ ;  $STD=0.62$ ). Meanwhile, the lowest mean score was immersion ( $M=2.75$ ;  $STD=0.70$ ). As informed, the competition dimension appeared to have the highest mean values, indicating that participants tended to feel competitiveness based on aspects of the gamified service and there being winners among students. In contrast, the lowest mean score intended for immersion suggests that the average of participants who used the gamified service might not sense an immersive experience or emotional reactions toward a story presented by the service. Taken together, the overall data reveal that participants responded positively regarding learning experiences toward gamified services used in learning English.

**Table 3**

The score distribution of participants' gamified learning experience.

Interval	Category	N	%	Mean	Std.Dev
73-96	High	98	63.2%	172.6	13.70
49-72	Moderate	57	36.7%		
24-48	Low	0	0%		

Given that participants had positive attitudes toward gamified service, Table 3 delivers the perceived levels of the gamified learning experience. The table above shows that the overall mean score is 172.6 and the standard deviation is 13.70. The researchers divided three categories (High, Moderate, and Low) to identify the participants' central tendency with respect to a statistical summary of how participants performed on a

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particular measure and showing the range. As demonstrated, the majority of participants appeared to have the highest percentage of 63.2% (N=98), which belongs to the high category level. Furthermore, a visible minority was considered in the moderate category of 57 participants (36.7%). Notably, neither participant was put into the low category level. This evidence confirms that GAMEFULQUEST successfully describes the gamified learning experience due to consistent participants' responses toward exploring the full range of experience afforded by gamified services, whether intentional (explicit) or unintentional (implicit).

#### 4.3. Group difference according to demographic characteristics

Turning now to the statistical calculation of inferential analysis, which was performed to answer the second research question (Do EFL students' gamified learning experience levels vary based on demographic characteristics?). As described previously, our data belong to the ordinal category, which is why the researchers employed the Mann-Whitney U Test to compare two groups (Gender: Male & Female) and the Kruskal-Wallis H Test to compare three groups (participants' age).

##### 4.3.1. Gender differences regarding the gamified learning experience of the participants

**Table 4**

The Mann-Whitney U Test results for the effect of gender on participants' gamified learning experience.

	Gender	N	Mean Rank	U	<i>p</i>
Accomplishment	Male	39	73.31	2079.000	.446
	Female	116	79.58		
Challenge	Male	39	79.51	2203.000	.802
	Female	116	77.49		
Competition	Male	39	66.28	1805.000	.056
	Female	116	81.94		
Guided	Male	39	78.90	2227.000	.883
	Female	116	77.70		
Immersion	Male	39	71.42	2005.500	.288
	Female	116	80.21		
Playfulness	Male	39	80.10	2780.000	.726
	Female	116	77.29		
Social Experience	Male	39	69.67	1937.000	.168
	Female	116	80.80		
Overall	Male	39	72.09	2031.500	.342
	Female	116	79.99		

\* $p < 0.05$

The above table reveals no statistically significant differences between participants' male and female EFL students concerning their gamified learning experience (male MR=72.09; female MR=79.99; U=2031.500;  $p=.342$ ). Furthermore, among those dimensions also revealed that none of these differences was statistically significant

between male and female EFL students ( $p$ -value>0.05). Nevertheless, the Mean Rank (MR) scores of females were higher on its subscales, and the differences were not far from those of males. However, it is important to note the considerable imbalance in gender distribution within the sample, with 116 females and only 36 males participating voluntarily. This disparity raises important questions about the representativeness of the findings. While the results suggest that gender may not significantly influence the perceived gamified learning experience, the dominance of female participants may have obscured more nuanced gender-based trends. It has been supported by the previous evidence, Palmquist and Jedel (2021) found that gender did not impact attitude toward gamification nor perception of its elements (e.g., level and badges), even though the majority of their participants were females as well. Nevertheless, some current studies have shown that female and male students see game-based classrooms differently (Khan et al., 2017; Hou, 2018; Apriani et al., 2022). They reported that female students have different perceptions and performances (Almusharraf et al., 2023). In addition, Ismail and Mohammad (2017) found that male students outperform female students in EFL game-based classrooms. After further examination, they confirmed that male students had a greater motivation level than female students.

As evidence aligning with the current research, some studies supported our findings by revealing no differences in EFL classrooms when adopting digital games (Chiang, 2020; Korkmaz & Oz, 2021; Wang et al., 2021). According to Wang et al. (2021), although genders differ in performance on specific levels of testing (i.e.,  $t$ -test), no statistically significant differences were found between female and male students in the overall comparison. Pursuing this further, Parra-González et al. (2022) uncovered no significant difference in regard to gender while developing and validating the different factors with the EGAMEDU instrument. Stepping towards our findings as a part of the demographic aspect affects students' learning experience, it is generally agreed that our participants enjoyed the gamified service in learning English, whether female or male students experienced it similarly. Through this evidence, our findings refute the stereotype that female students are less likely to play digital games or other factors (e.g., motivation, engagement, preference) than male students, but they have similar experiences in learning English.

#### 4.3.1. Age differences regarding the gamified learning experience of the participants

**Table 5**

The Kruskal-Wallis H Test results for the effect of gender on participants' gamified learning experience.

	Age	N	Mean Rank	X <sup>2</sup>	<i>p</i>
Accomplishment	19 years old	105	77.06	.145	.930
	20 years old	32	79.92		
	21 years old	18	80.06		
Challenge	19 years old	105	77.11	2.103	.349

	20 years old	32	86.42		
	21 years old	18	68.22		
	19 years old	105	77.17		
Competition	20 years old	32	81.80	.305	.859
	21 years old	18	76.11		
	19 years old	105	73.38		
Guided	20 years old	32	87.13	3.607	.165
	21 years old	18	88.72		
	19 years old	105	81.84		
Immersion	20 years old	32	61.06	5.917	.052
	21 years old	18	85.69		
	19 years old	105	74.38		
Playfulness	20 years old	32	82.31	2.804	.246
	21 years old	18	91.47		
	19 years old	105	76.74		
Social Experience	20 years old	32	78.89	.416	.812
	21 years old	18	83.78		
	19 years old	105	74.40		
Overall	20 years old	32	85.17	2.096	.351
	21 years old	18	86.22		

\* $p < 0.05$

The researchers also tested for age effects to diagnose the view that there will be differences in their learning experience toward the gamified service used. The analyses revealed that the difference in levels of all dimensions among the 19-, 20-, and 21-year-old EFL students was not statistically significant ( $p\text{-value} > 0.05$ ). Moreover, there was no statistically significant difference among EFL students' ages concerning their gamified learning experience (19 years old  $MR=74.40$ ; 20 years old  $MR=85.17$ ; 21 years old  $MR=86.22$ ;  $U=2.096$ ;  $p=.351$ ). Here, it can be observed that the immersion dimension is almost significantly different ( $0.052 > 0.05$ ). While some previous studies emphasize the influence of age on attitudes toward gamification, the present study cannot directly compare its findings with theirs due to differences in participant age ranges. For instance, Brauner et al. (2013) included participants aged 20 to 80 and categorized them into distinct age groups: young (<30 years), middle-aged (30–65 years), and older adults (>65 years).

Similarly, Bittner and Shipper (2014) included participants aged 15 to 71, Palmquist and Jedel (2021) involved those aged 17 to 54, and Kappen et al. (2017) included participants between 17 and 65 years or older. These studies classified participants by age to explore generational differences in perceptions of gamification. Despite this information, remember that our participants only came from second-year students of a limited age who are able to participate in our study and cannot be generalized to the overall population (all English Education Department undergraduate students). The current study involved a more homogeneous age group, with participants aged 19, 20, and 21—individuals who can all be categorized as youth. This narrower age range limits the possibility of examining age-related differences and instead reflects a relatively

uniform perspective typical of younger individuals. Consequently, the current study's limitation should be addressed in future research, which is expected to explore broader or different contexts to validate the findings or offer new perspectives.

## 5. Conclusion

This study has answered two research questions by conducting a quantitative survey about the perceived levels of EFL students' gamified learning experience according to its dimensions for learning English and how their learning experience levels vary based on demographic characteristics (i.e., gender and age). It has been claimed that participants have a positive attitude toward gamified services used in learning English. Most of them appeared to have a high category level of gamified learning experience. Since no significant differences were found in gamified learning experiences across gender and age, gamified learning appears to be broadly effective across diverse student groups. This suggests that gamification has the potential to be an inclusive instructional method that can benefit a wide range of learners regardless of demographic differences.

However, as the study was limited to a specific group of second-year English Education students from a single university in Indonesia, the generalizability of the results is constrained. Therefore, future studies are encouraged to include more diverse samples across multiple institutions and year levels to provide a more comprehensive understanding of how demographic variables may or may not influence gamified learning experiences in EFL contexts, including a wider age range and a more balanced male-to-female ratio, to better understand potential demographic influences.

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