

# How can the Learning Spirit of Buddhist Sunday School Students be enhanced through the Gamification Method?

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**Abstract:** This study aimed to find the effect of gamification methods on the enthusiasm of Buddhist Sunday School students to learn. The problems that occur are challenges for Buddhist Sunday School teachers in class management such as human resources, facilities and infrastructure and implementation of learning, low enthusiasm for learning of Buddhist Sunday School students, limitations in using learning methods, some students were seen chatting during the worship service, many pre-kindergarten students played during the worship service, and some children arrived late to Buddhist Sunday School. This study used a quantitative research approach by providing questionnaires to respondents. The subjects of this study are 30 people, obtained by a total sampling technique, namely using the entire population as respondents. The study results showed a significant favorable influence between the gamification method and students' enthusiasm for learning. The study result states that the gamification method affects learning enthusiasm by 52.1%, and other factors influence the remaining value of 47.9%. This study has practical implications in education; gamification can be considered in the learning process, such as using points, levels, or challenges to motivate students and make learning more enjoyable.

**Keywords:** Gamification Method; Learning Morale, Buddhist Education, Student Character Building

## 1. Introduction

Education is defined as a conscious and planned effort to create a pleasant learning and learning atmosphere so that students actively develop their potential to have religious and spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves and society. To get maximum education, students not only learn formally but can learn and gain experience outside of school or get non-formal learning. So that students can develop the potential that exists in themselves to the fullest [1]. Education in Indonesia consists of two types, namely formal and non-formal education. Formal education is structured, has levels or levels, and takes place within a certain period, from elementary school to university. Formal education also includes various special programs and institutions for several technical and professional training types. Meanwhile, non-formal education is a learning activity outside the school system, and

formal education is carried out in an organized manner. One of the non-formal education that Buddhist students get outside of school is the Buddhist Sunday School [2].

According to Government Regulation No. 55/2007 on Religious Education and Religious Education, Buddhist Sunday School is a non-formal education activity routinely held in a Vihara or Cetya every Sunday, where the curriculum is implemented according to the National Education Standards. Buddhist Sunday School aims to develop students' ability to understand, appreciate, and apply the principles that underlie their mastery of the arts, technology, and science (Fransisca Anna & Wijoyo Hadion, 2020). In the teaching and learning process at Buddhist Sunday School (SMB), various learning methods are needed so that students can easily understand the material taught optimally. Learning methods are a set of ways, approaches, and strategies teachers use during the learning process so that students can achieve learning objectives or master the competencies set out in the subject syllabus [3]. One of the learning methods commonly used in Buddhist Sunday Schools is the lecture learning method. The lecture method allows a teacher or lecturer to explain a material. This process is usually done in front of a few learners, with the educator speaking orally [4].

Based on the researcher's observations with the Sunday School Children, several issues were found. *First*, some students were seen chatting during the worship service. It shows a lack of attention and awareness of the importance of worship participation. Secondly, many preschool students play during the worship service. These children may not yet fully understand the procedures and importance of prayer, so they prefer to play instead. Thirdly, some children arrive late to Sunday School at the Buddhist temple. Various factors, including a lack of time and discipline from the child and the parents, can cause this delay. Most Sunday School students learn because they want to do something exciting and enjoyable. Good classroom management will benefit students, increasing their enthusiasm for learning. The challenges in education are becoming increasingly complex, especially in maintaining students' learning enthusiasm. Various learning methods have been implemented to address this challenge, including gamification [5].

According to Zichermann in Heni [6], gamification is a process of game thinking and mechanics that encourages users to solve problems. In gamification, students earn scores, points, levels, rewards, and challenges just like in a game. The advantage of the gamification method is that it increases students' enthusiasm for learning, and a system that consistently provides positive feedback encourages students to keep learning. For example, the use of the Kahoot web platform provides immediate feedback on how well they are learning, which enables them to continue learning and stay motivated. Using gamification in learning makes students feel more enthusiastic, happy, not bored, and more active in practicing the material. A study from the University of Colorado Denver found that students who learn through gamification can score 14% higher than students who learn through lecture methods [7]. It shows that the gamification method can enhance the learning enthusiasm of Buddhist Sunday School children (SMB). Excitement for learning is significant for educational activities because it encourages students to perform better in the learning process, and if students lack enthusiasm for learning, they will not achieve their maximum potential [8], [9].

Gamification in the Bodhisattva Bandar Lampung Buddhist Sunday School (SMB) is implemented through web platforms like Kahoot, which offers interactive games. Every game designed in Kahoot provides enjoyment and has profound educational meaning following Buddhist teachings. Students are invited to participate in a game full of challenges and rewards, which sharpens their cognitive skills and instills moral and spiritual values. This approach makes learning more engaging, and students can better understand the teachings conveyed through enjoyable methods. The results of the research by Irnawati [10], show that implementing gamification in mathematics subjects can increase students' learning motivation by 13.03% compared to conventional learning. In the research by Isma [11], previous research findings also show that gamification-based e-learning media positively impacts students' interest in studying computer engineering.

Additionally, the study by [12] shows that the gamification-based blended learning model positively affects learning motivation and outcomes. Based on the above description, the researcher is interested in further examining the influence of the gamification method on learning enthusiasm, thus necessitating a study to clarify the problem of learning enthusiasm as a critical variable. They were undoubtedly linked to another variable believed to address the learning enthusiasm issue: the gamification method variable. The expected final result of this research is to prove the research hypothesis regarding the influence of gamification methods on the enthusiasm of Sunday School students in Buddhism (SMB).

## **2. Method**

This research uses a quantitative approach with metode penelitian menggunakan pendekatan deskriptif kuantitatif dan teknik pengolahan data dalam bentuk survei dengan jumlah pernyataan sebanyak 73 menggunakan skala likert sebagai jawaban. In this study, the population being researched is the Bodhisattva Bandar Lampung Sunday School (SMB) students, totaling 30, and all of these students were made the sample through a total sampling technique. According to Sugiyono [13] total sampling is a technique where all population members are made the sample. According to [14], if the population consists of less than 100 people, the entire population is the sample. The research design conducted in this study involves making observations, creating a background of the problem, identifying and formulating the problem using theoretical foundations, or searching for theories related to retreat activities and student discipline, including exploring theories, creating research methods, and making decisions. They continued with determining variables, creating an instrument grid, collecting data with a questionnaire, analyzing data, and making conclusions and recommendations. The data analysis used in this research employs the technique of simple linear regression analysis. This research uses data analysis with the SPSS data processing programs to achieve better and more reliable results.

## **3. Results**

The respondent in this study involved 30 respondents with the instrument consisted of 80 statement items, consisting of 40 items for the gamification method variable and 40

for the learning motivation variable. The results for the gamification method variable showed 36 valid and four invalid statement items. The invalid statement items were measured by analyzing for 30 respondents at a significance level with 0.361. The result found for four items is invalid. The researcher removed invalid statement items because other item numbers could already represent each statement indicator, so out of 80 statement items, 73 statement items were still brought into in the study. Based on the reliability instrument test of the study, the reliability coefficient for 73 valid items was obtained. The reliability analysis got the result with the value of 0.973, it means reliable. It can be stated that the study instrument brought to this study has fulfilled the criteria for strong reliability. This study's alpha value  $> 0.80$  indicates that all items and tests are reliable.

**Table 1.** Reliability Test of Measurement Tool

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha	Cronbach's Alpha
,973	,973	,973

(Source: SPSS 26.0 data processing results)

Measuring the normality test has been done by using a testing of One-Sample Kolmogorov Smirnov. The criteria for data sample to take from a normal distribution of the population with a significance level of 0.05 or 5%. The results of the normality calculation using the One-Sample Kolmogorov-Smirnov test are presented in the table below.

**Table 2.** Normality Test

One-Sample Kolmogorov-Smirnov Test		
N	N	N
Normal Parameters <sup>a,b</sup>	Normal Parameters <sup>a,b</sup>	Normal Parameters <sup>a,b</sup>
Most Extreme Differences	Most Extreme Differences	Most Extreme Differences
Test Statistic	Test Statistic	Test Statistic
Asymp. Sig. (2-tailed)	Asymp. Sig. (2-tailed)	Asymp. Sig. (2-tailed)
a. Test distribution is Normal.		

(Source: 2024 data processing results using SPSS 26.0)

Based on the test of homogeneity above table mentioned shows that the significance value of the gamification method and learning enthusiasm is 0.133, which states that the two data are homogeneous. For more details, see the table of tests for the variance of homogeneity.

**Table 3.** Homogeneity Test  
 Test of Homogeneity of Variances

		Levene			
		Statistic	df1	df2	Sig.
The Influence of X on Y	Based on Mean	2,400	1	28	,133
	Based on Median	2,408	1	28	,132
	Based on the Median and with adjusted df	2,408	1	26,729	,133
	Based on trimmed mean	2,423	1	28	,131

(Source: 2024 data processing results using SPSS 26.0)

**Table 4.** Regression Equation Output

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	37,502	19,439		1,929	,064
Gamification Methods	,771	,140	,722	5,516	,000

a. Dependent Variable: Eager to learn

(Source: 2024 data processing results using SPSS 26.0)

Regarding to the output from the table above mentioned shows that the gamification method increases or develops, the learning enthusiasm variable will decrease. Based on the data analysis, can be concluded that the two variables have a positive regression relationship. There is an influence between the gamification method variable and learning enthusiasm. The results show that there is an influence between the gamification method and the learning enthusiasm of Buddhist Sunday School students. The hypothesis testing criteria following ANOVA table.

**Table 5.** ANOVA Analysis Output

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6304,787	1	6304,787	30,421	,000 <sup>b</sup>
	Residual	5803,079	28	207,253		
	Total	12107,867	29			

a. Dependent Variable: Eager to learn

b. Predictors: (Constant), Gamification Methods

(Source: 2024 data processing results using SPSS 26.0)

From the ANOVA analysis output, shows that the gamification method affects students' learning enthusiasm.

**Table 6.** Value of R Square Determination Coefficient

Model Summary <sup>b</sup>				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	,722 <sup>a</sup>	,521	,504	14,39628

a. Predictors: (Constant), Gamification Methods

(Source: 2024 data processing results using SPSS 26.0)

The determination coefficient R Square, with the result of 0.521, means that 52.1% of the gamification method affects students' enthusiasm for learning, the other side, the other influencing factors were 47.9%. It shows that the gamification method affects the enthusiasm for learning of Sunday School Students. It means that the excitement for learning can be influenced by the gamification method by 52.1% through a linear relationship  $Y = 37.502 + (771) X$ .

Data analysis shows that the gamification method affected the enthusiasm for learning. It can be seen from several pieces of evidence that have been carried out through research results in the form of questionnaires or questionnaires, and each variable is analyzed to obtain an analysis result that can be tested and confirmed for its truth. So it can be used to make decisions and produce research conclusions. Gamification is crucial and fundamental in the student learning process. It shows that by using gamification method in learning can increase student involvement in education, increase creativity motivation, enhancing the skills to collaborate among students, and increase students' enthusiasm for learning. According to the study results showed that it is in line with the opinion of [15], who stated that gamification in the form of digital technology application game media is one solution which can be implemented in the learning of early childhood students. It improves children's skills, such as cognitive and language skills, as well as increases motivation, participation in learning, and collaboration.

Gamification plays a significant role in increasing students' enthusiasm for learning [16]. By incorporating game elements into the learning process, gamification can significantly improve students' motivation [16], [17]. Gamification encourages students to have a more positive attitude toward learning and build better relationships with classmates [18]. Because they have high motivation and a supportive learning environment, students can participate more actively, work together, and feel appreciated during the learning process [19], [20]. The results of this study align with Valentinna's opinion (2020), which states that using gamification methods in learning can increase student motivation, cognitive skills, commitment, and student performance, which can boost student enthusiasm for learning [21]. The gamification method has a significant impact on improving student enthusiasm for learning [22]. Gamification has created a more interactive and enjoyable learning environment to reduce student boredom and saturation [23]. Some previous research aligned with this study, which indicated that the gamification-based blended learning model has significantly impacted the student learning motivation [24]. It is result with value of 0.529, which is formulated with a large percentage of the R square determination coefficient of the gamification-based blended

learning model effect on student learning motivation and learning outcomes with the value 52.9%. The analysis describes that the blended learning model on student learning motivation and learning outcomes has a strong influence. Enthusiasm is a person's feeling that is so strong that it can be considered an essential component of an activity and can be shown through the direction of potential that revives, gives rise to, and fosters a great desire. People who are enthusiastic, constantly aware, pure in their actions, have self-control, live according to the Dhamma, and are always alert for their happiness [25].

In Buddhism, enthusiasm is interpreted as an effort or effort. Someone diligent will make a great effort to achieve his goals [26]. People with poor enthusiasm are lazy and observant and have many reasons not to do something [27]. Someone who avoids work or is afraid to take responsibility always gives reasons such as too early, too late, too cold, hot, hungry, or complete to avoid a job. Someone like this is a victim of laziness and slowness. Both of these unwholesome mind formations are the opposite of enthusiasm. Enthusiasm refers to the effort of the mind in action. There are two types of mind action: right effort and wrong effort (Rapiadi, 2020). The *Abhidhamma Pitaka* in the Buddhist discourse explains that enthusiastic effort in doing something is the path to a person's perfection to achieve the final goal. Being energetic and wise means being diligent in enthusiasm, acting mindfully with wisdom, being firm in the precepts, and developing calm and insight as concentration and wisdom. In the *satipatthana sutta* the Buddha says that a person who can restrain himself from heat and cold, in line with that in the *Cūlahatthipadopama Sutta*, can defend himself from lust, can drive away laziness, dissatisfaction and slowness by arousing the desire to move effort and arouse enthusiasm, can find the noble path ahead. Based on the description of the gamification method variable indicators, there are four indicators: 1) feedback, 2) construct, 3) challenge, and 4) story. The most considerable indicator value is the story indicator. It emphasizes that many Buddhist Sunday school students are motivated by the learning provided, and gamification-based learning can be an exciting learning experience. In comparison, the learning enthusiasm variable has four indicators, namely 1) an indicator of being diligent in facing difficulties, 2) an indicator of being persistent in facing difficulties, 3) an indicator of getting bored quickly with routine tasks, and 4) an indicator of enjoying finding and solving problems. The most enormous indicator value is being diligent in facing difficulties. This is because many Buddhist Sunday School students diligently and enthusiastically do their assignments.

The gamification method result analysis for Sunday school students showed a percentage of 86% in the excellent category. The details of each indicator answered the average in the outstanding category with the percentage of answers, namely: 1) feedback indicator with value 82% in the excellent category; 2) construct indicator with value 87% in the excellent category; 3) challenge indicator with value 85% in the perfect category; 4) story indicator with value 89% in the outstanding category. The results of data analysis on the enthusiasm for students' learning showed a value 86% in the outstanding category. The details of each indicator answered the average in the outstanding category with the percentage of answers, namely: 1) persistent indicator in facing difficulties with value of 88% in the outstanding category; 2) persistent indicator in facing difficulties with value

84% in the excellent category; 3) indicator of getting bored quickly with routine tasks with value 87% in the excellent category; 4) The indicator of enjoying finding and solving problems with value 83% is in the excellent category.

#### 4. Conclusion

According to the study background, research results, and discussion, it can be concluded that the gamification method has strong affect to students' enthusiasm for learning. It can be described that there is a significant impact between the gamification method and students' enthusiasm for learning. The magnitude of the impact of gamification methods on students' enthusiasm for learning. Gamification is very important in the student learning process because using gamification methods in learning can increase student involvement, creativity, and motivation, as well as improve the ability to collaborate between students, increasing students' enthusiasm for learning. Gamification, which involves game elements in the learning process, can significantly increase student motivation. Gamification encourages students to have a more positive attitude toward learning and build better relationships with their classmates. Students can participate more actively, work together, and feel appreciated during the learning process because the learning environment is supportive and has high motivation..

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