

**Survey of Learning Interest in Physical Education among Students Who Play Online Games****Pajar Hari Widodo<sup>1✉</sup>, Iyakrus<sup>2</sup>, Ahmad Richard Victorian<sup>3</sup>**Program Study of Physical Education and Health Sciences, Faculty of Teacher Training and Education, Sriwijaya University, Palembang, Indonesia<sup>123</sup>**Article History**

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**Keywords:**Interest in Learning;  
Physical Education; Online  
Games**Abstract**

This research aims: 1. To determine the interest in learning physical education of students who play online games for class X Mechanical Engineering and X Light Vehicle Engineering State Vocational High School 4 Palembang. 2. To determine the intensity of playing online games for students in class X Mechanical Engineering and X Light Vehicle Engineering at State Vocational High School 4 Palembang. The research method used in this research is quantitative descriptive research. Data collection techniques in this research are observation: the ongoing process of physical education learning activities, questionnaires: in the form of statements regarding interest in learning and intensity of playing online games, and documentation: physical education learning activities and school documents. The data analysis technique in this research is descriptive statistics and quantitative analysis by carrying out normality tests, looking for the mean, standard deviation, variance and percentage of data. The results of this research show that the Physical Education Study Interest Survey of Students Who Played Online Games in Class X Mechanical Engineering and Class X Light Vehicle Engineering at State Vocational High School 4 Palembang, namely: The majority of students in Class moderate physical education lessons. Meanwhile, the intensity of playing online games for students in class X Mechanical Engineering and X Light Vehicle Engineering at State Vocational High School 4 Palembang is also in the medium category.

**How to Cite**

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## INTRODUCTION

The purpose of learning can be achieved through the drive or interest within each student to learn because without the presence of motivation in every individual, it will be in vain. Interest is an individual's tendency towards an activity they enjoy, accompanied by cognition, emotion, conation, or (Al Fuad, 2016). Students' learning interests are crucial because interest is the tendency to remember, pay attention to, and recall certain activities. These activities are continuously enjoyed, observed with pleasure, and without being instructed. The stronger the connection, the stronger the interest. In daily life, interest is often equated with attention, whereas attention is temporary and not necessarily accompanied by pleasure, while interest is always accompanied by a sense of enjoyment and leads to a sense of satisfaction. Success usually begins with a strong interest, and a strong interest will certainly affect the success of maximum learning outcomes.

In this digital age, the development of the scientific sector is advancing rapidly. The advancement of technology provides benefits and conveniences for humans in science, education, and entertainment. Nowadays, knowledge can even be sought by simply accessing the internet. Apart from providing ease of access to knowledge, it also provides convenience and freedom to access entertainment, games, and other forms of entertainment.

Currently, there is a trend of playing various online games, which is a new habit or lifestyle especially among children and adolescents, due to the rapid development of science and communication. The proliferation of online game influencers who use social media to promote these online games also greatly influences this habit of playing online games. Playing online games is one of the activities that can influence students' learning interests. Online games themselves have various genres, ranging from simple text-based games to games with complex graphics that create virtual worlds that can be inhabited by many players simultaneously (Surbakti, 2017). It is undeniable that many teenagers and children are addicted to online games due to the variety of game genres available such as adventure, MOBA, warfare, racing, and many others, packaged with exciting and engaging gameplay experiences.

Online games are not just games to be watched; players can also actively participate by moving images together with other players. Players can compete to earn low and high points, determining winners and losers. In online games, players can also train their intellect by making decisions

to achieve specific goals. Online games have positive and negative impacts on players. The negative impacts of online games include causing bad attitudes such as words spoken while playing, bad attitudes when playing such as patting the table, taking/stealing other people's rights, being lazy about doing activities other than playing online games (Mertika & Mariana, 2020).

In the past, children were only familiar with traditional games such as congklak, gobak sodor, jump rope, hide and seek, hopscotch, kites, and many more. However, nowadays children tend to be reluctant to play traditional games because they are familiar with smartphones and computers. Online games are like an addiction for the current generation; children tend to become more individualistic, which can disrupt their social and environmental lives. Online games are not limited to the device used, online games can be played on computers, laptops, smartphones and even tablets. Online games can be played as long as the gadget is connected to the internet network (Amanda, 2016).

Online games allow interaction between players who are far apart, making the gaming experience more enjoyable, especially with added features such as voice chat, enhancing the excitement of playing together with the trendy term nowadays, "mabar" (playing together). Games are activities played for fun or for fun that have rules so that someone wins and someone loses. Eddy Liem, Director of Gamer Indonesia and an Indonesian game enthusiast, said that online games are games that are played online using the internet, which can be played on ordinary game consoles such as PC (personal computer) or PS2 and X-Box (Johan, 2019). Examples of popular online games include Free Fire, Mobile Legends, and PUBG, which are widely played by children and teenagers. These online games have both positive and negative impacts.

The positive impact of online games includes providing a sense of enjoyment, tranquility, entertainment, and stress relief (Johan, 2019). Players can also earn money from selling diamonds in online games. Online games have garnered attention from various parties and have become profitable, as evidenced by the emergence of gamers who earn money from playing games on social media platforms and the establishment of official online game competitions such as MPL (Mobile Legends Bang Bang Pro League), FFIM (Free Fire Indonesia Master), PMSL (PUBG Mobile Super League), and even some players being called up to represent the Indonesian national team in international events like the SEA Games and Asian Games.

In addition to the aforementioned positive impacts, online games also entail several negative consequences. One of the negative impacts associated with online gaming is violence, particularly in games categorized as fighters, where children tend to emulate the behaviors of the characters they encounter, which can be detrimental to their social lives and may lead to undesirable outcomes such as violence towards others or family members. Moreover, children often exhibit more frequent use of vulgar language and cursing while playing games due to frustration or unmet expectations during gameplay. It is undeniable that playing online games can lead to children becoming less inclined to read.

Furthermore, addiction to online gaming can influence students' interest in physical education learning. Physical education learning contains various moral education situations such as unity, cooperation and competition contained in interactions between teachers and students (Girartama et al., 2018). Addiction to online gaming can cause children to become lazy and reduce their study time, which can affect their academic performance. This phenomenon is evident among students at State Vocational High School 4 Palembang who are frequently seen playing online games during lessons, free periods, or after classes. These students are those who have been playing online games for a long time, such as MOBILE LEGEND, FREE FIRE, and PUBG. Students who engage in online gaming during physical education classes appear to be less interested and more focused on using their mobile phones. In conclusion, the development of technology and the prevalence of online games can influence students' interest in learning physical education. Therefore, the author intends to conduct research at State Vocational High School 4 Palembang with the title "Survey of Physical Education Learning Interest of Students Who Play Online Games in Class X Mechanical Engineering and X Light Vehicle Engineering at State Vocational High School 4 Palembang."

## METHODS

This research adopts a quantitative descriptive study with an inductive approach, aiming to depict the actual situation during the research by collecting, classifying, and analyzing data to obtain insights into the issues at hand. The required data for this study include understanding the learning interest of physical education students who play online games in Class X Mechanical Engineering (TP) and X Light Vehicle Enginee-

ring (TKR) at State Vocational High School 4 Palembang, as well as the intensity of online gaming among these students.

The descriptive model is suitable for this study as it aligns with the research objective, which is solely to observe the learning interest of physical education students who play online games in Class X TP and X TKR at State Vocational High School 4 Palembang, and to assess the intensity of online gaming among students in these classes without examining the influence of online games on learning interest. The research subjects consist of students in Class X TP and TKR.

The research instrument used in this survey is a Likert scale or questionnaire, composed of questions aligned with the survey's objectives, and these questions are designed not to complicate the respondents' tasks. Data collection is conducted by providing the questionnaire to respondents, who then choose one of the answers (Dewi & Sepriadi, 2021). According to Sugiyono, (2022), the Likert scale is used to measure individuals' or groups' attitudes, opinions, and perceptions about social phenomena. To measure respondents' answers in this study, the researcher used a research instrument in the form of a questionnaire to be filled out by respondents using weighting criteria by assigning scores to each question with the following levels: Strongly Agree (SA) = Score 4, Agree (A) = Score 3, Disagree (D) = Score 2, Strongly Disagree (SD) = Score 1.

Data collection technique is observation technique involves gathering information about visible objects or events detectable by the senses. Sometimes, observations yield more accurate and reliable information compared to interviews. This method is used when studying human behavior, work processes, natural phenomena, or when the observed respondents are not numerous. In this research, observations will be conducted on factors influencing and related to the research object, specifically the physical education learning process. The questionnaire technique involves presenting a set of written questions or statements to respondents. The questions typically progress from general to specific, and their validity and reliability will be tested beforehand to ensure data validity and reliability. The questionnaire's physical appearance will be neat and clear to enhance respondents' seriousness in filling it out. Documentation involves investigating written sources such as books, magazines, documents, regulations, meeting minutes, daily records, etc., to supplement the research data gathered at State Vocational High School 4 Palembang.

**Table 1.** Grids for making physical education student interest questionnaires

Indicator	Question Item	Amount Question	
Intrinsic Factors	Attention	1,2,3,4,5	5
	Feeling Happy	6,7,8,9,10,11	6
	Activity	12,13,14,15,16,17,18	7
Extrinsic Factors	The Role of the Teacher	19,20,21,22,23,24	6
	Facility	25,26,27	3
Amount		27	

**Table 2.** Grids for making online game playing insensity questionnaires

Aspect Insensity Play Online Games	Indicator	Number Item of Favorable	Number Item of Favorable	Total
Frequency	Spending time: playing online games rather than doing activities outside	4,5,8,11	19	11
	Putting online games first than others activities	9,10,12,13	17,18	
Duration	Playing online games during free time	1,3,16,20	7	12
	Play online games every day	2,6,21	29	
	Forgetting time	14,15,23	-	
Amount				23

**RESULTS AND DISCUSSION**

**Data Interest in Physical Education Learning Among Students Who Play Online Games**

Description of the Interest in Physical Education Learning Among Students Who Play Online Games in Class X TP and X TKR at State Vocational High School 4 Palembang, considering the intrinsic influence:

Based on the research data analysis, the description can be summarized in the following **Table 3. Table 4. Table 5. Table 6. Table 7. Table 8.**

**Table 3.** Description of the interest in physical education learning among students who play on-line games in the Intrinsic factors

Statistic	Score
N Valid	60
Missing	0
Mean	59.20
Median	58.00
Modu	58
Std. deviation	5.217
Range	21
Min	51
Max	72

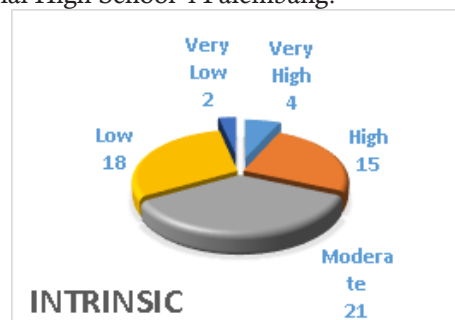
Source: SPSS

From the data **Table 3**, we describe the internal factors (intrinsic) of interest in learning physical education of students who play online games for class X TP and The middle value is 58, the frequently occurring value is 58, and the standard deviation is 5.21. while the highest score was 72 and the lowest score was 51. From the test results, it can be categorized as an internal influence (intrinsic) in the interest in learning physical education of students who play online games for class X TP and X TKR State Vocational High School 4 Palembang. These calculations can be seen in the following **Table 4.**

**Table 4.** Categories of Influence of students learning interest from intrinsic factors

Interval	Category	Frequency	%
67 < X	Very High	4	6,6%
62 – 67	High	15	25%
56– 62	Moderate	21	35%
51 – 56	Low	18	30%
X < 51	Very Low	2	3,3%
Amount		60	100%

**Figure 1** illustration diagram depicting the intrinsic influence on the interest in physical education learning among students who play online games in Class X TP and X TKR at State Vocational High School 4 Palembang:



**Figure 1.** Intrinsic Diagram

**Table 5.** Description of the interest in physical education learning among students who play on-line games in the Extrinsic factors

Statistic	Score
N Valid	60
Missing	0
Mean	28,97
Median	28.50
Modu	28
Std. deviation	3.075
Range	13
Min	23
Max	36

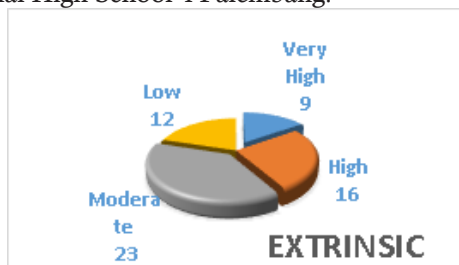
Source: SPSS

Here is an illustrative graph depicting the extrinsic influence on the interest in physical education learning among students who play online games in Class X TP and X TKR at State Vocational High School 4 Palembang:

**Table 6.** Categories of Influence of students learning interest from Extrinsic factors

Interval	Category	Frequency	%
33 < X	Very High	9	15%
30 – 33	High	16	26%
27– 30	Moderate	23	38%
24– 27	Low	12	20%
X < 24	Very Low	0	0%
Amount		60	100%

Here is an illustration graph depicting the extrinsic influence on the interest in physical education learning among students who play online games in Class X TP and X TKR at State Vocational High School 4 Palembang.



**Figure 2.** Extrinsic Diagram

From the data **Table 7**, it can be described as a whole the influence from within (intrinsic) and influence from outside (extrinsic) on the interest in learning physical education of students who play online games for class X TP and X TKR State Vocational High School 4 Palembang seen from the overall influence from within (intrinsic) and from outside (extrinsic) with an average of

88.18. The middle value is 86, the frequently occurring value is 86, and the standard deviation is 7.66. while the highest score was 108 and the lowest score was 76.

**Table 7.** Description of the interest in learning physical education of students who play online games as a whole, influences from within (intrinsic) and from outside (extrinsic)

Statistic	Score
N Valid	60
Missing	0
Mean	88.18
Median	86.00
Modu	86
Std. deviation	7.668
Range	32
Min	76
Max	108

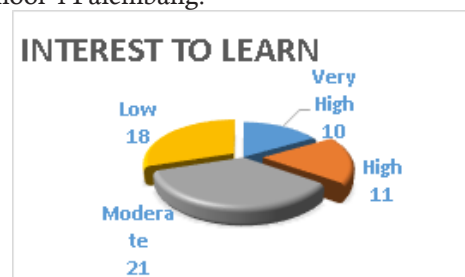
Source: SPSS

From the test results, it can be categorized as overall interest being influenced by internal (intrinsic) and external (extrinsic) factors in the physical education learning interest of students who play online games for class X TP and X TKR State Vocational High School 4 Palembang. These calculations are presented in the table as follows **Table 8**.

**Table 8.** Categories of Influence of Student Interest in Learning

Interval	Category	Frequency	%
99 < X	Very High	10	16,6
92 – 99	High	11	18,3
84 – 92	Moderate	21	35
76 – 84	Low	18	30
X < 76	Very Low	0	0
Amount		60	100%

The following is a graphic illustration of external (intrinsic) and external (extrinsic) influences on the interest in learning physical education of students who play online games for class X TP and X TKR at State Vocational High School 4 Palembang:



**Figure 3.** Interest to learn Diagram

### Overall Online Game Playing Intensity

The research was conducted with the aim of knowing the variable description of the intensity of playing online games using a research instrument in the form of a psychological scale. The intensity scale for playing online games is formulated from the intensity aspect. It is hoped that the use of this scale can reveal the intensity variables of playing online games both in general and specifically. A general picture of the intensity of playing online games can be seen from data analysis with statistical calculations. Intensity was measured using a scale consisting of 23 valid items, with the highest score being four and the lowest score being one.

The following is analysis data processed using data processing software **Table 9. Table 10. Table 11. Table 12.**

**Table 9.** Descriptive Statistics of Online Game Playing Intensity

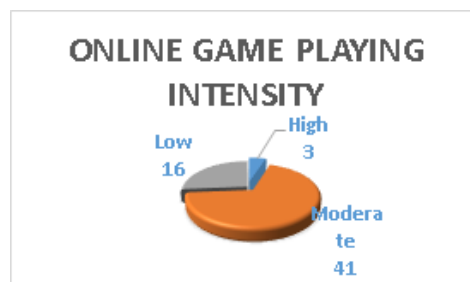
Statistic	Frequency	Duration	N Valid
Range	23	30	
Min	16	12	
Max	39	42	
Mean	25.77	26.15	60
Std. deviation	4.589	5.748	
Variance	21.063	33.045	

Based on the calculations above, the intensity classification for playing online games is as follows **Table 10.**

**Table 10.** Overview of Online Game Playing Intensity

Interval Skor	Interval	Criteria	F	%
$(u + 1 o) \leq X$	$69 \leq X$	High	3	5 %
$(u - 1 o) \leq X < (u + 1o)$	$46 \leq x < 69$	Moderate	41	68,3%
$X < (u - 1 o)$	$X < 46$	Low	16	26.6%
Amount			60	100%

Based on the table **Table 10**, it can be seen that the intensity level of playing online games is in the medium category. From the calculations, the empirical mean result of 51.92 is theoretically included in the medium category, namely the interval  $46 \leq x < 69$ . Therefore, it is concluded that the description of the intensity of playing online games is included in the medium category. The following is a general diagram of the intensity of playing online games **Picture 4.**



**Picture 4.** Online Game Playing Intensity Diagram

If each indicator is described, a table of categories of interest in learning physical education and intensity of playing online games can be produced, as follows **Table 11.**

**Table 11.** Category of interest in learning physical education

Criteria	Intrinsic		Extrinsic	
	Score	Category	Score	Category
Very High	4	6,6%	9	15%
High	15	25%	16	26%
Moderate	21	35%	23	38%
Low	18	30%	12	20%
Very Low	2	3,3	0	0%

**Table 12.** Categories of intensity of playing online games

Criteria	Frequency		Duration	
	Score	Category	Score	Category
High	3	5%	5	8,3%
Moderate	36	60%	44	73,3%
Low	21	35%	11	18,3%

Based on the overall results of the study, the influence of intrinsic and extrinsic factors on Physical Education learning interest among 10th-grade students in the TP and TKR classes at State Vocational High School 4 Palembang shows that the majority, 21 students or 35%, fall into the moderate category. The impact of both intrinsic and extrinsic factors on Penjas learning interest is categorized as very high for 10 students (16.5%), high for 11 students (18.3%), moderate for 21 students (35%), and low for 18 students (30%).

Regarding the overall intensity of online gaming among these students, the frequency and duration analysis reveals that the majority, 41 students (68.3%), are in the moderate category. However, 3 students (5%) exhibit high gaming intensity, while 41 students (68.3%) and 16 students (26.6%) show moderate and low gaming intensity, respectively.

The observed issue during physical education learning processes indicates that many students participate without understanding its benefits, potentially due to a lack of interest influenced by both intrinsic (attention, enjoyment, activities) and extrinsic (teacher roles, facilities) factors. Interest has a big influence on learning outcomes, because if the subject matter studied is not in accordance with interests, students will not learn well because it is not interesting to them. Interest as an internal factor plays a role in supporting student learning outcomes. Students who are not interested in learning material will show an unsympathetic attitude, be lazy and not enthusiastic about participating in the teaching and learning process (Prastika, 2020). Additionally, the advancement of technology enables easy access to the internet and engaging online games, indirectly affecting students' physical education learning interest. Physical education is an educational process that involves interaction between students and their environment which is managed through systematic physical activities which aim to form a complete human being. (Watikasari et al., 2023). Physical education is also called sports education to achieve achievement. Physical education is education that actualizes the potential of human activity in the form of attitudes, actions and works that are given form, content and direction towards personal decisions in accordance with human desires (Budi, 2021).

In this context, the teacher's role is crucial in packaging learning experiences and controlling classroom conditions. According to Damayanti, (2016), an educator must possess the ability to provide assistance, guidance, instructions, warnings, encouragement, examples, and directions that enable students to understand the material. However, in certain contexts, no teacher shows disagreement or strongly disagrees with providing technical assistance, guidance, and instructions to students. Instead, it is acknowledged that some Physical Education teachers may not adequately provide services that meet the learning needs of students, which could be an area that needs improvement in efforts to enhance the quality of teaching and learning.

Teachers should create a conducive learning environment by utilizing facilities and managing students' psychological states to enhance their interest in learning. According to Destriani, (2018), interest is considered an alteration of a person's personality, which is observed through their views and actions aimed at achieving goals. Interest is an element that originates from within a person and functions as motivation to do some-

thing that brings the individual's attention, pleasure, desire and conscious experience, while the affective behavior of interest is characterized by direction, intensity and purpose (Rahmayanti, 2016). High learning interest facilitates active participation, skill mastery, and optimal learning achievements. Facilities and infrastructure are important factors because they encourage students' interest in learning (Jannah & Sontani, 2018).

## CONCLUSION

Based on the research findings and data analysis conducted at State Vocational High School 4 Palembang, it can be concluded that the Survey of Students' Interest in Physical Education (Penjas) among 10th-grade students in the Mechanical Engineering and Light Vehicle Engineering classes shows the following:

The majority of 10th-grade students in the Mechanical Engineering and Light Vehicle Engineering classes at State Vocational High School 4 Palembang have moderate interest in Penjas. Most students' interest in Penjas falls into the moderate category (35%). The students' interest in Penjas can be influenced by both intrinsic factors, such as attention, enjoyment, and activities, and extrinsic factors, including teacher roles and facilities awareness of its benefits, such as improving physical condition, knowledge, discipline, and achievement. In this context, students acknowledge the importance of Penjas in enhancing their quality of life.

Meanwhile, the intensity of online gaming among 10th-grade students in the TP and TKR classes at State Vocational High School 4 Palembang is moderate. This is due to the frequency and duration of students' online gaming activities. The lack of awareness among students in managing their time for both studying and playing online games may also be attributed to school policies allowing students to bring smartphones to school and the absence of suitable platforms for students to channel their online gaming skills (e-sports) effectively at school.

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