

## Acceptability Level of Students in Pradita Dirgantara Senior High School against E-Sport as an Extracurricular Alternative

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### Abstract

*E-Sport stands for Electronic Sport, E-Sport has a general meaning, namely an agility contest between individuals or groups that is not limited to physical activities only and is carried out using tools that carry out their functions electronically. During its development, E-Sport began to penetrate the world of education as a sport. Some schools have begun to introduce E-Sport through extracurricular activities, this is of course the pros and cons of students, especially male and female students. This study aims to map the level of acceptance of students at Pradita Dirgantara High School to E-Sport as an extracurricular alternative. This type of research is a descriptive study using a quantitative approach. batch 2018 and 2019. The sample in this study was taken using a random sampling technique, with a total of 75 students from two generations. Data collection used a questionnaire with the Likert scale scoring method. The data analysis used the frequency distribution formula in the form of a percentage. The results showed that the level of acceptability of students towards E-Sport as an extracurricular alternative was the highest in the group of male students of class XI followed by class XII with a percentage of 45.00% and 63.16%, while the lowest was in the group of female students of class XII and class XI with a percentage of 42.86% and 46.67%.*

### Keywords

acceptability; E-Sport; students; men; women



## I. Introduction

The rapid development of technology nowadays means that the need for information is increasing. The need for accurate, fast and easy information is considered an efficient choice by the public. For this reason, the use of web-based technology is an option to meet information needs because it is considered easier and more structured. With so many needs for this information, many media have emerged that provide the information needed by the public. These products aim to facilitate the routine that is often carried out by everyday people. People generally access the internet, usually using the internet with a computer or cellphone facility at home, whereas those who do not have internet access usually use internet access by using the services of an internet cafe or what is known as a warnet that provides internet facilities, so that it makes it easier for the general public to access the internet easily and can be done anytime in their spare time. Internet users vary in age, from children, adolescents to adults.

The very rapid development of science and technology is a determining factor in the development of the world of education. Students today are a generation that is very responsive in responding to technological developments. One of them is games, technological

developments have made games a new trend in the world of education by entering sports. Many online games are not just for entertainment, but also many online games that require players to use good skills in terms of managing strategies, managing teamwork, negotiating and how to make the right decisions. Online games are games that can be accessed by many players, where the machines used by the players are connected by a network (Adams and Rollings, 2010).

## **II. Review of Literatures**

E-Sport stands for Electronic Sport, electronic means something that works using many small components, especially microchips and transistors, which control an electric current. Sport means a physical activity and dexterity carried out by individuals or groups that compete between individuals or between groups for entertainment. Birri (2020) states that Sports and Health Physical Education (Penjasorkes) is a means of encouraging the development of motor skills, physical abilities, knowledge, sportsmanship, habituation of healthy lifestyles and character building (mental, emotional, spiritual and social) in order to achieve the goals of the national education system. Julius, et al. (2016) explained that E-Sport is an electronic sport where aspects of this sport are facilitated by an electronic system. Broadly speaking, the notion of E-Sport itself is a sport that does not compete physically but emphasizes strategy in online matches via a computer so that each team can compete without meeting face to face. E-Sport not only has a sports aspect, as an E-Sport industry is able to hold many other aspects such as technology, entertainment and hobbies. Physical education, sport and health are one of the main subjects that must be taught in schools, ranging from elementary school through high school (Novianti, 2020).

This means that the E-Sport industry has also provided space for companies engaged in technology, entertainment and hobbies to carry out business activities therein. However, even though the E-Sport industry is able to collaborate with other aspects, the E-Sport competition which is a video game competition still prioritizes the sports aspect. Walidi (2018) explains that in the world of education, E-Sport has begun to be used as a forum for channeling interests and talents and shaping student character. In several countries E-Sport has become a component that is taken into account in the implementation of the learning process in schools. Examples of countries that have used E-Sport are Norway, Sweden and Korea.

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The development of E-Sport in Indonesia, compared to other countries, is still low and lacks recognition. However, at least recognition has been obtained through the formation of the Indonesia E-Sport Association (IeSPA) by the Indonesian Community Recreation Sports Federation (FORMI) which is under the Minister of Youth and Sports (Menpora). The ministry, representing the Indonesian government finally decided that IeSPA was officially incorporated in this state agency. E-Sport has been recognized as one of the national sports and is included in Law No.3 of 2005 concerning the National Sports System which is responsible to the Indonesian Minister of Youth and Sports and Government Regulation No.16 of 2007 concerning the Implementation of Sports.

E-sport is a type of sport that can help educate children and is very interesting to develop among students. According to Walidi (2018), through games students not only play, but will also train problem solving, team work and logic. Indeed, games are an important part of education. E-sport will not only create a professional player, but also can be a caster, analysis, managing. In addition to E-sport talking about playing techniques, other than that students will form self-confidence, good communication and are not afraid of failure. With the E-sport program, it can stimulate the potential of students in their world, namely the world of the digital era. It is hoped that students can have a career with their desires, interests and talents, so that they enjoy doing their profession in the future. Thus E-Sport plays an important role and has a big share in the future of students.

Video game play continues to strengthen E-Sport's status as a sport for all in today's digital age. It also explains why E-Sport is so popular. According to the President of KeSPA, Jun Byung-Hun, this industry can easily align itself with technological developments (Inaglobal, 2014). E-Sports have a strong fan base among young people and have great growth potential as they can be matched with technologies ranging from cellphones or mobile devices to ever-increasing computer technology.

### III. Research Method

This research is a quantitative research with a descriptive approach so that it can provide an overview of what will be studied in the form of numbers and measured with certainty. According to Arikunto (2013: 243), descriptive research is non-hypothetical research, so the research steps do not formulate hypotheses. Meanwhile, Sugiyono (2009: 147) suggests that descriptive research is used to describe or describe the data that has been collected as it is. Therefore, this study aims to reveal a condition based on the data obtained in the field, related to the level of acceptability of both male and female students at Pradita Dirgantara Upper Menenagh School to E-Sport as an extracurricular alternative. The population used in this study is the first and second batches that enter the foundation under the auspices of the Indonesian Air Force, namely the 2019 class which is currently in the XI class and the 2018 class which is now in the XII class. The total population is 300 male and female students. Sampling in this study, using the random sampling technique, or randomly on male and female students, then calculated using the Slovin formula, so that the results of 75 students were selected from the two generations.

#### 3.1 Implementation Procedure

The research was carried out after permission from the foundation on October 1, 2020. The researcher provided material to the students who were the samples in the study, about the meaning, concept and purpose of E-Sports, the material was provided in the form of a pdf file which could be accessed by each each student. Furthermore, students are given videos that researchers got from the social media channel youtube, related to E-Sport education as an educational development that is included in the field of sports. Then, after the introduction and deepening of the E-Sport material was carried out, the researchers collected data using a questionnaire via google form. The questionnaire that the researchers used was as an assessment of the level of acceptability of students towards E-Sport as an alternative extracurricular choice.

#### 3.2 Research Instruments

The research instrument according to Sunarno and Sihombing (2011: 67) is identical to the data collection tool. Data collection, of course, must use a tool or instrument that is designed, constructed or arranged in such a way as to the type, problem and purpose of the study. The instrument used in this research is to use a questionnaire or questionnaire in the form of google form. Below is the instrument grid that will be used in this study, as follows:

**Table 1.** Research Instrument Grid

Variable	Indicator	Question Number		total
		Positive	Negative	
E-Sport acceptability	Feeling happy	1, 2, 4	3, 5	5
	Feelings of Attraction	7, 9, 10	6, 8, 11	6
	Level of Understanding	12, 14, 15	13, 16	5
	Benefits / Effects	19, 20, 22	17, 18, 21	6
	Infrastructure	23	24, 25	3

As presented in the table above, the research instrument uses a score or value of 1-5, where the respondent or sample is given several answer choices related to the available questions and / or statements. The aspects that will be identified are 1) Feelings of pleasure; 2) Feelings of Attraction; 3) Level of Understanding; 4) Benefits or Effects; and 5) Infrastructure.

### 3.3 Data Analysis

Data analysis has the aim of conveying and limiting findings to become ordered and structured and more meaningful data (Marzuki, 2000). Data analysis of the E-Sport acceptability measurement tool is based on the results of field data that have been successfully collected, then by giving a score according to the Likert scale. Then the analysis was carried out related to the result data using the tabulation of the frequency distribution and mean (A. Muri Yusuf, 2005).

**Table 2.** Likert Scale Scoring

No.	Positive Statement		Negative Statements	
	Answer Value	Score	Answer Value	Score
1	(STS) Strongly Disagree	1	(STS) Strongly Disagree	4
2	(TS) Disagree	2	(TS) Disagree	3
3	(S) Agree	3	(S) Agree	2
4	(SS) Strongly Agree	4	(SS) Strongly Agree	1

## IV. Results and Discussion

This research was conducted on 75 students at SMA Pradita Dirgantara. All are students who are in the dormitory environment and only get access to gadgets or other communication tools on weekends.

The description of the research subject is seen from the grade level, age, and gender of the 11th and 12th grade students. The following is a table that shows the distribution of research subject data:

**Table 3.** Distribution of Research Subject Characteristics

Subject		total	Percentage	Total
Class XI	Age	15 years	5	6.67%
		16 years	24	32%
		17 years	6	8%
	Gender	Women	15	20 %
		Male	20	26.67 %
Class XII	Age	16 years	2	2.67 %
		17 years	20	26.67 %
		18 years	16	21.33 %

Gender	19 years old	2	2.67 %
	Women	21	28 %
	Male	19	25.33 %
Total		100%	75

Based on the table above, it is known that the distributions of the samples in this study are:

- 1) Based on the class, it is divided into 2, namely: class XI, totaling 35 students or 46.67% of the total sample; and Class XII, totaling 40 students or 53.33% of the total sample.
- 2) Based on age, in class XI there are 3 divisions, namely 5 students with 15 years of age or 6.67%, 24 people aged 16 or 32% and 6 students aged 17 or 8% of the total the whole sample. In class XII, there are 4 divisions, namely 2 people aged 16 years or 2.67%, 20 people aged 17 or 26.67%, 16 18 years old or 21.33% and 19 years old. 2 people or 2.67% of the total.
- 3) Based on gender, in class XI there are 15 female students or 20% and there are 20 students who are male or 2.67% of the total sample. In class XII, there are 21 female students or 8% and 19 students who are male or 25.33% of the total sample. Overall, the samples that were categorized in class XI were 35 students or 46.67% of the total sample size. And the categorization in class XII is 40 students or 53.33% of the total sample.

Descriptive analysis in this study includes the number of research subjects (N), mean ( $\pi$ ), standard deviation (SD), variance (s<sup>2</sup>), lowest score (Xmin), and highest score (Xmax) and other statistics.

**Table 4.** Descriptive Analysis Results

Descriptive Statistics								
	N	Range	Min	Max	Mean		Std. Deviation	Variance
	Statistics	Statistics	Statistics	Statistics	Statistics	Std. Error	Statistics	Statistics
E-Sport acceptability class XI	35	36	56	92	76.89	1,468	8,683	75,398
E-Sport acceptability class XII	40	38	55	93	75.55	1,403	8,875	78,767



#### 4.1 Measurement Overview

The analysis that researchers use in the E-Sport Acceptability Measurement Tool is to use categorization according to the normal distribution model (Azwar: 2008: 109). Based on the data obtained, then classified into three categories, using a formula as shown in the following table:

**Table 5.** Classification of E-Sport Acceptability Criteria

No.	Interval	Criteria
1	$X < \pi - 1\alpha$	Low
2	$\pi - 1\alpha \cong X < \pi + 1\alpha$	Moderate
3	$X \cong \pi + 1\alpha$	High

The data description as presented above provides an overview of the distribution of scale scores in the group of subjects subject to measurement and serves as a source of information about the subject's condition on the aspects or variables studied (Azwar, 2008: 105).

Measurements were made using a Likert scale against 24 valid items. With information, the subject has low criteria if the score obtained is lower than the average minus one standard deviation, the subject has moderate criteria if the score obtained is greater than the average score minus one standard deviation and is smaller than the average in plus one standard deviation, the subject has high criteria if the score obtained is greater than the average plus one standard deviation.

To measure the acceptance of E-sport as one of the extracurricular alternative options, an export acceptability scale is used which consists of 24 valid items with a value distribution or a score of 4 to 1. So that E-Sport acceptability can be stated with the following criteria:

Highest score	$= 24 \times 4 = 96$
Lowest score	$= 24 \times 1 = 24$
Area Spread distance	$= \text{Highest score} - \text{Lowest score}$ $= 96 - 24$ $= 72$
Standard Deviation	$= \text{Area of distribution distance: unit of standard deviation}$ $= 72: 6$ $= 12$
Theoretical Mean	$= \text{Number of items} \times 2.5 \text{ (category)}$ $= 24 \times 2.5$ $= 60$

#### 4.2 E-Sport Acceptability for Class XI Female Students

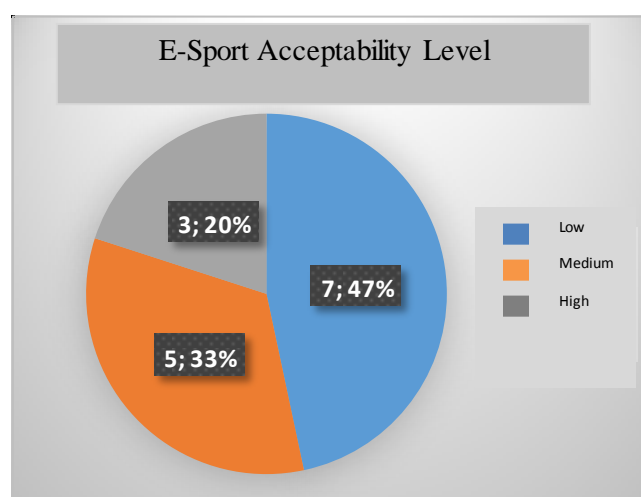
The results of the data on the E-Sport Acceptability frequency distribution for students, who have female gender in class XI at SMA Pradita Dirgantara, can be seen in the following table:

**Table 6.** Acceptability of Class XI Women E-Sport

No.	Interval	Criteria	frequency	Percentage
1	$X < 40$	Low	7	46.67%
2	$40 \leq X < 72$	Moderate	5	33.33%
3	$X \geq 72$	High	3	20.00%
Total			15	100%

Based on the research data criteria of the E-Sport Acceptability scale, the sample of class XI students with the gender of the female is then carried out. The results showed that as many as 7 students or 46.67% (at a low level), the subjects chose E-Sport as an alternative option for extracurricular activities implemented in SMA Pradita Dirgantara. As many as 5 or 33.33% (at the moderate level), the subjects chose E-Sport as an alternative option for extracurricular activities implemented at SMA Pradita Dirgantara. And a total of 3 or 20.00% (at the high level), the subjects chose E-Sport as an alternative option for extracurricular activities that were implemented at SMA Pradita Dirgantara.

It can be concluded that, from a total of 15 students who are female, who are in class XI at SMA Pradikantara, the level of acceptance of E-Sport as an extracurricular alternative option is mostly at the low level, with a total of 7 students. It can be said that the majority of female students in class XI have a low level of acceptance of E-Sport as an extracurricular alternative.



**Figure 1.** Acceptability Diagram of the XI Women's E-Sport



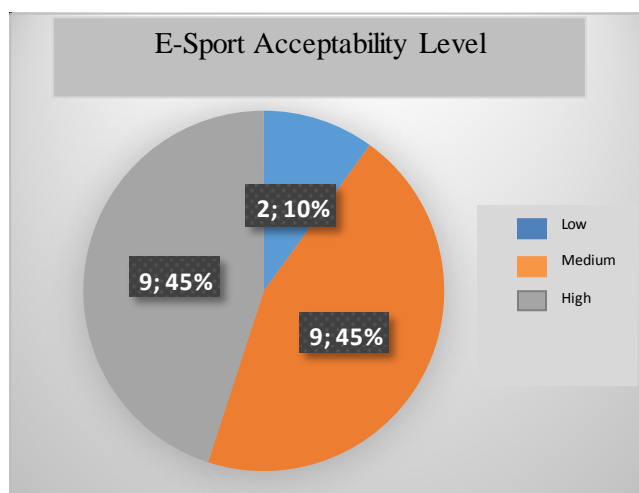
### 4.3 Acceptability of E-Sport in Class XI Boys

The results of the data on the frequency distribution of E-Sport acceptability in male students, class XI at SMA Pradita Dirgantara, can be seen in the following table:

**Table 7.** Acceptability of Class XI Male E-Sport

No.	Interval	Criteria	frequency	Percentage
1	$X < 40$	Low	2	10.00%
2	$40 \leq X < 72$	Moderate	9	45.00%
3	$X \geq 72$	High	9	45.00%
total			20	100%

Based on the research data criteria of the E-Sport Acceptability scale, the sample of class XI students with the male gender is then carried out by scoring. The results showed that as many as 2 students or 10.00% (at the low level), the subjects chose E-Sport as an alternative option for extracurricular activities applied at SMA Pradita Dirgantara. As many as 9 or 45.00% (at the moderate level), the subjects chose E-Sport as an alternative option for extracurricular activities that were implemented at SMA Pradita Dirgantara. As many as 9 or 45.00% (at the high level), the subjects chose E-Sport as an alternative option for extracurricular activities that were implemented at SMA Pradita Dirgantara.



**Figure 2.** XI Male E-Sport Acceptability Diagram

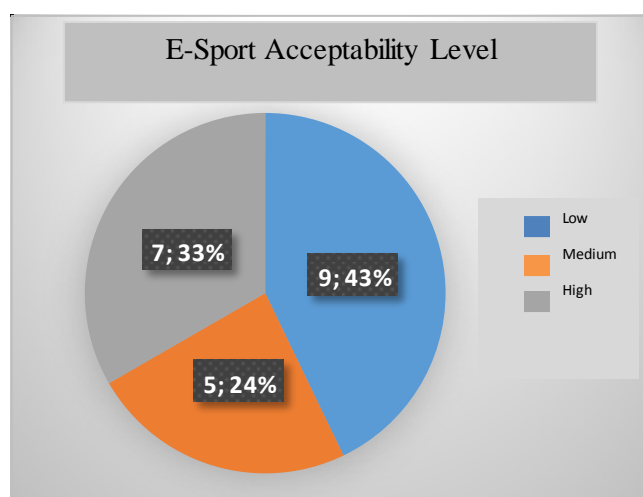
It can be concluded that, from a total of 20 students who are male, who are in class XI at SMA Pradikantara, the acceptance level of E-Sport as an extracurricular alternative option is mostly at medium and high levels, with a total of 9 participants each students and 9 students. It can be said that the majority of male students in class XI have a moderate to high level of acceptance of E-Sport as an extracurricular alternative.

#### 4.4 E-Sport Acceptability for Class XII Female Students

The results of the data on the E-Sport Acceptability frequency distribution for students, who have female gender in class XI at SMA Pradita Dirgantara, can be seen in the following table:

No.	Interval	Criteria	frequency	Percentage
1	$X < 40$	Low	9	42.86%
2	$40 \leq X < 72$	Moderate	5	23.81%
3	$X \geq 72$	High	7	33.33%
total			21	100%

Based on the research data criteria of the E-Sport acceptability scale, the sample of class XII students with the gender of the female is then carried out. The results showed that as many as 9 students or 42.86% (at the low level), the subjects chose E-Sport as an alternative extracurricular option. As many as 5 or 23.81% (at the moderate level), the subjects chose E-Sport as an extracurricular alternative option. As many as 7 or 33.33% (at the High level), the subjects chose E-Sport as an alternative extracurricular option.



**Figure 3.** Women's E-Sport Acceptability Diagram XII

It can be concluded that, from a total of 21 students who are female, who are in class XII at SMA Pradikantara, the level of acceptance of E-Sport as an extracurricular alternative option is mostly at the low level, with a total of 9 students. It can be said that the majority of female students in class XII have a low level of acceptance of E-Sport as an extracurricular alternative.

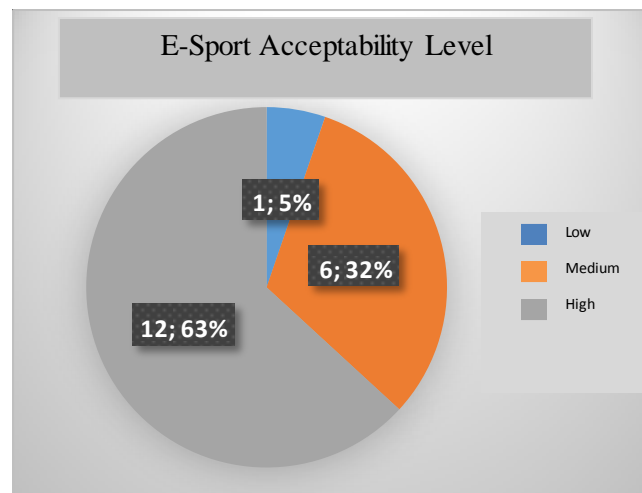
#### 4.5 E-Sport Acceptability for Class XII Male Students

The results of the data on the E-Sport acceptability frequency distribution for male gender students, class XI at SMA Pradita Dirgantara, can be seen in the following table:

**Table 9.** E-Sport Class XII Male Acceptability

No.	Interval	Criteria	frequency	Percentage
1	$X < 40$	Low	1	5.26%
2	$40 \leq X < 72$	Moderate	6	31.58%
3	$X \geq 72$	High	12	63.16%
total			19	100%

Based on the research data criteria of the E-Sport acceptability scale, the sample of class XII students with the male gender is then carried out by scoring. The results showed that as many as 1 student or 5.26% (at the low level), the subject chose E-Sport as an alternative extracurricular option. A total of 6 or 31.58% (at the Low level), the subjects chose E-Sport as an alternative extracurricular option. As many as 12 or 63.18% (at the High level), the subjects chose E-Sport as an alternative extracurricular option.



**Figure 4.** Male E-Sport Acceptability Diagram

It can be concluded that, from a total of 19 students who are male, who are in class XII at SMA Pradikantara, the acceptance level of E-Sport as an extracurricular alternative option is mostly at the high level, with a total of 12 students. It can be said that the majority of male students in class XII have a high level of acceptance of E-Sport as an extracurricular alternative.

## V. Conclusion

Based on the results of research data analysis and as previously discussed, it can be concluded that what is obtained from the research is to find out The Acceptability Level of Students at Pradita Dirgantara High School towards E-Sport as an Extracurricular Alternative, for female students in class XII and XII, the majority have a low level of acceptance or acceptability for E-Sport as an Extracurricular Alternative. Meanwhile, male students in class XI and XII, the majority have a high level of acceptance or acceptability towards E-Sport as an Extracurricular Alternative.

Field data also show results that indicate that E-Sport is still a little difficult to accept as a development field in education, but it could also be the opposite, precisely with E-Sport as a support in maximizing learning, especially for students. This is because, there are still many students who have acceptance or acceptance of E-Sport which tends to be at a moderate level. All of these things can be caused by the absence of research that discusses the good and bad effects of E-Sport in the current educational context. So, it is hoped that there will be a further research study that can further specify the impact (good and bad), contribution, to achievements related to E-Sport.

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