

## **The Influence of *Online Games* on Children's Mental Development in Tanjungsari Village District Kajen Pekalongan**

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### **Abstract**

*This study discusses the influence of online games on the mental development of children in Tanjungsari Village, Kec. Kajen District, Pekalongan, with the aim of this study to find out how games are played on internet sites in the form of online games, to find out the mental development of children in Perum Kopri, Tanjungsari Village, Kec. Kajen, this research method uses a quantitative approach to research types with field research, data collection methods using observation, interviews, questionnaires and documentation. The results of this study show that there is a very strong and significant influence of online games on the mental development of children at Perum Kopri, Tanjungsari Village, Kec. Kajen District, Pekalongan.*

**Keywords:** *Online Games, Soul Development*

### **Introduction**

In its development, computer sophistication also developed in the virtual world which is often called the internet. With the internet, time and place limits are no longer an obstacle, the presence of the internet not only brings information about knowledge, but also entertainment. What is currently trending is online games. Various games are created and then played by those who download them. Even the PN players don't know each other, they only know each other in the online world (Wardoyo, 2009). Today's games are not like previous games, if in the past games could only be played by a maximum of two people, now with advances in technology, especially internet networks, *online games* can be played by more than 100 people at the same time.

The purpose of this research is to determine game play on internet sites in the form of online games, to determine the mental development of children in Tanjungsari Kajen Village, and to determine the influence of *online games* on internet sites on children's mental development.

The benefits of this research are to provide information to readers about *online games* that parents should pay attention to for their children, provide an explanation of the influence of *online games* on children's mental development and add to the intellectual treasures about the influence of *online games* on children's mental development.

### **Research methodology**

This research is a type of research with a quantitative approach where the results of the research are expressed in the form of a description using statistical figures. This type of research uses field research where the research uses real life scenes. With the aim of solving practical problems in everyday life through research activities carried out in the field (Arikunto, 2015) (Abdullah, 2015).

This research has two variables, namely the influence of *online games* on the Internet and the mental development of children in Tanjungsari village, district. Kajen District. Pekalongan. With a total population of 213 children aged 8-13 years, 10% of the 213, namely 20 children, were used as samples.

## Discussion

### 1.1. Game Online

Online games are games that require an internet connection to be able to play them (wardoyo, 2009) (Halim, 2009)

#### Positive and Negative Impact of Online Games

The results of research and surveys from various countries regarding *online games* have a positive impact. Many parents in Indonesia don't know this. As has been researched by several research institutions in several countries, the positive impacts of *online games* have been found, among others (Samuel Henry, 2010) (Lutfiwati, 2018) (Novrialdy, 2019) :

- 1) Playing *online games* provides lessons in following directions and rules
- 2) Playing *online games* makes children familiar with computer technology
- 3) Some *online games* provide practice for problem solving and logic
- 4) *Online games* provide training in the use of motor nerves and spatial skills
- 5) *Online games* are a means of intimacy and interaction between parents and children when playing together
- 6) *Online games* are entertaining and fun

Several experts have found several things that are influenced when playing *online games* (Samuel Henry, 2010) (Novrialdy, 2019) :

- 1) Motor Development
- 2) Physical Development
- 3) Development of Neurology
- 4) Cognitive Development
- 5) Moral Development
- 6) Language Development
- 7) Role Development

Child and adolescent education expert, Kak Seto Mulyadi also believes, as quoted by M. Iwan Januar and EFTurmudzi, that *online games* have a positive effect on the players, especially children. "The positive aspect of this game is that it can make children think abstractly in the sense of "Imagining something symbolic, such as hitting or parrying, then pressing the A button, I think there are benefits for stimulating the growth of the left brain" (Januar, 2006) .

Apart from the positive impact of *online gaming*, it also has negative impacts. It cannot be denied that it has become part of our culture and daily life. Slowly, *online gaming culture* is becoming a lifestyle that is widely known and familiar to the younger generation. *Online games* are influenced by trends and technology that continue to develop. The very detailed graphics are almost like the real world, making many gamers, especially young people, increasingly addicted to online games. Not only is the game realistic, the gameplay or game flow also makes players addicted like the many games found on Playstore or Facebook (Samuel Henry, 2010) (Syahran, 2015) (Sidabutar et al., 2019) .

Various perceptions generally held by parents regarding the negative impacts of *online games* are the view that many *online games* contain the following things (Samuel Hanry, 2010):

- 1) Has the opportunity to become a source of models for aggressive and violent perpetrators.
- 2) Directing the view towards bad behavior from certain people or individuals.
- 3) Causes addiction
- 4) It is a waste of time because the skills the child acquires do not conform to the recognized standard education model

This content is suspected to be the cause of negative impacts, such as aggressiveness, excessive imagination and unstable emotions that often explode without the child being able to control them.

Gender intimidation, this is a negative impact of *online games* if female characters are made as antagonistic characters, often violence and harsh words are combined into one weapon, namely verbal weapons in disputes that are created using the model of competition, battle competence and adventure. If a female character is made the protagonist, the character is often made weak and must need the help of a male friend. Often the *online gaming environment* is based on plots of violence, aggression, and even gender intimidation. If played, it will trigger deviant behavior because every action in *an online game* requires an action taken by the player. To win *online games* often requires a certain plot as a basic rule, and this makes it difficult for children to distinguish between correct and unreal behavior in the real world. Repetition in playing *online games* to achieve the goal of winning and certain values is considered to sharpen thought patterns and actually forms deviant behavior, whether consciously or not (Samuel Hanry, 2010).

According to Tjahjono Darmino Gondhowiardjo, he explains that with a normal eye, the image of an object from a distant place will fall into the focus point without the eye needing to work. Our eyes will work when looking at close distances, the image of objects will fall behind the retina or optic nerve. If you look at *online games*, there are several different elements there, *first*, the distance. With such a close distance, it means the eyes have to work hard. *Second*, if we compare the work of our eyes between playing *online games* and reading books or newspapers. When we read normally in black and white, our eyes won't have as many problems as with color. There are also no problems with contrast, sharpness and so on. However, in *online games* there are always *background* colors, contrast and brightness problems. In this case, children usually don't really care about contrast issues and so on. *Third*, about speed. Movement on the *online game screen* is regulated by the speed of the computer or machine. The faster the machine moves, the faster the child's eyes have to catch up. His eyes never had a chance to rest. From a close distance, the child's eyes continue to work, glancing right and left as well as his fingers, actively pressing buttons (M. Iwan Januar, 2006).

Whether you want to accept it or not, whether you like it or not, playing *online games* is definitely a waste of time. No matter how much time is spent in front of the monitor watching *online games* from level to level, no matter how much time is spent it still doesn't feel like it. When compared to the time children spend

socializing, studying, helping their parents at home, studying the Koran, etc. Barely comparable. Many people are strong at playing *online games* for hours, even days, there are also those who come home from school and immediately hang out in front of their favorite *online games*. Even though many works can be produced at any time. Apart from that, addiction to *online games* can also encourage *gamers* to commit a number of other antisocial acts. Not a few teenagers skip school just to play *games*. Likewise, they dare to embezzle tuition money to play at *the game center*. There are also those who drop out, right? from school because he was often absent, even though he was wearing a uniform from home, carrying a bag, and asking for pocket money (January, 2006).

## 1.2. Child Mental Development

Development can be interpreted as progressive and continuous change, meaning that there are continuous changes that occur within an individual from birth to death. Another meaning of development is the changes experienced by an individual or organism towards its level of maturity or maturity which takes place systematically, progressively and continuously, both physically and physically (Syamsu Yusuf, 2000).

Among the views or theories regarding children's mental development are as follows (M. Sugeng Solehudin, 2009):

- 1) Empiricism Theory
- 2) Convergence Theory
- 3) Psychodynamic Theory
- 4) Spiritual science theory
- 5) Interactionism Theory

Phases of children's mental development (Singgih D, 1998)

### Age Development Stages

Infancy	0-2 years
Childhood	2-12 years
Adolescence	12-18 years
Adulthood	18-40 years

Factors that influence the development of a child's soul, factors that influence a child's soul are divided into 3 groups that are mutually related to each other. These factors are (Mubarak, 2014) (M. Sugeng Solehudin, 2009) :

#### 1) Nativism Factor

Experts who follow the flow of nativism argue that individual development is determined solely by factors innate from birth (inheritance) (Sumardi Suryabrata, 2002). Heridity is the process of passing on traits or characteristics from one generation to another through the medium of seed plasma. In general this means that structures and not forms of behavior are inherited. Heridity has an important role in the development and development of a child's soul. He was born into this world bringing with him various inheritances that came from both mother and father or grandparents. These inheritances are important, including body shape, facial expressions, skin color, talents, traits or character and illnesses. .

2) Empiricism Factor

Experts who follow the position of empiricism are of the opinion that development depends solely on environmental factors, while fundamentals play no role at all. In the current development of technological advances, it seems that part of the family environment is the presence of a game center which has more or less influence on the individuals present, especially children who are experiencing fundamental changes in their mental health. *Online games* are allegedly part of the factors that influence the development of a child's soul in the formation of their personality. The level of addiction can be indifferent to the environment (January, 2006).

3) Convergence Factor

This convergence ideology argues that in individual development, both basic or innate and the environment play an important role. Talent as a possibility already exists in each individual, but the talent that is already available needs to find a suitable environment so that it can develop. Phenomenologically, this development can be described as a child's exploration or exploration of his world (M. Sugeng Solehudin, 2009)

1.3. Mental Development of Children in Tanjungsari Village

Tanjungsari village, part of which is agricultural land, has a large population compared to the population in other villages in the Kajen sub-district, Pekalongan Regency. The total number of residents in Tanjungsari village is 3656 people and the number of children of learning age in Tanjungsari village is 571 children. (interview with Mrs. Jairiah: 2010).

Results of a questionnaire about *online games* in Tanjungsari village, sub-district. Kajen district. Pekalongan, the questionnaire distributed contained 20 questions which obtained the results from the average value table:

$$X = \frac{\sum fX}{N} = \frac{941}{20} = 47.5 \text{ rounded to } 47$$

From the results of a questionnaire regarding the mental development of children in Tanjungsari village, sub-district. Kajen district. Pekalongan, the questionnaire distributed contained 20 questions which obtained the results from the average value table:

$$X = \frac{\sum fX}{N} = \frac{878}{20} = 43.9 \text{ rounded to } 44$$

Analyzing the responses of children in Tanjungsari village to *online games* with a known interval value of 3, a frequency distribution table can be created as follows:

Table 1  
Frequency distribution of data on responses of Tanjungsari village children to playing *online games*

No	Intervals	Absolute Frequency	Relative Frequency
1	50-52	74 <del>8</del>	20%
2	47-49	10	50%

3	44-46	3	15%
4	41-43	3	15%
Amount		20	100

From the calculation results, the average value of respondents' answers about *online games* is  $M = \frac{\sum fX}{N} = \frac{946}{20} = 47.3$  rounded up to 47. So you can use the

assessment table as follows:

Table 2

Assessment Category

Intervals	Category
50-52	Very good
47-49	Good
44-46	Enough
41-43	Not enough

By looking at the table above, it can be concluded that playing *online games* is in the good category for children in Tanjungsari Kajen village because the most dominant value is the interval 47-49 with a percentage of 50%.

Analysis of responses regarding children's mental development in Tanjungsari village, it can be seen that the value of interval 2 is created, so a data frequency table is created as follows:

Table 3

Parents' responses to *online game play* on children's mental development

No	Intervals	Absolute Frequency	Relative Frequency
1	47-48	2	10%
2	45-46	4	20%
3	43-44	10	50%
4	41-42	4	20%
Amount		20	100

From the calculation results, the average value of respondents' answers about *online games* is  $M = \frac{\sum fX}{N} = \frac{878}{20} = 43.9$  rounded up to 44. So you can use the

assessment table as follows:

Table 4

Assessment Category

Intervals	Category
47-48	Very good
45-46	Good
43-44	Enough
41-42	Not enough

By looking at the table above, it can be concluded that the *online games* played by children in Tanjungsari village, sub-district. Kajen district. Pekalongan category has quite an influence on children's mental development with a concentration of 44 answers.

The influence of playing *online games* on the mental development of children in Tanjungsari village, sub-district. Kajen district. Pekalongan, in proving the research hypothesis test and at the same time to prove whether or not there is an influence of *online games*, in this case what the author points out is the impact of playing *online games* on the mental development of children in the village of Tanjungsari sub-district. Kajen. These results will provide us with information about the presence of the internet with various web sites, especially games intended for children in the form of online games. Of course, to some extent it will have an influence on the child's mental development, so the author carried out an analysis using the product moment technique with the results of the table calculations as follows:

$$\begin{aligned}
 r_{xy} &= \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \\
 &= \frac{91,41}{\sqrt{(152,15)(65,7)}} \\
 &= \frac{91,41}{\sqrt{9996,26}} \\
 &= \frac{9141}{99,98} \\
 &= 0.915
 \end{aligned}$$

Based on the results obtained, the value interpretation table is then consulted, namely:

Table 5  
Interpretation

The value of r	Interpretation
Between 0.910-1,000	Very high
Between .710-.900	Tall
Between .410-.700	Enough
Between .210-.400	Low
Between 0.00-0.200	Very low

Based on the work table above, the influence of playing *online games* on the mental development of children in Tanjungsari Village shows a very high value with a correlation coefficient of 0.915.

The final step in statistical data analysis is testing the hypothesis. The procedure used is to match the r value in the interpretation table at both the 1% and 5% significance levels. At a significant tariff of 1% it is known that  $r_t = 0.561$  while

$r_o = 0.915$  so that  $r_o > r_t$  or  $(0.915 > 0.561)$ . Meanwhile, at the 5% level, it is known that  $r_t = 0.444$  and  $r_o = 0.915$  so that  $r_o > r_t$  or  $(0.915 > 0.444)$ . So, with a simple interpretation, it can be concluded that there is a very strong positive correlation between *online games* and the mental development of children in Tanjungsari village, sub-district. Kajen district. Pekalongan.

Based on evidence with product moment correlation, both with rough interpretation and interpretation of the degrees of freedom table at the 1% and 5% significance levels, it is obtained that it is very strongly significant. Thus, it can be stated that there is a very strong and significant influence of playing *online games* on the mental development of children in Tanjungsari village, sub-district. Kajen district. Pekalongan.

Factors that influence the mental development of children in Tanjungsari village are within the child's family and the child's play environment. As is known, there are in principle two factors that influence a person's mental development, namely internal factors or within the child and exogenous factors from outside the child. Factors within the child are more due to heredity, in general children imitate the characteristics and habits of their parents which are passed down to them. Meanwhile, factors external to the child are the environment and social interactions that the child receives. Usually environmental factors more quickly influence a child's mental development, for example the game center environment.

The mental development of children in Tanjungsari village is generally influenced by a good environment in the family and in the playground in the form of the influence of interactions with friends of the same age. Currently, almost every family in the village of Tanjungsari sub-district. Kajen still has a laptop or cellphone at home. This makes children in Tanjungsari village tend to spend their time playing *online games* in their homes. Moreover, children whose parents work as civil servants spend more time at home playing online games.

### Conclusion

*Online games* are very fun and very entertaining for children of learning age, namely children aged between 8-13 years. Of the *online games*, there are those that have a positive influence on children of that age, such as baby balls, how to count marbles, children's math games, coloring games, and there are those that have a negative influence, such as first person 3D vehicles based, *online games* have a significant influence on mental development. children in Tanjungsari village, sub-district. Kajen district. Pekalongan is proven by calculating the analysis of children's responses to playing online games and analysis of children's responses to children's mental development

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