



## The Effect of Playing Online Games on the Fifth-Grade Primary Students' Learning Outcomes

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### ABSTRACT

The present study discusses whether there is an effect of online games on the learning outcomes of class V students at UPT SD Negeri 064025 Flamboyan Raya Medan in the academic year 2022/2023 or not. The population involves 158 class V students at UPT SD Negeri 064025 Flamboyan Raya Medan. The sampling technique uses purposive sampling, which was totaled 28 students at class V-D of UPT SD Negeri 064025 at the academic year 2022/2023. The method used in this research is a quantitative survey with the research method type. The survey type of quantitative research method used in this research is to find the effect of playing online games on the learning outcomes of class V students at UPT SD Negeri 064025 Flamboyan Raya Medan. Based on the results of statistical processing, it shows that the level of addiction to playing online games among students is categorized as strong category with an average of 88.28. Meanwhile, student learning outcomes have not met the KKM that has been implemented with an average of 72.85. By using the test,  $t_{count}$  is 4,530 while  $t_{table}$  is 2,056, because  $t_{count} \geq t_{table}$ . Then,  $H_0$  is rejected and  $H_a$  is accepted. This proves that there is a significant effect between playing online games on the learning outcomes of class V students at UPT SD Negeri 064025 Medan Selayang in the academic year 2022/2023.

*Keywords: online games, learning outcomes, primary students*

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### INTRODUCTION

Education is stated as a place for human development and formation through appropriate guidance and direction throughout life through various direct efforts within the family, school and community. The criteria for whether a nation is said to be advanced or not are determined based on the level of its human resources or determined by the level of education of its people. The higher the education, the better the human resources and vice versa. This is in accordance with Law Number 20 of 2003 concerning the National Education System which states that national education functions to develop abilities and shape the character and civilization of a dignified nation in order to make the nation's life more intelligent, aiming to develop the potential readiness of human resources for educators involved in this process. According to Kaban, et al (2021:103), education is an effort to build and improve the quality of human resources towards the era of globalization which is full of challenges so that it is based on the fact that education is something that is very fundamental for every individual. Therefore, educational activities cannot be ignored, especially in entering an era of increasingly tight, sharp and severe competition in this century.

Education aims to develop the potential of students to become human beings who have faith and devotion to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent and become democratic and responsible citizens. Found in Law no. 20 of 2003 concerning the national education system article 3. Primary school education is very important for every individual in improving the quality of education as a provision for the future. To get good provisions, maximum effort is needed from

teachers and students in learning activities. For this reason, teachers and students are expected to work together to achieve the goals of education.

Teachers play a very important role in the advancement of education. The characteristics that a teacher must have are working hard, having good self-confidence, knowing how to appreciate and respect other people. The teacher's job is to educate, teach, facilitate, design, manage and assess. As in Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers Article 1 paragraph 1 states: Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing and evaluating students in early childhood education, formal education, primary education, and secondary education. Technological developments in today's digital era are very fast and rapid. We can obtain various technological advances easily. Along with the times and the rapid development of technology, information and communication between people can be done with various tools or facilities, one of which is a means of refreshment, such as playing online games. Online games are growing rapidly these days, as time passes, the games become more exciting and fun. Starting from the appearance, playing style, game graphics, image resolution and so on. There are also variations in the types of games such as war games, adventure games, fighting games and other types of online games which make the game interesting. The more interesting a game is, the more people will play the online game. In recent years, electronic games in the form of online games have experienced very rapid progress, this can be seen from the increasing number of internet cafes or online games that have appeared not only in big cities but also in small towns.

According to Rahyun, Yunus, and Hamid (2021:66), online games are growing rapidly and the longer they go, the more fun the games are. Starting from the appearance, playing style, game graphics, image resolution and so on. There are also variations in the types of games such as war games, adventure games, fighting games and other types of online games which make the game interesting. The more interesting a game is, the more people play the online game. The ones who dominate playing online games are students, starting from elementary, middle school, high school and college levels. This can be seen from the large number of internet cafes and game centers in big cities and small towns where students play online games. Students who often play online games will cause children to become addicted. Siburian, et al (2022:1349) stated, "Excessive addiction can affect student learning achievement. "This addiction can give rise to a lazy nature of learning in students, which can have an impact on students' learning achievements." Learning achievement itself is something that must be achieved by every student, so that teachers assess the extent of the child's ability to achieve learning in school, both in the cognitive, affective and psychomotor domains.

Based on the results of initial observations of the fifth grade teacher at SD Negeri 064025 Flamboyan Raya Medan as the homeroom teacher of VD SD Negeri 064025 Medan, he said that the current problem at school is a decrease in student learning outcomes, students are less active in participating in the learning process in class, students Also, sometimes they are sleepy in the morning because students are tired due to playing too many online games at night via gadgets/cellphones, and there are also those who play online games in internet cafes (internet cafes) until they lose track of time and spend their pocket money playing online games.

Several class V students at SD Negeri 064025 Flamboyan Raya Medan are playing games online. These students said they really like playing online games, when playing online games they feel happy and don't feel bored because they play with friends online. From the results of the interviews I conducted, it turns out that playing online games affects the learning outcomes of students at school, they have incomplete grades, which can be seen from the low grades in the odd semester exams for class VD students at SD Negeri 064025 Flamboyan Raya Medan. The following is data on the results of the 2022/2023 odd semester exam scores for class VD students at SD Negeri 064025 Flamboyan Raya Medan.

## LITERATURE REVIEW

### Learning Outcomes

Learning can be an important activity that everyone must do optimally to be able to master or obtain something. Learning can be defined simply as "an effort or activity that aims to bring about changes in a person, including changes in behavior, attitudes, habits, knowledge, skills, and so on. According to Khairani (2017:2) learning is a process of changing behavior that is carried out intentionally to get better changes, for example: from not knowing to knowing, from being unskilled to being skilled, from not being able to do something to being able to do something and so on.

These changes are changes that arise due to experience and practice. So learning is not a result but a process to achieve goals in order to fulfill the need for knowledge. The learning process is experiencing, doing, reacting and going beyond. Deliberately, the learning process arises because there is an intention. Agrees with Simatupang (2019:2) an activity that involves the acquisition and modification of knowledge, skills, strategies, beliefs, actions and behavior. In line with A. Susanto (2016:6) emphasizes that learning is an activity that a person carries out deliberately in a conscious state to obtain a new concept, understanding or knowledge so as to enable a person to experience relatively permanent changes in behavior both in thinking, feeling and in action.

People or students often feel that they have learned, on the basis that they have read the lesson material or material being taught for hours. According to Khairani M (2017:11) students who have been said to be learning have the following characteristics: Learning is characterized by changes in behavior. This means that the results of learning can only be observed from behavior, namely changes in behavior, from not knowing to knowing, from unskilled to skilled and so on, Changes in behavior are relatively permanent, this means that changes in behavior that occur due to learning for a certain time will remain or not change, but on the other hand, this behavior will not remain fixed for life, Changes in behavior do not have to be immediately observable while the learning process is taking place, these changes in behavior are potential. This means that learning outcomes are not always immediately visible immediately after completing learning. Learning outcomes can continue to be processed after learning activities are completed, Changes in behavior are the result of training or experience, meaning that learning must be done actively, deliberately planned, not because of incidental events. Experience or practice can provide strengthening. Something that strengthens provides enthusiasm or encouragement to change behavior.

In line with Lestari & Hudaya, (Djamarah 2018:256) if learning is a change in behavior, then there are several changes that are included in the characteristics of learning, namely: Changes that occur consciously, this means that the individual who is learning will be aware of the change or at least the individual will feel that a change has occurred within themselves, Changes in learning are functional, as a result of learning changes occur within the individual that take place continuously and are not static, Changes in learning are positive and active, in the act of learning, these changes always increase and are aimed at obtaining something better than before, Changes in learning are not temporary, changes that occur due to the learning process are permanent or permanent. This means that the behavior that occurs after learning will be permanent, Changes in learning are purposeful and directed, this means that changes in behavior occur because there is a goal to be achieved, Change covers all aspects of behavior, changes that individuals obtain after going through a learning process include changes in overall behavior. Based on the description above, it can be concluded that the characteristic of learning is change itself, both in thinking and in acting or doing a person, of course in a positive direction. In other words, if he has had a change, it means he has learned. If there is no or no change, it means he has not learned.

Learning is the main activity in the entire educational process at school. This means that the success or failure of achieving educational goals depends on the learning patterns experienced by students as students. According to Syah (2017:145) Globally, the factors that influence student learning can be divided into 3 types, namely: Internal Factors, factors that originate from within the student include two aspects, namely: Physiological aspects, namely the general physical condition that indicates the level of fitness of the body's

organs and joints, can influence students' enthusiasm and intensity in attending lessons. A weak condition of the body's organs, especially accompanied by severe headaches, for example, can reduce the quality of the creative (cognitive) domain so that the material studied is lacking or no trace, Psychological Aspects, several elements including psychological aspects that can influence the quantity and quality of student learning acquisition such as 1) student intelligence 2) student attitudes 3) student talents 4) student interests 5) student motivation. Student External Factors, Student external factors consist of two types, namely: Social Environment, the school's social environment such as teachers, staff or administration, and classmates can influence a student's enthusiasm for learning. Furthermore, what is included in the student's social environment is the community and neighbors as well as playmates around the student's village. The social environment that influences learning activities more is the students' parents and families themselves, Nonsocial Environment, factors that are included in the Nonsocial environment are the school building and its location, the house where the student's family lives and its location, learning tools, weather conditions and the study time used by students. These factors are seen to help determine the level of student learning success. In agreement with Slameto (2017: 13) the factors that influence learning are classified into only two groups, including:

Internal Factors, these internal factors will be discussed into three factors, namely: Physical factors, which include health factors, physical disabilities, Psychological factors, which include intelligence, attention, interests, talents, motives, maturity, readiness, Fatigue factor, which includes physical fatigue and spiritual fatigue, External factors, these external factors can be grouped into three factors, including: Family factors, which include the way parents educate, relationships between family members, home atmosphere, economic conditions, parental understanding, cultural background, School factors, which include teaching methods, curriculum, teacher-student relationships, student-student relationships, school discipline, learning tools, school time, lesson standards above standard, building condition, homework assignments, Community factors, which include student activities in society, mass media, social friends, forms of community life. In line with Purwanto (2017: 102) states that there are two groups of factors that influence learning: Factors that exist within the organism itself are often called individual factors, such as maturity/growth factors, intelligence, training, motivation and personal factors, Factors that exist outside the individual are often called social factors, such as family factors/household conditions, teachers and their teaching methods, tools used in teaching and learning, the environment and opportunities available and social motivation.

Learning activities are not activities carried out independently of other interests. Learning activities are activities that involve elements of body and soul. Learning will never be done without a strong encouragement, both from within which is more important and from outside as another effort which is no less important. According to (Rusman, 2017) the principles of real learning are generally applicable relating to attention and motivation, activeness, direct involvement/experience, repetition, challenge, feedback and reinforcement, as well as individual differences. Attention and Motivation, Attention has an important role in learning activities. Attention to learning will arise in students if the learning material is felt as something that is needed, needed for further learning or needed in everyday life, this will generate motivation to study it. Motivation is the energy used to move and direct a person's activities. Motivation can be internal, meaning it comes from oneself, it can also be external, meaning it comes from other people. Motivation is divided into two parts: Intrinsic Motive, Intrinsic motive is the driving force that is in accordance with the action being carried out. For example, a student is serious about studying lessons at school because he wants to have the knowledge he learns.

Extrinsic Motives, Extrinsic motive is a driving force that exists outside of the action carried out but is a companion. For example, students study seriously not because they want to have the knowledge they have learned but are driven by the desire to advance to a class or get a diploma. The desire to move up a class or get a diploma is an accompaniment to successful learning. Liveliness, Learning cannot be forced by others and cannot be delegated to others. Learning is only possible if children actively experience it themselves. In agreement with Dewey in Rusman (2017:95), learning is about what students have to do for themselves, so the initiative comes by itself. Educators are just guides and directors. Direct Engagement, In line with Dale in

Rusman (2017: 95), in classifying learning experiences as outlined in cones of experience, he states that the best learning is learning from direct experience. Direct learning in this case is not just observing directly but must be internalized, directly involved in the action, and responsible for the results. Students must learn actively, both individually and in groups, by solving problems. Educators act as mentors and facilitators. Repetition, According to power psychology theory, learning is exercising the powers that exist in humans, consisting of observing, responding, remembering, imagining, feeling, thinking, and so on. By repeating, these powers will develop. Departing from one of his learning laws "law of exercise", Thorndike in Rusman (2017:96) stated that learning is the formation of a relationship between stimulus and response, and repetition of these observations increases the chances of a correct response arising. In the psychological theory of conditioning, a response will arise not because of a stimulus alone but a conditioned stimulus, for example students lining up to enter class, cars stopping at a red light. Challenge, Field theory from Lewin and Rusman (2017:97) suggests that students in a learning situation are in a psychological field. In a situation where students face a goal that they want to achieve, but there are always obstacles, namely studying learning materials, a motive arises to overcome these obstacles, namely by studying the learning materials. The challenges faced in learning materials make students enthusiastic about overcoming them. New learning materials contain many problems that need to be solved, making students challenged to learn them.

In line with (Slameto, 2017:2) formulating learning principles as follows: Based on the prerequisites required for learning. In learning, each student must seek active participation, increase interest and guide them to achieve instructional goals, Learning must be able to generate strong reinforcement and motivation in students to achieve instructional goals, Learning needs a challenging environment where children can develop their ability to explore and learn effectively, Learning requires student interaction with the environment. According to the nature of learning. Learning is a continuous process, so it must be done step by step according to development, Learning is a process of organization, adaptation, exploration, and discovery, Learning is a process of continuity (the relationship between one understanding and another) so as to obtain the expected understanding. The stimulus given causes the expected response.

According to the material/materials that must be studied. Learning is holistic and the material must have a simple structure and presentation, so that students can easily grasp the meaning. Learning must be able to develop certain abilities in accordance with the instructional objectives that must be achieved. Conditions for successful learning, Studying requires sufficient advice, so that students can study calmly. Repetition, in the learning process, repetition is needed many times so that the understanding/skills/attitudes deepen in students. Agrees with (Suprijono, 2014) the first principle of learning, the principle of learning is changing behavior. Second, learning is a process. Learning occurs because it is driven by needs and goals to be achieved. Learning is a systematic process that is dynamic, constructive and organic. Learning is a functional unity of various learning components. Third, learning is a form of experience. Experience is basically the result of interaction between students and their environment.

### **Online Game**

According to the Big Indonesian Dictionary (KBBI), it is separated into two words, namely game and online. In Indonesian game means game, while online means online. In the KBBI, a game is something that is used or used for playing. Meanwhile, the meaning of the word online is something that is connected to an internet network. Online games can also be interpreted as game programs connected via the internet network that can be played anytime, anywhere, online games can be played simultaneously or in groups throughout the world and the game itself displays various interesting images that are supported by the internet.

According to Affandi (2013:117) that computer games can be played by multiplayer via the internet. Usually provided as an additional service from the online service provider company or can be accessed directly (visiting the relevant web page or through a system provided by the company that provides the game. In agreement with Azis (Kustiawan & Utomo 2019:50) it is a game or game where many people can play at the



same time via an online communication network. Multi player online games are a development of games played by one person.

When playing online games, there are important devices that must be owned, namely a smartphone, computer or gadget with specifications that indicate a connection to the internet. In line with Harsan (2011:3) that online games are often also called multiplayer online games because they involve many players interacting with each other at the same time, this is what makes online game players.

Based on the definition of online games above, it can be concluded that what is meant by the term online games are internet service games whose aim is to entertain oneself so that someone wins and someone loses in the game. Online games refer to a type of game that can be accessed via the internet network. Online games are a set of games in the form of attractive images that can be moved according to the player's will.

According to Kautsar, 2019 in (C.Z Aji, 2012:35) Online games have various types with different methods, although the categorization of online games does not cover everything, but online games need to be clarified to provide a basic understanding for gamers beginner. The following is a division of games based on genre or type: Shooter Game, The concept of this game is a shooting type game. Games in this genre include Counter Strike, Point Blank, Call of Duty. Adventure Game, The concept of this game is a type game. Games with an adventurous concept are an early type of game that later developed. Adventure games like Mario Bros and Sonic were popular games in the 90s. Action Game, Action games rely on technique and hand speed to complete the game. The development of action games is often combined with adventure games and becomes a new genre of action adventure games, games that rely on technique and hand speed also have interesting storylines to complete. This genre of game was initially seen in Mortal Combat and Street Fighter.

In agreement with Kustiawan et al (2019:78), online games are divided into two types, namely web based and text based games. Web based games are applications placed on a server on the internet where players only need to use internet access and a browser to access the games. So there is no need to install or patch to play the game. However, along with development, there are several features that need to be downloaded to play some games, such as Java Player, Flash Player, and Shockwave Player, which are usually needed for the game's graphic display. Apart from that, games like this also do not require sophisticated computer specifications, they no longer require large bandwidth. Apart from that, most web based games are free.

Online games are always believed to have a negative influence on the players. This is mainly because most of the games are addictive and are usually about violent battles and fighting. The majority of parents and the media think and believe that games damage children's brains and promote violence among them. However, many psychologists, child experts, and scientists believe that these games are actually beneficial for children's growth. So it can be summarized that there are positive and negative impacts of playing online games.

Positive impact, According to Anhar (Putra, 2021), some of the positive impacts of playing online games are as follows: Helps develop hand-eye coordination, motor and spatial abilities, Improve the ability to make analysis, quick decisions, and think deeply. Negative impact, The negative impact of online games arises because, generally 89% of games contain some violent content. According to (BUDIARTI, 2019) the negative impact of online games on students or children is as follows: Children spend more time playing online games during hours outside of school, Learning concentration is disturbed because students' minds tend to focus on games in online games. Fall asleep at school, Often neglects duties and responsibilities as a student. Grades at school decline, Lying about how much time you have spent playing online games, Prefer playing games rather than playing with friends, Distance yourself from your social group (clubs or extra-curricular activities).

Complete learning is when change occurs, change from bad to good and from good to better. Panjaitan et al stated that education is not something static or fixed, but something dynamic, so that it demands continuous change or improvement. Quality education can be realized by learning activities in schools that can improve students' knowledge, skills and attitudes. . What all teachers in the world hope for. Learning is not only mastery of theoretical concepts of subjects, but also mastery of habits, preparation, fun, interests, talents. Oemar Hamalik (2002) (in Rusman, 2017: 130), who states that "learning results can be seen from changes in perception and behavior, including improvements in behavior". This is in line with the opinion of Setiawanti

Ma'rifeh Siti (2018), who said that student learning outcomes are essentially "changes in behavior as a result of learning, in the broadest sense of the cognitive, effective and psychomotor fields".

In line with Purwanto (2017:45), states "learning outcomes are a planned process to achieve teaching goals (goal directed). From the research opinion above, the author can conclude that learning outcomes are a process of change in perception and behavior that is triggered by learning in the cognitive, affective and psychomotor domains. Factors that influence learning outcomes according to Munadi Rusman (2017: 130), include internal and external factors, namely: 1. Internal factors; a. Physiological factors, In general, physiological factors, such as being in good health, not being tired or fast, not being physically disabled, and so on. These things can influence students in receiving learning material, b. Psychological factors, Each individual, in this case a student, basically has a different psychological condition, of course this also influences their learning outcomes. Several physiological factors, including intelligence (QI), attention, interest, talent, motivation, cognitive and reasoning power of students. 2. External factors; a. Environmental factors, Environmental factors can influence learning outcomes. These environmental factors include the physical environment and the social environment. The natural environment, for example temperature and humidity. Studying in the middle of the day in a room that has less air ventilation is certainly a different learning atmosphere from studying in the morning where the air is still fresh and in a room that is conducive enough to breathe freely. b. Instrumental factors, Instrumental factors are factors whose existence is designed in accordance with the expected learning outcomes. The factors are expected to function as a means to achieve the planned learning goals. These instrumental factors are in the form of curriculum, facilities and teachers.

Learning outcomes can also be influenced by several factors, according to Syah (2015: 129), there are three factors that influence learning outcomes, namely: Internal factors (factors from within the student), namely the physical and spiritual condition/condition of the student, the physical condition of the student also determine student learning outcomes, External factors (factors from outside the student), namely the environmental conditions around the student. The approach to learning factor, namely the type of student learning effort which includes the strategies and methods used by students to carry out activities to study lesson materials. In agreement with Slameto (2003:54-59), the learning outcomes obtained by students are influenced by two factors, namely internal factors and external factors. Internal factors, including: Physical factors, including health and physical disabilities

Psychological factors include intelligence, attention/concentration, interest, talent, motivation, maturity and readiness, Fatigue factor. External factors, including: Family factors, including the way parents educate, relationships between family members, home atmosphere, family economic situation, parental understanding, and cultural background, School factors, including teaching methods, curriculum, teacher relations with students, school discipline, learning tools, school time, learning standards, building conditions, learning methods, and homework, Community factors, including students' activities in society, mass media, friends they associate with, and forms of community life.

In learning, student learning outcomes consist of various domains whose aim is to improve student learning outcomes to the maximum. Bloom's taxonomy (in Rusman, 2017: 131), suggests there are 3 ways of classifying it with "The taxonomy of educational objectives". According to Bloom, learning objectives can be classified into three domains, namely: Cognitive Domain; relating to intellectual thinking abilities and skills, Effective domain; relating to attitudes, abilities and mastery of emotional aspects, namely feelings, attitudes and values, Psychomotor domain; relating to skills or physical movements.

According to Susanto (2013: 6-10), the types of learning outcomes are divided into three, namely: Conceptual understanding, namely how far students are able to receive, absorb and understand the lessons given by the teacher to students, or the extent to which students can comprehend and comprehend what they read, see, experience or feel in the form of research results or direct observation. what he did, Process skills, namely abilities that lead to the development of fundamental mental, physical and social abilities to mobilize higher abilities in individual students.

Attitude, namely the tendency to do something in certain ways, methods, patterns and techniques towards the surrounding world in the form of certain individuals and objects, attitude refers to a person's actions, behavior or actions.

## **METHOD**

### **Place and time of research**

The research place is the place used by researchers to conduct research and obtain the data needed by researchers. This research was conducted at SD Negeri 064025 Flamboyan Raya Medan. The address is Jalan Flamboya Raya, Tanjung Selamat Village, Medan Tuntungan District, Medan City. Research time is the time when the research takes place or when this approach is carried out. This research was carried out in the even semester of the 2022/2023 Academic Year.

### **Population and Sample**

Before conducting research, researchers must determine the research population and sample. Population is the place or object of research. According to (Sugiyono, 2017) "Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn." Agrees with (Darmadi, 2012) who states that "Population is a group where a researcher will obtain research results that can be generalized". After determining the research population and sample, they are given treatment to achieve the research objectives to be carried out. In line with (Arikunto, 2018) the population is the entire research subject. Based on the opinions of the experts above, it can be concluded that population is the place, region or subject to be researched. The population in this study was class V students at SD NEGERI 064025 Flamboyan Raya Medan, totaling 158 students.

Research samples are an important source of data to support research. According to (Sugiyono, 2018:118) the sample is part of the number and characteristics of the population. In line with (Arikunto, 2018:174) the sample is part or representative of the population studied. Sampling was carried out in this research using a purposive sample method. (Arikunto, 2018: 183) explains that purposive sampling or purposive sampling is carried out by taking subjects not based on strata, random or area but based on the existence of a certain objective. The sample was students in class VD of SD Negeri 064025 Flamboyan Raya Medan, totaling 28 students and consisting of 1 class.

### **Research methods**

When conducting research, researchers must determine the research method, because methods play a very important role in research. This method will be used to prove the truth of a research. According to (Sugiyono, 2018) quantitative research methods can be interpreted as research methods that are based on the philosophy of positivism, used to research certain populations or samples, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative/statistical. with the aim of testing the established hypothesis.

This research approach is quantitative survey type research. In agreement with Pakpahan and Manullang (2014: 19) a survey is research that aims to collect data by examining samples from an available population. Survey research is usually not conducted in depth about the phenomenon being studied. This research often uses interview techniques, questionnaires or direct observation of the object under study. Research Method is a method or step taken in collecting, organizing and interpreting data. In line with (Sugiyono, 2018) "Research Methods are defined as scientific ways to obtain data with specific purposes and uses.

The type of research used in this research is associative research, namely research that aims to determine the influence between two or more variables. According to (Noor, 2017) Research design is a depiction of the relationship between variables, data collection and data analysis, so that with a good design both researchers and interested parties have a clear picture of the relationship between the variables in the



research context and what they want to do, carried out by a researcher in carrying out research. In this research there are independent variables and dependent variables. Independent variables (independent) are variables that influence the dependent variable. The dependent variable is a variable that influences the independent variable. This variable is usually symbolized by the variable "y". The variables used in this research consist of the independent variable, namely online games (X), while the dependent variable is student learning outcomes (Y).

Data collection techniques are the most important step in research because the main aim of research is to obtain data. (Sugiyono, 2018:309) data collection techniques can be carried out using observation, interviews, questionnaires, documentation and a combination of the four. The data collection technique used in this research is a questionnaire. (Arikunto, 2018:194) Observation is a technique or way of collecting data by observing activities in the classroom during learning activities. The activities observed included teacher and student activities during learning activities. The purpose of this observation is to determine the suitability of actions with the learning plan and to determine the extent to which the implementation of actions can produce changes that are in accordance with the desired ones.

A questionnaire is a number of written questions that are used to obtain information from respondents in the sense of reports about their personality, or things they know. Sugiyono (2018:199) questionnaire is a data collection technique that is carried out by giving a set of questions or written questions to respondents for them to answer. The questionnaire used in this research is a check list questionnaire, a list, where respondents simply put a check mark (√) in the appropriate column. This is to avoid random answers, scoring each item based on the choice and nature of the item. The variable indicators for playing games can be seen from the grid for playing online games. According to Pangestika (2015: 9), the indicators for online games are: Places to play online games, time to play online games, types of online games, tendency to do assignments rather than play online games.

According to Sinurat, Silaban, and Sari (2022:22), "Documentation is a technique for obtaining data from several media sources, whether from videos, cameras, documents, and others." In this study, researchers used documentation in the form of past student learning outcomes, as well as photographs that would be taken in future research. The research uses documentation studies to prove that it is true that researchers conducted research at the school.

## RESULTS AND DISCUSSION

In class VD, which consisted of 30 students, the first research activity was carried out, namely the researcher came to school to conduct research by distributing questionnaire details. Before distributing the questionnaire details, the researcher first said hello to the students in class VD, then gave directions to the students regarding filling in questionnaire that will be given. After the questionnaire was filled in and returned to the researcher, the researcher gave thanks to the VD class teacher and then to the students who had filled out the questionnaire and had accepted the researcher to conduct research at the school.

**Table 1. Frequency Table of Levels of Addiction to Playing Online Games**

Score	Range	Value	Frequency	Percentage Frequency
1	75-80	4	14	Low
2	80-85	7	25	Not Enough
3	85-90	6	21	Enough
4	90-95	8	28	High
5	95-100	3	11	Very High

Based on the table above, the frequency of students' addiction to playing online games is in the High category at 28%. Based on the diagram above, it can be concluded that the level of addiction to playing online games at SD Negeri 064025 Flamboyan Raya Medan Selayang.

**Tabel 2. Frequency of Student Learning Outcomes**

Num	Score	Frequency	Percent	Category
1	61-67	19	67%	Low
2	68-81	0	0%	Not Enough
3	81-87	1	4%	Good
4	88-94	7	25%	Good
5	95-101	1	4%	Very Good
	<b>Total</b>	<b>39</b>	<b>100%</b>	

Based on the table above, the frequency of learning outcomes for students at SD Negeri 064025 Medan Selayang, is in the low category at 68%. Based on the diagram above, it can be concluded that the level of student learning outcomes at SD Negeri 064025 Medan.

### Normality Test

Noor (2017:174) The Normality Test is carried out to find out whether the data taken comes from a normally distributed population or not. The Normality Test is carried out on the two variables to be studied, namely the independent variable (X) and the dependent variable (Y).

**Table 3. Normalitas One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		28
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	9.85546074
	Most Extreme Differences	
	Absolute	.083
	Positive	.072
	Negative	-.083
Test Statistic		.083
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

The normality test is used to determine whether the research is normally distributed or not. After carrying out calculations using SPSS for normality testing, namely using the Kolmogorov-Smirnov (K-S) test, it was found that the significant value was  $\geq 0.05$ . Based on the results of the normality test, it is known that the significant value is  $0.200 \geq 0.05$ , so it can be concluded that the data is normally distributed.

### Correlation Coefficient Test

Correlation analysis using the rxy formula aims to prove that there is a significant relationship between variable x and variable y. This is intended to measure the correlation coefficient between two variables.

**Table 4. Correlation Table of Playing Online Games on Learning Outcomes**

		Angket	Hasil Belajar
Angket	Pearson Correlation	1	.664**
	Sig. (2-tailed)		.000
Hasil Belajar	N	28	28
	Pearson Correlation	.664**	1
	Sig. (2-tailed)	.000	
	N	28	28

Based on the results of the calculations carried out, the correlation coefficient ( $r_{xy}$ ) or  $r_{count} = 0.664$  with a significance level of 0.000 with the number of respondents ( $n$ ) = 28 students, obtained  $r_{table} = 0.374$ . From the results of these calculations, it shows that  $r_{count} \geq r_{table}$ , it can be concluded that the alternative hypothesis ( $H_a$ ) is accepted, namely that there is a significant negative influence between playing online games ( $X$ ) and student learning outcomes ( $Y$ ) at SD Negeri 064025 Flamboyan Raya Medan. The calculation results regarding the effect of playing online games on student learning outcomes are shown by an  $r_{xy}$  correlation of 0.664. Based on the  $r$  value interpretation table, the  $r_{xy}$  correlation of 0.664 lies in the value range of 0.60-0.799. So, it can be concluded that playing online games has a strong influence on student learning outcomes.

### Hypothesis

Hypothesis testing in this research was carried out using the  $t$  test with the help of the SPSS Version 22.0 program. The  $t$  test is used to determine whether there is an influence of the independent variable on the dependent variable, namely the variable playing online games on learning outcomes. Hypothesis testing using the  $t$  test is carried out by comparing  $t_{count}$  with  $t_{table}$ . The testing criteria using the  $t$  test are if  $t_{count} \geq t_{table}$  the alternative hypothesis is accepted and if  $t_{count} \leq t_{table}$  the alternative hypothesis is rejected. The hypothesis proposed is:  $H_0$ : There is no significant effect of playing online games on student learning outcomes,  $H_a$ : There is a significant influence between playing online games on student learning outcomes. Below we will present a table of the results of hypothesis testing with the help of the SPSS ver 22.0 program.

**Table 5. Uji Hipotesis**

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-50.788	27.304		-1.860	.074
	Angket	1.398	.309	.664	4.530	.000

Based on the table above, it is known that the calculated value is 4,530 and  $t_{table}$  is 1.705. If it is consulted with the  $t_{table}$  value at degrees of freedom ( $df$ ) = 26 of 2.056 so  $t_{count} 4,530 \geq t_{table} 2.056$ , so  $t_{count} \geq t_{table}$  then  $H_a$  is accepted, meaning there is a negative influence on playing online games ( $X$ ) on learning outcomes ( $Y$ ).

### CONCLUSIONS AND RECOMMENDATION

Based on the results of the analysis and discussion carried out on class V students of UPT SD Negeri 06405 Medan Selayang which is located at Jalan Flamboyan Raya No. 100, Tanjung Selamat, Medan Tuntungan District, Medan City, North Sumatra for the 2022/2023 academic year the following conclusions can be drawn: The level of addiction/intensity of playing online games among students is in the high category, namely 28% or has an average of 88.28, The results of research on class V students at UPT SD Negeri 06405 Flamboyan Raya Medan show that there is a negative influence between playing online games on student learning outcomes, From the calculation results, it is obtained that  $t_{count}$  is 4,530 which is greater than  $t_{table} 2.056$ , The results of the correlation test calculation obtained  $r_{xy}$  0.664 so it can be interpreted that the regression between the dependent variable playing online games ( $x$ ) and the independent variable learning outcomes ( $y$ ) has a negative and significant influence. So this calculation means that the working hypothesis ( $H_a$ ) is accepted, namely "There is a significant negative influence between playing online games and student learning outcomes at UPT SD Negeri 06405 Flamboyan Raya Medan".

### Suggestion

The suggestions that can be made include: For Schools, For schools to activate extracurricular activities in order to divert students from playing online games. For student, After knowing that there is influence negative effect of playing online games on results learning, students are expected to reduce their

addiction to playing online games and students are expected to have the desire to be more active in studying in order to achieve national education goals, even in the current situation or circumstances. For Teachers, Teachers should provide more motivation and guidance to students to be more active in studying, and provide direction to reduce students playing online games. For Next PGSD Researchers, To future researchers who use this thesis as a reference so they can study further about the influence of playing online games on student learning outcomes in different classes and schools.

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