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# The Effectiveness of Scheduling Activities to Reduce the Intensity of Playing Online Games in Children

Afitria Rizkiana  
Universitas Muhammadiyah Ponorogo, Indonesia  
afitria@gmail.com

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## ARTICLE INFO

### Article history

Received December 20, 2022

Revised January 10, 2023

Accepted February 5, 2023

### Keywords

Intervention

Game Online

Scheduling Activities

Indonesia

## ABSTRACT

The problem of online game addiction harms children. One of the negative impacts of online game addiction is related to schools, so special treatment is needed. The subjects who participated in this study were those who were diagnosed with online game addiction problems. Assessments carried out to diagnose subjects included interviews, observations, and the Video game Addiction Scale for Children. The intervention used is scheduling activities. The intensity of the subject's online game playing was reduced after the intervention was given. The duration of playing online games was originally an average of 2.4 hours per day in 1 week, after the intervention, it became 0.4 hours per day in 1 week. Subjects spend more time studying, doing homework, fishing or sleeping during the day. The score of the Video game Addiction Scale for Children also changed from 83 (high) to 58 (medium).

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## INTRODUCTION

Online games are games that use electronic media to create interactive systems that can be used to play. Electronic devices are used in the form of computers, game devices, or mobile phones. Online game addiction is the excessive and inappropriate use of electronic games (especially those that use social networks to be accessed by many users). In the case of addiction, excessive use tends to interfere with daily activities and significantly affect the child's activities. Research on the excessive use of the internet structure and the problems it causes has emerged since 1989 (Karapetsas, Karapetsas, Zygoris, & Fotis, 2014).

There are several reasons why someone chooses to switch their world to online games, one of which is boredom. Boredom can push children towards the scourge of online gaming addiction. A lack of goals to be achieved can lead to feelings of boredom and meaninglessness. Lack of self-control can also trap children into preoccupation with their computers with negative impacts on their lives (Karapetsas et al., 2014). Like what happened to the subject, the subject felt that there was no entertainment at home, felt bored, and had no friends to play with, so the subject diverted

his boredom to playing online games. Until finally the subject felt happy when playing online games. The online game made the subject eventually become addicted to the subject felt restless when he didn't play online games for a day.

Online games can have a positive impact if used as necessary for entertainment, where games can reduce fatigue and stress (Cha & Seo, 2018; Russoniello, O'Brien, & Parks, 2009). If addicted, online games can harm children, one of which is things related to disrupted schools (Skoric, Teo, & Neo, 2009). The high intensity of playing online games makes the players ignore and forget their daily activities to play games continuously. Online games have an addictive effect on children, so they forget their main task, namely learning. As a result, from an academic point of view, their learning achievement has decreased. Online games allow children to forget more important things such as studying, doing homework, school, worship, and work. This illustrates that the more often students play online games can lead to a decrease in student achievement at school (Nuhan, 2016). Games can have a strong effect on children so it is imperative to set limits on the intensity and content of the games that children play (Claudia, 2014).

Frequently playing online games causes the subject to never study which makes his grades drop, often disobeys his parents, often becomes aggressive when his parents don't obey his wishes, and the subject becomes difficult to eat so scheduling activities intervention is needed to overcome this so that daily activities are carried out. Subject days are more focused on giving rewards in the form of praise and support when the subject can carry out their daily activities according to the agreed schedule. Giving scheduling activities means that the subject can use his time more for useful activities. As said by 'Awadh Muhammad Al-Qorny that "Time does not give birth, does not lengthen, does not stop and does not go backward but always forwards" (Chaisa & Mustofa, 2006).

## **METHOD**

### **Assessment Method**

Enforcement of diagnosis and determination of intervention is done through several assessments. The assessment methods used are observation, interviews, psychological tests, and scales. Interviews were conducted with subjects, teachers, and families to obtain in-depth information related to the history of problems, complaints, and symptoms

of the subject to establish a diagnosis. Observations were made to deepen the results of interviews related to the intensity of playing online games.

The psychological test used is CPM to determine the level of intelligence of the subject. And the Videogame Addiction Scale for Children to see how severe the subject's level of addiction to online games is.

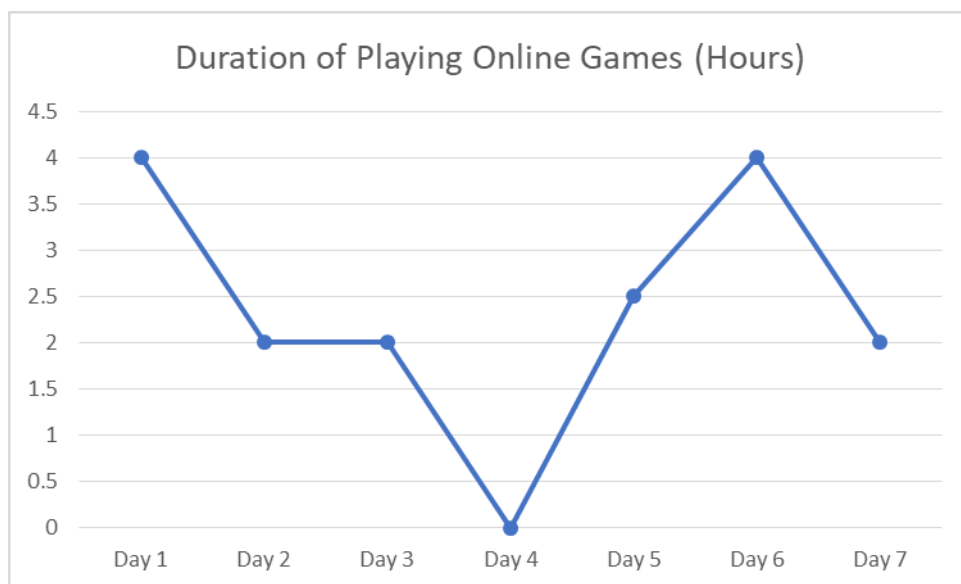
### **Intervention Method**

The intervention used in this case is Scheduling activities with a target to reduce the intensity of playing online games from the original 2-4 hours per day to a maximum of 1 hour per day. The provision of this intervention is based on the main problem of the subject that is urgent at this time, namely the excessive activity of playing online games which can interfere with the subject's learning, causing the value to decrease. Excessive activity in playing online games is caused by the absence of activities that the subject must do when alone at home. With scheduling activities, the subject can carry out daily activities according to a mutually agreed schedule by providing positive reinforcement while the subject can reduce the intensity of playing online games by doing more positive activities according to the agreed schedule, such as giving praise or rewards can be given immediately so that the subject can manage his time and do other more useful things such as studying.

One technique that can be used to reduce the intensity of playing online games is to manage time and find other useful activities (Griffiths, 2018). So scheduling activities are given to the subject so that the subject can reduce the intensity of playing online games by doing more positive activities.

1. Before the intervention, the therapist provided counseling to parents regarding the cause of the subject having these problems because the parents were busy individually and did not provide positive activities to the subject. In addition, it provides knowledge to parents about the impact of game addiction. The therapist also asks parents for help to always monitor the behavior that will be carried out by the subject because scheduling activities requires direction and encouragement from the closest people.
2. Efforts must be made to reduce or control students playing online games, which can be started in the family environment by educating and interacting with children such as advising to reduce playing online games. Parental support and attention help students in carrying out student activities so that they can have a positive impact (Nuhan, 2016).

3. Therapy is done concretely and adapted to the ability of the subject. By scheduling the given activities based on the principle of behavior, the subject can immediately change behavior and carry out concrete intervention procedures. The intervention carried out on the subject was 7 sessions as follows:
4. Session 1: Building rapport and work contract  
Objectives: Creating a therapeutic relationship and knowing the motivation of the subject.  
Activity:
  - The therapist builds report cards on the subject and parents by asking about the subject's activities during school holidays.
  - The therapist performs a work contract with the subject with the holding of therapy as a solution to the problems that the subject experiences and complaints about.
  - The therapist explains the procedure that will be given to the subject and parents and the benefits of therapy that will be given.
5. Session 2: Identify problems/problems and set goals.  
Purpose: Knowing and specifying the problems experienced by the subject to determine the goals and targets of the desired behavior.  
Activity:
  - The therapist invites the subject to list the advantages and disadvantages of the subject's behavior.
  - The therapist asks the subject to write down the advantages and disadvantages on a piece of paper.
  - The therapist and the subject discussed setting a goal, namely reducing the intensity of playing games which was replaced with more positive activities, namely studying, doing homework, fishing, and taking a break/nap. Determination of targets is carried out based on the baseline results of monitoring by parents on the subject related to the behavior of playing online games for one week during the assessment process, which can be seen in the following graph:



**Graph 1. The baseline of Online Game Playing Behavior Before Intervention**

6. Session 3: Planning and committing to change

Purpose: The subject has a schedule of activities and asks the subject to commit to change.

Activity:

- The therapist, subject, and parents together design the daily activities of the subject. The design of daily activities is made by taking into account the activities carried out by the subject before the intervention with discussion and approval from the subject.
- Asking parents to give rewards in the form of praise, hugs, stroking the subject's head when the subject succeeds in not playing online games or only playing online games for 1 hour by replacing them with their daily activities according to the agreed schedule. In this session the therapist asks for the subject's commitment to follow and carry out the activities that have been designed together, then the subject promises to carry out daily activities according to the agreed schedule.

7. Sesi 4: Activity monitoring

Objective: To know the daily activities of the subjects during the intervention.

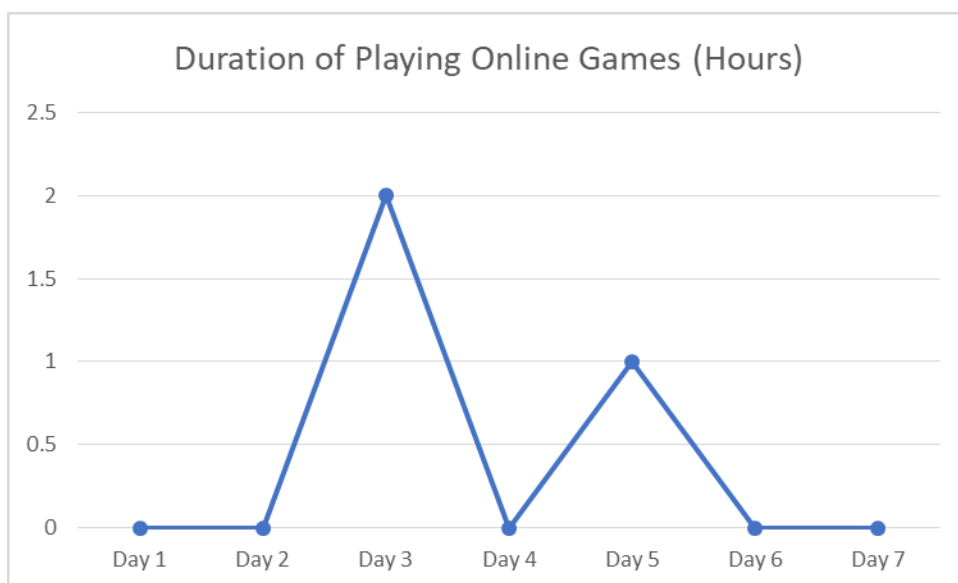
Activity:

- The therapist re-assures whether for 3 days the subject carries out activities according to what has been scheduled and agreed and these activities can reduce their intensity for playing online games.
- The therapist ensures the achievement of previous activities by looking at the monitoring sheet and asking mothers and fathers about what the subject has done.

8. Session 5: Evaluate changes

Objective: To find out changes in the subject's behavior when given the intervention.

Activities: The therapist asked the parents whether the subject did his daily activities according to the schedule or not.



**Graph 2. A baseline of Online Game Playing Behavior During the Intervention**

9. Session 6: Evaluation II and Termination

Objective: To find out changes in the subject's behavior when given the intervention.

Activities:

- The therapist evaluates the tasks and activities that the subject has done for eight days in the sixth session. After that, the therapist concludes the things that the subject has learned during the intervention process

by providing provisions so that the subject can get used to not playing online games.

- The therapist asked the family to continue to control the subject even after the intervention process was completed, and to assign responsibility for useful activities when the mother was away. This session evaluates the results obtained and the subject and parents listen to the therapist's direction.

#### 10. Session 7: Follow up

Objective: To know the progress of the subject after 1-week post-intervention.

Activity: Ask the family and also the subject about the condition of the subject for 1 week. Follow-up was carried out 1 week after the intervention was completed.

## RESULTS AND DISCUSSION

### Assessment Results

An 11-year-old male subject in 6th grade of elementary school experienced a decline in learning achievement in school. The subject is the last of three children. His two older brothers are married and already have their own house, so the subject at home is only with his father and mother. The subject's father works as a denture installer, while his mother works as an employee at a catering service, sometimes in the fields. The age difference between the subject and his siblings is quite far, so the subject tends to be spoiled by his parents and also his two brothers.

When his father and mother were called to work, the subject at home was alone. Subjects feel that there is no entertainment and no activities at home so the subject often feels bored. When the subject was in 3rd grade, the subject's friends often went to the internet cafe to play online games, so when the subject was alone at home and had nothing to do, the subject was invited by his friend to go to the internet cafe and was introduced to online games, but the subject had not yet mastered the electronic game. The subject is also not very interested because the subject's pocket money is still not enough to pay for the internet cafe and there is still entertainment at home, namely television.

At the end of 5th grade will go up to 6th grade, the subject television at home is broken. When the subject is at home, the subject feels there is no activity and no entertainment. Then the subject went to the internet cafe to play games with his friends. The subject's parents tend to obey whatever the subject asks. His mother when going to work, always gave more money

to the subject. So that the extra money is used by the subject to play games at the internet cafe. Since the television was broken, the subject became frequent in the internet cafe because the subject felt happy when playing games. Plus the subject is always given money by his parents when asking for money to go to the internet cafe. When not given money, the subject hit his mother sometimes throwing stones into the house. This has happened since the end of 5th grade which made the subject's grades drop and almost did not advance to grades. Subjects went to the internet cafe every day with a duration of 2-4 hours per day with an average of 2.4 hours per day.

Online game addiction has seven characteristics, namely, (1) Salience, playing games becomes the most important activity in a person's life and dominates his thoughts (preoccupation), feelings (cravings), and behavior (overuse). (2) Tolerance, is the process by which a person starts playing games more often, thereby gradually building up the amount of time spent playing games. (3) Mood modification/euphoria, a subjective experience that a person tells as a result of involvement in the game. (4) Withdrawals, unpleasant emotions, and/or physical effects that occur when the game is suddenly reduced or stopped. Such as moodiness and irritability, but may also include physiological symptoms, such as shaking. (5) Relapse, the tendency to repeatedly return to the previous game pattern. (6) Conflict, refers to all interpersonal conflicts that result from excessive play. Conflict exists between the player and the people around him. Conflicts can include arguments and abandonment, but also lies and deception. (7) Problems refer to problems caused by excessive play involving school, work, and socialization problems. Problems can also arise within the individual, such as intrapsychic conflict and subjective feelings of loss of control (Lemmens, Valkenburg, & Peter, 2009).

The things that caused the subject to be willing to spend time at the internet cafe were because they were bored and had no activities at home, curiosity because they wanted to level up, and make friends, and because the game was constantly updated and not boring. The gameplay in the online game makes the subject feel great, confident, and satisfied when the subject can beat his opponent. So the subject wants to always play on. This becomes a habit of the subject and is always repeated when the subject feels bored, alone at home, and has no activities.

According to Skinner, learning is a process of behavior change. The behavioral changes that have been achieved from the learning outcomes are through several new behavioral reinforcements, which are called operant conditioning. Behavior is formed and persists because of the antecedent



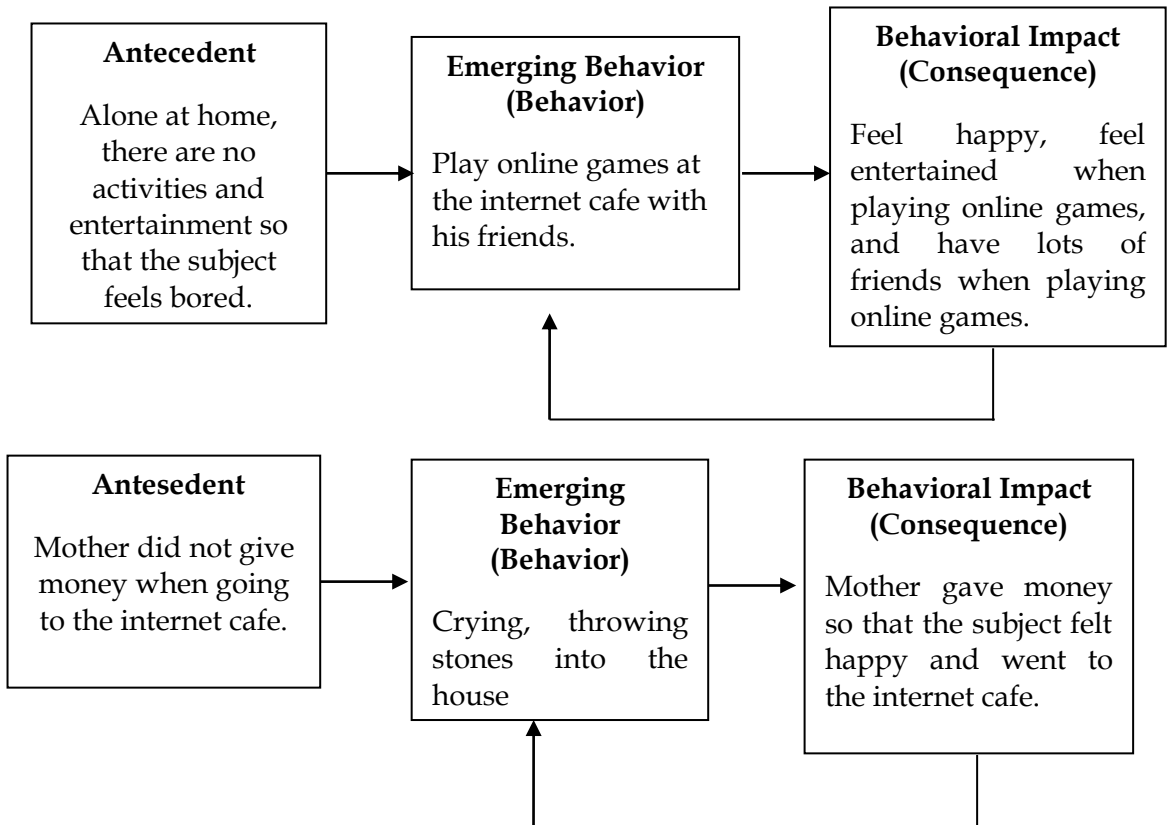
(which causes the behavior to appear), Behavior (behavior that persists in the context of a problem or disorder), and Consequence (the consequences obtained from the problematic behavior/disruption performed) (Jones & Skinner, 1939). According to the operant conditioning perspective, drug use abuse, and addiction are responses that are learned from the perceived consequences (Queiroz et al., 2015).

In this case, the antecedent experienced by the subject is the subject alone at home, feeling bored because there is no entertainment and no activities besides that it is also supported by giving more money from his mother. Behavior or behavior that the subject does is to go to the internet cafe to play online games. So the consequence felt by the subject is to feel happy when the subject can beat his opponent or can level up to a higher level. Subjects feel satisfied, confident, and feel great when they can beat their opponents. So when the antecedent comes, the subject tends to repeat his behavior to play games at the internet cafe because the consequences he feels are a pleasure.

From the results of the Videogame Addiction Scale for Children, the score obtained by the subject is 83, so the subject is addicted to online games. There are several negative impacts of gadget addiction which include speaking late, attention deficit, learning problems, anxiety, childhood depression, and will harm children's character (Sundus, 2018). It can also cause a variety of negative psychosocial consequences which include, problems in work, education, hobbies, socializing, time with spouse/family and sleep, increased stress, absence of real-life relationships, poorer social skills, decreased academic achievement, behavior aggressive/opposition and hostility, maladaptive coping, decreased verbal memory performance, and suicidal ideation (Griffiths, 2015).

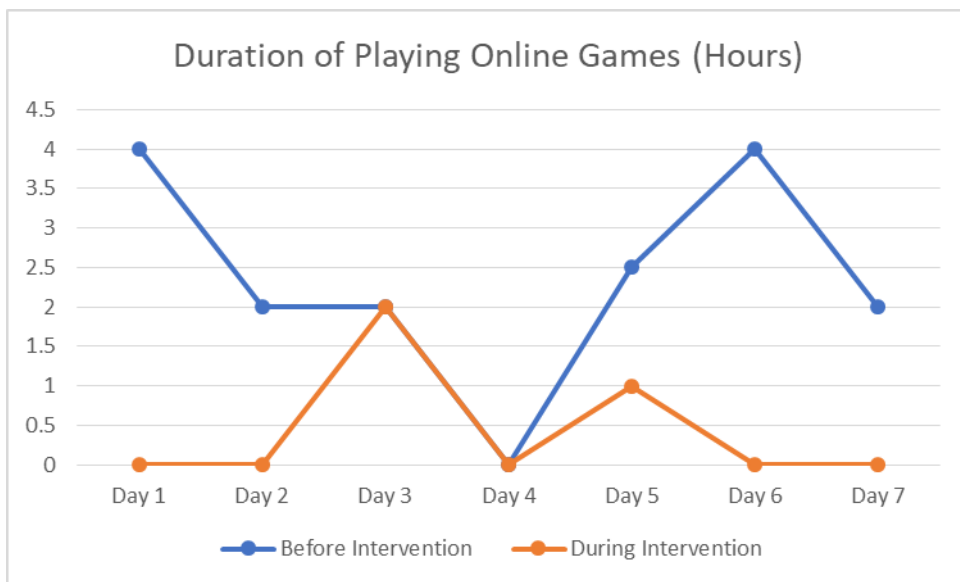
Based on the explanation from the teacher, the subject's grades are decreasing, the subject also never does homework because he is lazy when at home there is no one to accompany him to study, this makes the subject seldom go up to grade 6. The teacher is worried if the subject continues to not be able to use his time, it will have an impact on subject failure. Based on the results of the CPM test, the intelligence level of the subject is included in the lower average category, so the subject needs maximum direction and regular study so that the subject can follow lessons at school like his friends his age. Therefore, it is necessary to provide scheduling activities so that the subject can reduce the intensity of playing online games and spend more time studying.

### Problem Dynamic Chart

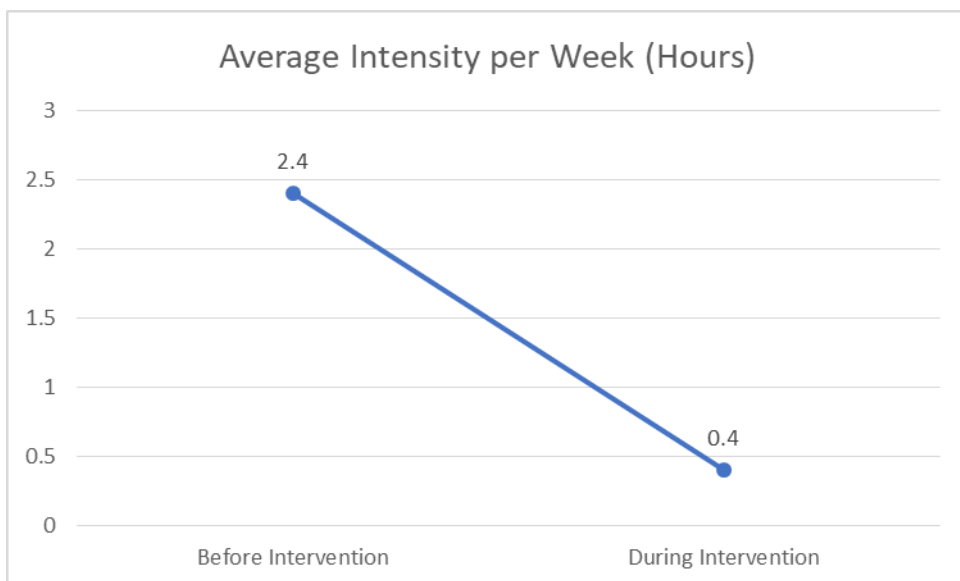


### Intervention Results

The target for the intervention carried out was that the subject could reduce the intensity of playing online games with parental supervision, but when the mother was not at home and the father was sleeping or both parents left, the subject asked permission to go to the internet cafe. The final results can be seen in the following table:



**Graph 3. Comparison of the Duration of Playing Baseline Online Games Before and During the Intervention**



**Graph 4. Comparison of the Intensity of Playing Baseline Online Games Before and During the Intervention (Average Intensity per Week)**

Based on Graph 4. Shows the results of the intervention that has been carried out to meet the target. The behavior of playing online games from the beginning 6 times a week with a duration of 2-4 hours per day going to

the internet cafe every after school with an average intensity of 2.4 hours per day in one week, as long as the subject is intervention can reduce the frequency of playing the game become 2 times a week with a duration of 1-2 hours per day with an average of 0.4 hours per day in one week. So it can be concluded that the target is met, namely the subject of playing online games for less than 1 hour, the subject can reduce the intensity of playing online games. The things that made the subject go to the internet cafe when his parents were not at home, the subject did not have any accompanying study, the subject felt alone, and none of his friends wanted to be invited to go fishing so the subject preferred to go to the internet cafe.

## **DISCUSSION**

Online game addiction needs immediate intervention, if intervention is not immediately given it will have an impact on several aspects of life, such as health aspects, psychological aspects, academic aspects, social aspects, and financial aspects (Novrialdy, 2019). Addiction to online games can cause someone to rarely hang out with friends or relatives around their environment (Dinata, 2017). The intervention given to the subject has been adjusted to the problems experienced by the subject. Where the online game addiction experienced by the subject was caused because the subject felt bored and lonely at home and felt that there were no fun activities to do. So scheduling activities need to be given and the role of the family to support behavior change in the subject is also highly expected.

Some efforts to prevent online game addiction include attention switching, dissuasion, education, parental monitoring, and resource restriction (Xu, Turel, & Yuan, 2012). In preventing problematic behavior in adolescents, especially addiction, parents have a very important role (Loke & Wong, 2010; Mogro-wilson, 2008). Parent-child communication about internet use is an effective way to prevent internet addiction (Eijnden, Spijkerman, Vermulst, Rooij, & Engels, 2010).

The important role of the family during intervention and post-intervention, in this case, is to always monitor, direct, advise, and accompany the subject when the subject is at home so that the subject does not go to the internet cafe and continues to carry out activities according to the agreed schedule and rewards the subject in the form of praise. , hugging, or stroking the head when the subject does not go to the internet cafe and can carry out daily activities according to the schedule that has been made so that the subject can reduce his intensity to go to the internet cafe to play online games.

Learning is a process of behavior change. The behavioral changes that have been achieved from the learning outcomes are through several new behavioral reinforcements, which are called operant conditioning. Behavior is formed and persists because of the antecedent (which causes the behavior to appear), Behavior (behavior that persists in the context of a problem or disorder), and Consequence (the consequences obtained from the problematic behavior/disruption performed) (Jones & Skinner, 1939). These consequences modify a person's future behavior.

An effective way to change and control behavior is to do reinforcement, which is an actionable strategy that makes certain behaviors have the opportunity to occur or vice versa in the future (Alwisol, 2016). In this case, the subject can reduce their activities to play online games by doing activities that have been scheduled and agreed upon with the therapist and parents, while parents and therapists monitor these activities. Parents give rewards in the form of praise, hugs, and sometimes stroking of the subject's head if the subject can carry out the activity, then the reward given by the parent creates strength in the subject to repeat the activity. Reward in this case acts as a positive reinforcement that can cause the desired behavior of the subject to be repeated.

Scheduling activities in this intervention intended to reduce the subject's activity of playing online games by replacing it with more useful activities following the agreement of the client and therapist. The Prophet advised his people to always use their time as well as possible so that later humans do not regret everything that has been missed. An Arabic proverb that explains the importance of using time in life, namely: "Time is like a sword. If you don't use it well, it will cut you down. And if you are not busy in goodness, you will be busy in useless things" (Kurnia, 2011).

One of the activities that have been agreed with the client is learning. This is because the subject is in grade 6 so the subject must try to pass. In addition, learning in Islam has a very important meaning. Allah says in Surah an-Nahl verse 78 that humans are born into the world not knowing anything, so Allah commands Muslims to seek knowledge by utilizing the mind, five senses, heart, and other potentials. The importance of studying this can be seen from the first revelation that was revealed to Muhammad Saw, namely, Allah started his revelation with the command to read (Iqra') as contained in the letter Al-Alaq verses 1-5. This is the basis of Islamic psychology in conducting intervention Scheduling activities.

The intervention process can run quite smoothly because there are several factors, one of which is family cooperation to provide assistance

and encouragement to the subject, as well as the availability of a place to carry out the intervention process. In addition, the subject who is cooperative and has the motivation to change is one of the reasons behind the smooth intervention process. The obstacles experienced during the intervention process were when the subject's parents were not at home so when the subject was feeling at home alone, the subject went to the internet cafe to have fun and not be lonely. Because happy and lonely is the nature of the soul, and this becomes the instinct of every human being (Setiawan, W. etc. 2019).

## CONCLUSION

Scheduling activities can play a role in helping reduce the intensity of playing online games for children who feel bored, lonely, and have no activities at home. The existence of scheduled activities and also providing positive reinforcement when the subject does not go to the internet cafe and carry out daily activities according to the schedule, it can reduce the intensity of playing online games by doing more useful activities.

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