

Self Management Training to Treat Online Game Addiction

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Abstract. This research aims to know whether self management training can decrease online game addiction. Two hypothesis are (1) there is online game addiction level difference of before and after treatment in experimental group and (2) there is online game addiction level difference in experimental and control group after treatment. Research subject consists of 6 people in each group. This research uses experimental method and pretest-posttest control group design. Subjects' characteristic is online gamers who have high and average score in Game Online Addiction Scale. Data is collected using Game Online Addiction Scale based on Lemmens' theory of game online addiction characteristics. Technique used in analyzing the data is non-parametrical two related sample test and two Independence sample test with Wilcoxon test. Analysis shows difference in average score of game online addiction before and after treatment in experimental group ($Z = -2,201$, $p = 0,028$) and no difference in average score of game online addiction between experimental and control group after treatment ($Z = -1,153$, $p = 0,249$). Those means, only the first hypothesis is accepted.

Keyword : Self management, game online addiction

Introduction

Internet user development in the world and Indonesia is very vast. This triggers a new trend between internet users. (<http://www.hariansumutpos.com/arsip/?p=14076>). Survey result of Indonesian Internet Service Provider Association (APJII) shows the number of Indonesian internet active users on 2014 has reached 63 million people or 24% from its total population. This number increased approximately 8% if compared to 2013 where active users were only 55 million people. (<http://ligagame.com/index.php/home/1/5228-berapa-jumlah-pemain-game-online-di-indonesia-ini-datanya>). Furthermore, it is said that from active internet user data, Indonesian active online gamers are approximately 6 million people or 10% of internet users. The number of gamers are predicted to increase about 5% to 10% every year. In line with the vast growth of internet infrastructure in Indonesia <http://ligagame.com/index.php/home/1/5228-berapa-jumlah-pemain-game-online-di-indonesia-ini-datanya>.

Recently, online gaming becomes a trend. Children and adolescence are the ones who play the most. (<http://www.hariansumutpos.com/arsip/?p=14076>). This is also said by Wan C.S & Chiou, W (2006) that through recent high technology devices (computer, tablet, and smartphone) popularity and internet use, online or offline gaming became more popular, especially in adolescence. People usually play video games for entertainment, fun, emotional coping, to seek challenges and run from reality to cyber world to meet unattended needs in real world. Dogan, A (2014) said that gaming could give short term benefits to solve problems like personal problems but for the long term effect, it could create problems. For addicts, gaming can be a trigger to personal problems, job loss, death, and divorce.

Kuss, D.J (2013) and Young, K.S (2011) summed online game addiction effects from few researches; leaving reality, personal problems, interpersonal and intrapersona conflicts, loneliness, aggression, stress, somatic symptoms appearance because of unattended biological needs (food, sleep, and self-care), weight loss, headache, backache, and fatigue.

Research result of Jap T et al (2013) suggested that 10.15% of Indonesian gamers who were also students were addicted to online game. This researcher also told the comparison of online game addiction estimation in several countries –Korea was approximately 2.4 %, China was approximately 13.7 % and United States and Europe countries were approximately 1.5 % - 8.2 %– suffers from internet addiction. Research result from Wang, C,W (2014) revealed that 94% of subjects from 503 people reported to play either video or internet game and 1 out of 6 (15.6%) experienced addiction.

Krunt, R.E & Seay, A.F (2007) said that low self regulation had an important role in becoming an online game addict. Research result of Ming, L and Wei, P (2008) showed that maladaptive cognition, low self regulation, shyness, and depression were important predictor of game online addiction that made physical, personal life, and education or job problems appear. Akin A et al (2015) also showed correlation between self control (self management) and internet addiction. Self control included self monitoring, self evaluation and self reinforcement. Meanwhile, Kanfer (1984) said that to understand the framework of self management, one needed to pay attention to psychological process occurred in self regulation; self observation, self evaluation, self-reaction and self reinforcement. Frayne & Geringer (1992) said that self management was sometimes referred as self control or self regulation.

According to those facts above, it can be assumed that self management can be used to treat game online addiction. So, the aim of this research is to know whether self management can decrease game online addiction level.

Literature Review

Online Game Addiction

Lee, E.J (2007) gave a definition to online game addiction as an inability to stop doing one activity. Van Rooij (2011) referred game addiction as losing control on gaming that might cause some significant disadvantage.

Lemmens (2009) said that an online game addict would have some symptoms such as (a) *salience* (thinking to play online game all day), (b) *tolerance* (increasing time to play online gaming), (c) *mood modification* (online gaming as a way to run from problems), (d) *relapse* (tendency to play online game after a long vacuum time), (e) *withdrawal* (feel bad everytime they are unable to play online game), (f) *conflict* (fighting with someone because of excessive online gaming), and (g) *problems* (avoid any other activities so that caused problems).

Self Management

Frayne & Geringer (1992) said that self management were sometimes referred as self control or self regulation. Mills (Frayne, 1991) also gave a definition to self management as a description of one's effort to control their behavior or decision.

Kanfer (1984) said that to understand the framework of self management, one needed to pay attention to psychological process occurred in self regulation. Three stages of self regulation were (a) self observation, (b) self evaluation and (c) self-reaction. After that, self management included (a) self assessment; asking one to observe and note their own behavior, (b) goal-setting; setting behavior change target, (c) self monitoring; asking one to observe and note their own behavior –when, where, how long it happened or not happened–, (d) self evaluation; comparing something they do to the goal set or comparing between the performance and a criterion/standard, (e) self reinforcement; including giving a reward or punishment systematically to one's self regarding to behavior change target increase or decrease, (f) contract; setting a standard or goal is usually embodied in a contract to undergo a behavior changing program made by the individual and professional (health worker, therapist, etc).

Self Management and Online Game Addiction

Krunt, R.E & Seay, A.F (2007) explained that self regulation (self monitoring, self evaluation dan self reinforcement) were basically suitable to explain the paradigm of self management toward gaming. Self monitoring (a simple introspective observation toward time consumed for online gaming) would give effects to the next game because one realized how much time needed to play online game so that they could decide how long they would play online game. Inability to do self monitoring or realize how much time consumed to play online game is an example of failure in self monitoring that usually causes lost track when playing. Self evaluation will play a role in comparing the amount of time that one uses to play online game with other people's time so one will realize the time used to play online game. Self consequence is basically giving a reward or punishment to one's self, such as watching movie or traveling after successfully limiting their online gaming. If online gamers follow this step, they will be able to control their gaming activity so it won't cause addiction.

Hypotesis

1. There is difference in online game addiction level between pretest and posttest in experimental group
2. There is difference in online game addiction level in experimental and control group pretest and posttest.

Research Method

Independent Variable Manipulation

Research subjects were given a treatment in the form of self management skills, including self assesmen, goal-setting, self monitoring, self evaluation and self reinforcement also contract making.

Research Subject

Research subjects were online gamers who have high and average score in Game Online Addiction Scale. Subjects are divided into experimental and control group each consists of 6 people.

Data Collecting Method

Instruments used to collect data were (1) Game Online Addiction Scale based on Lemmens' (2009) theory of game online addiction characteristics; (a) salience (b) tolerance, (c) mood modification, (d) relapse, (e) withdrawal, (f) conflict, (g) problems. (2) Self Management Scale based on Kanfer's (1984); (a) self evaluation, (b) goal setting, (c) self monitoring, (d) self evaluation dan (e) self reinforcement.

Game Online Addiction Scale consists of 28 statements (items). Try out result showed items coefficient correlation moving between 0,378 to 0,766 and scale reliability 0,972. Self Management Scale consists of 30 statements (items). Try out result showed item coefficient correlation moving between 0,373 to 0,764 and scale relability 0,948.

Experimental Design

This research experimental design was pretest-posttest control group design

Data Analysis Method

Analysis was done using non-parametrical two related sample test and two Indenpendence sample test with Wilcoxon test.

Research Result

Table 1. T-test Result (*two related sample test*)

	Z score	Significancy
Game Online Addiction pre-post EG	-2.201	0.028
Self Management pre-post EG	-2.201	0.028
Game Online Addiction pre- post CG	-1.153	0.249
Manajemen diri pre-post CG	-0.674	0.500

Based on the table above, it can be concluded that there is difference in online game addiction level and self management in experimental group and there is no difference in online game addiction level and self management in control group.

Table 2 T-test resul (*two independent sample test*)

	Z Score	Significancy
Game Online Addiction pre EG & CG	0.000	1.000
Self Management pre EG & CG	33.500	0.378
Game Online Addiction post EG & CG	-1.601	0.109
Self Management EG & CG	32.000	-1.123

Based on the result showed above, it can be concluded that: (1) there is no difference in addiction level and self management before treatment. It means that experimental and control group are homogeny (similar). (2) there is no dofference in addiction level and self management after treatment in experimental and control group.

Discussion

Based on data analysis above it can be cocluded that only first hypothesis is accepted, that there is difference in online game addiction level before and after treatment in experimental group. Average score of online game addiction after treatment (mean = 54.33) is lower than before treatment. Self management score is also like that. Average score of self management after treatment (mean = 86) is higher than before treatment (mean = 54.33).

One of the the theory that explains self management training effectivity is social learning theory (Bandura in Lathan & Frayne, 1990). Frayne and Geringer (1992) said that social cognitive theory described complete theoritical framework to analyze and explain human behavior. This theory explains that conginition, behavior, and environment affect one another (reciprocal determinism). Bandura (in Hergenhahn & Olson, 2008) said whether humans controlled environment or environment controlled humans depend on which reciprocal side chosen to study.

Frayne and Geringer (1992) said that human could respond proactively or reactively depend on external influence and external influence on one's self can be changed as a result from individual response. Similar thing was also explained by Bandura (Hergenhahn & Olson, 2008) that act was not only determined by reward and external punishment but more likely determined or controlled by one's self (self regulation behavior). People use strategies either reactively of proactively for self regulation. Humans are capable to manipulate external factor that affects upcoming behavior but humans are also capable of regulating internal factor by monitoring and evaluating their behaviors in relation to their own personal goals.

This research result is supported by research result from Krunt, R.E & Seay, A.F (2007), showed that low self regulation individual tended to report problems after online gaming. On the other hand, actively self regulating individual reported fewer problems. Another supporting research result was from Detria (2013) that self management technique could decrease online game addiction (quasi experimental research in SMPN ninth grade students).

Conclusion

According to data analysis, it can be concluded that first hypothesis is accepted. There is difference in online game addiction level before and after treatment in experimental group ($Z = -2.201$, $p = 0.028$). second hypothesis is not accepted, which means there is no difference in online game addiction after treatment in experimental and control group ($Z = -1.601$, $p = 0.109$).

Suggestion

1. For subjects
Subjects should agree to continue their self management skill independently so they will not be addicted to online game.
2. For next research
For next researchers who are interested in studying similar thing, it is suggested to add the number of research subjects. Beside, next researchers should pay more attention to the research external validity to get more accurate result.
3. Related party (psychologist, magister students of psychologist profession)
Can use self management to treat online game addiction

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