The correlation between frequency of playing online games and teen communication on nursing students in STIKes Muhammadiyah Palembang[☆]

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Abstract

Background: Communication in adolesencest is an interpersonal interaction that use symbolic linguistic system, such as a system of verbal and non-verbal symbols. Factors that influence adolescent communication include environmental factors, education, and online games.

Research objectives: To find out the correlation between frequency of playing online games and teen communication on students' Level I & II of STIKes Muhammadiyah Palembang.

Research method: the research method use was quantitative descriptive research with *Cross Sectional* approach using Purposive Sampling as the technique of collecting data with a simple of 262 out of 760 populations. The instrument used in the form of a questionnaire about the frequency of playing online games and teen communication made by the researcher and has been tested for validity and reliability. This research was conducted in March–April 2019.

Result: From the results of the study, most of the respondents with 116 respondents (82.3%) had passive communication with the frequency of playing online games often, and a small number of respondents with 2 respondents (2.9%) had aggressive communication with the frequency of playing online games sometimes. The result test of Chi Square was obtained a value P value = 0.000 (<0.05)

Conclusion: There was a correlation between frequency of playing online games and teen communication on students' level I & II STIKes Muhammadiyah Palembang.

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Introduction

Online games are types of games that can be accessed by many players who are connected to the Internet network. Online gaming is also referred to as a technology rather than as a genre or type of game, a mechanism for linking players together versus specific patterns in a game.[1]

Ref.[2] has gathered several positive effects of playing online games. Playing games provides a very effective exercise for the brain. A large number of them need abstract and high-level thinking skills to win. His skills are like: problem solving and logic. While the negative impact of playing online games is the occurrence of musculoskeletal disorders, causing skin problems, impaired vision (computer vision syndrome) causing game addiction behavior, affecting emotional addiction and Psychological problems such as anti-social behavior, decreased social interaction, decreased empathy, and social deviations such as problems in communicating.[2]

Judging from the negative impact in playing online games according to Ref.[2] which is causing social deviations. Where the duration of playing online games is very varied, from 1 to 6 h or more. Resulting in social deviations. One of the social deviations committed by adolescents of online game players is the problem of communication with the surrounding environment. Playing online games will unconsciously make adolescents become individualism, ignoring the events around them and not being able to adjust to the environment due to only focused on the game itself.[3] Changes in communication may not be felt by teenagers themselves but can be felt by other people around them especially friends and parents.

Based on previous research conducted by[4] with the title ''Relationship Frequency of Playing Online Games With Aggressive Behavior in Adolescents of Class XI Science and XI IPS in senior high school Muhamadiyyah 7 Yogyakarta'' concluded that there was no relationship between the frequency of playing online games with aggressive behavior in adolescents class XI IPA and XI IPS at SMA Muhammadiyah 7 yogyakarta. Because teenagers playing online games are not one of the factors causing teenagers to be aggressive, but teenagers can be influenced by the surrounding environment.

The Indonesian Internet Service Providers Association (APJII) is a survey entitled ''Penetration and Behavior of Indonesian Internet Users 2017''. The survey results in collaboration with Teknopreneur said, internet user penetration in Indonesia increased to 143.26 million people or equivalent to 54.7% of the total population of this republic.

Where 50% of users have played online games found on social networking sites (Fig. 1).

Preliminary observations of researchers conducted diarrhea campus STIKes Muhammadiyah Palembang. Researchers conducted interviews with 15 students who played online games via smartphones. Interviews were conducted with 5 students level I and II, where 4 students showed a change in communication to the surrounding environment when playing online games with the frequency of playing for 3–6 h a day. The change in communication is that students ignore the events around them and are unable to adjust to the environment due to only focusing on their own game While 1 other student has no specific communication changes where the frequency of playing online games they play is only 1–2 h per day. Based on these problems, the authors are interested in studying and researching about ''The Relationship Between Frequency of Playing Online Games and teen Communication on Nursing Students of STIKes Muhammadiyah Palembang.

Literature review

Online games are games that can be played by multi players via the Internet. Online games not only provide entertainment but also provide interesting challenges to be solved so that individuals play online games without taking into account time to achieve satisfaction.[5]

Several studies have shown that online game users have positive and negative effects on their players. The positive impact of online games is the impact caused by online games that have a positive effect on users. Here are some of the positive things that can be arising from playing online games including online games make smart, improve concentration, have faster eye acuity, improve brain performance and stimulate the brain in receiving stories, improve reading skills, improve English language skills. While the negative impact of playing online games is a psychological problem, causing musculoskeletal disorders, causing skin problems, vision problems (computer vision syndrome), causing game addiction behavior, adolescent communication lapses. The frequency of playing online games according to
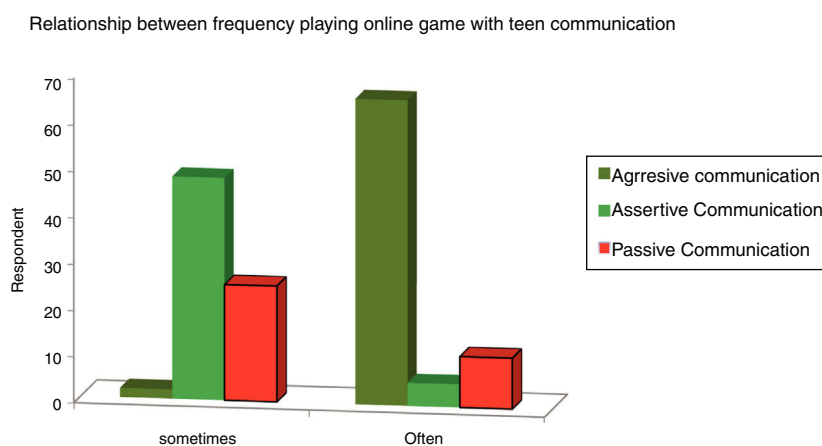
Relationship between frequency playing online game with teen communication

Figure 1   Relationship between frequency playing online game with teen communication.

Ref.[6] namely: never: <2 h, sometimes: 2–3 h, often: 4–6 h, always: >6 h.

Communication according to Ref.[7] states that communication is an interpersonal interaction that uses a linguistic symbolic system, such as a system of verbal symbols (words), verbal and nonverbal. This system is socialized directly/face to face to through other media. As for the forms of communication[8] are as follows: passive communication, assertive communication, aggressive communication.

Methods

Researchers conducted research on students of Muhammadiyah Palembang STIKes. The researcher focused on how the relationship between the frequency of playing online games and teen communication among students of STIKes Muhammadiyah Palembang.

This research method uses quantitative descriptive design. The research design used in this study is Cross Sectional, which is research that is measured and collected only once or once at a time.[9] In this study the independent variable is the frequency of playing online games and the dependent variable is teen communication. The study population was taken from student players and knew of online games at Muhammadiyah Palembang STIKes. Researchers conducted research on students level I and II. Based on preliminary observations, the total number of students of STIKes Muhammadiyah Palembang level I and II amounted to 760.

Sampling is done by the method of sampling using nonrandom sampling and the technique used is purposive sampling. Data source sampling techniques with certain considerations.[10] The samples taken in this study were 262 respondents.

In quantitative research, it is necessary to distribute questionnaires. This is needed to find out the answers of the research samples that have been set. It is necessary to establish a measurement scale in the research to be carried out so that researchers know the value of the answers that have been answered by the sample when filling out the research questionnaire. The questionnaire in this study was made by the researcher and validity and reliability tests were carried out. In accordance with the title previously explained, the statement on the variable X (the frequency of playing online games) and the Y variable (teen communication) is determined by a Likert scale. The response item consists of 4 responses as in Table 1.

In this study, researchers conducted a validity and reliability test through the Statistical Product and Service

Table 1 Table of likert scale.

Description	Alternative answer	Score (+)
Very often	SS	4
Often	S	3
Rarely	J	2
Never	TP	1

Solution (SPSS) program. According to Ref.[11] (2010: 172), the value of the correlation coefficient is as follows:

1. Less than 0.20 Very low relationship; very weak
2. 0.20–0.39 Relationships are low but certain
3. 0.40–0.70 A significant relationship
4. 0.71–0.90 High relationship; strong
5. More than 0.90 Very high relationship; very strong; reliable

Results and discussion

Based on the research results of the relationship between the frequency of playing online games with teen communication in the students of I & II level Muhammadiyah Palembang STIKes obtained the results (Table 2).

From the results above it can be concluded that from 262 respondents there are 2 respondents (2.9%) have aggressive communication with the frequency of playing online games sometimes, and there are 66 respondents (97.1%) have aggressive communication with the frequency of playing online games often. Then obtained 48 respondents (90.6%) have assertive communication with the frequency of playing online games sometimes, and as many as 5 respondents (9.4%) have assertive communication with the frequency of playing online games frequently. Of the 262 respondents there were 25 respondents (17.7%) had passive communication with the frequency of playing online games sometimes, and as many as 116 respondents (82.3%) had passive communication with the frequency of playing online games frequently.

Chi Square test results obtained P value = 0.000 smaller than the value of α = 0.05 so that H0 is accepted which means that statistically there is a significant relationship between the frequency of playing online games with teen communication. Thus the hypothesis which states that there is a relationship between the frequency of playing online games

Table 2 Frequency of playing online games with teen communication in the students of I & II level Muhammadiyah Palembang STIKes.

Frequency of playing game online	Teen communication								P(p value)
	Aggressive		Assertive		Passive		Total		
	N	%	N	%	N	%	N	%	
Sometimes	2	2.9	48	90.6	25	17.7	75	28.6	0.000
Often	66	97.1	5	9.4	116	82.3	187	71.4	
Total	68	26.0	53	20.2	141	53.8	262	100	

with teenage communication in students of STIKes Muhammadiyah Palembang Based on the theory put forward by Ref.[3] There are several factors that influence adolescent communication both internal and external factors such as education, knowledge, attitudes, age of development and health status, channels, environment, and online games. According to Adams and,[1] online gaming is more accurately referred to as a technology than as a genre or type of game, a mechanism to connect players together compared to certain patterns in a game. As for the impact of playing online games themselves have positive and negative impacts, namely positive impact is to have abstract thinking skills and a high level of winning. While the negative impact of playing online games is the occurrence of musculoskeletal disorders, vision disorders (computer vision syndrome), affect emotional addiction and psychological problems such as anti-social behavior, decreased social interaction, decreased empathy and social deviations such as problems in communication.[2] Besides the psychological aspects of a person are not met then there will appear uncomfortable feelings in him.[12]

Frequency of playing online games according to Ref.[6] i.e. never: <2 h, sometimes: 2–3 h, often: 4–6 h, always: >6 h. Communication according to Ref.[13] is every information exchange process, ideas and feelings. This process includes information that is conveyed both orally and in writing in words, or delivered in body language, style and appearance, using tools around us so that a message becomes richer. Factors that influence adolescent communication according to Ref.[3] are education, knowledge, attitudes, age of development and health status, channels, environment, and online games.

Based on literature studies and research results, researchers assume that the frequency of playing online games is the amount of interest or frequent someone playing games through Internet access (virtual games) online. The frequency of playing online games is the number of hours or the average person plays games every day of the week. Teenagers who play online games generally spend their time playing online games on average 4–6 h a day. The more often the frequency of playing online games the more it will have a negative impact on teen communication. Where there are forms of communication in adolescents, namely aggressive communication, passive communication, and assertive communication. Adolescent communication can be influenced by various factors, both internal and external factors, but external factors have a greater influence on the adolescent's communication. Where in external factors are the environment, peers, and online games. If a teenager cannot control the influence of external factors, such as online games, it will affect his communication, such as passive or aggressive communication

Conclusion and suggestion

Based on the results of research that has been done about the relationship of the duration of playing online games with teen communication can be concluded as follows:

1. From 262 nursing students of STIKes Muhammadiyah Palembang level I and II in 2019 showed that most of the frequencies of playing online games often were 187 respondents (71.4%).
2. From 262 students of STIKes Muhammadiyah Palembang level I and II in 2019 showed that the majority of respondents had passive communication that is 141 respondents (53.8%).
3. There is a significant relationship between the frequency of playing online games with teenage communication at the Muhammadiyah STIKes Palembang Levels I and II students in 2019, the statistical test results using the Chi Square test obtained the value of P value = 0.000 or ≤0.05.

Based on the results of research that researchers have done, so here researchers provide some suggestions or input as follows:

1. For Educational Institutions
   For educational institutions, it is expected that the results of this study can be used as a reference for students to know the positive and negative impacts of playing online games and to know the factors that cause adolescent communication deviations.
2. For Researchers
   The results of this study can increase the knowledge and experience of researchers as researchers in conducting further research and can increase knowledge, especially in the field of Basic Nursing.
3. For Teens

For teens, it is best to look for a place to try various roles and socialize in a more positive way compared to playing online games. Adolescents are better off following more positive youth group activities. Teenagers should also be able to know the behavior of good and bad friends asebya ay for adolescents themselves because the impact of peers is very influential on adolescents both the nature, behavior, interests, and appearance of adolescents themselves.

Conflict of interests

The authors declare no conflict of interest.

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