How to inhibit the habit of masturbation in cybersex adolescents, from bio-psychological approach?

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Abstract. Watching pornographic impressions over the internet affects sexual behavior among teenagers. This study aims to analyze the effect of cybersex behavior on the intensity of masturbation in adolescents and the role of religiosity in limiting the influence of cybersex on masturbation habits. The method used in this study is a correlational quantitative method by taking 45 subject of cybersex users’ teenagers study obtained by snowballs technique. The data were processed using multiple linear regression. The results showed cybersex behavior affects masturbation habits in adolescents. At the same time, the results of this study indicate religiosity inhibiting masturbation behavior in cybersex users. This study provides a solution to control masturbation habits due to the large exposure of incoming pornographic impressions, since teenagers full of curiosity.

1. Introduction

The era of globalization is an age where all information can be obtained easily and quickly. One medium that is able to provide information quickly is the internet. Various people can access the internet including teenagers. Teenagers are someone with a very high curiosity, especially in this case is the curiosity of sex. Teens can access sites related to sex material through the internet, including pornography. Sex is reported as the most popular search topic on the internet [1]–[5]. Teen curiosity about sexuality is a normal and healthy aspect of human development. But the ease of exploring the Internet and cable television has ushered in adolescence with a few clicks of their computer mouse, instantly flooded with sexual stimulation even though bio psychologically not yet mature enough to receive it. This affects the formation of their healthy sexual identity [2]. Pornographic views can affect the attitudes and behaviors of teenagers/students where attitudes and behaviors can occur when there is encouragement in adolescents to watch the impressions and imitate the things contained in pornographic shows.

In the last three decades, studies have proven adolescent exposure to sexual media content affects sexual beliefs [3]. The exposure to sexual content in music, movies, television, and porn magazines speeds up teenage sexual activity [4]. Peter David Goldberg remarks that cybersex is the use of the internet for sexual purposes. David Greenfield argues that cybersex is using computers for any form of expression or sexual satisfaction [5].

Teens’ interest about sex makes teenagers always trying to find more information about sex. Some sources of information about this sex, they obtained more from the environment, such as sex education
in school, reading books about sex, and more to discuss it with his friends. The amount of teens’ curiosity make teenagers trying to prove the truth of information received by tend to perform sexual behavior itself. This suggests that peers not only bring good influence to individual psychosocial development, but also have the opportunity to bring bad influence.

In satisfying sexual desire that is triggered by a porn spectacle, teenagers choose a common safe way of masturbating. Many teenagers, girls and boys, will start masturbating during adolescence but may feel depressed because of getting the various negative and threatening messages they receive. However, negative messages about masturbation or the like usually do not stop people from masturbating because they are aware of the safe spread of HIV, and diseases spread through other sex.

Although the impact of pornography has been raised from various studies on adolescent sexual behavior, research conducted by Valkenburg suggests that limiting pornographic media is not a wise way [6]. Another approach should be sought to accommodate adolescent development so that they can control their sexual behavior with full awareness. Thus this approach is done from two elements of psychology and biology known as Biopsychology. The research suggests that religious cultivation to adolescents can make teenagers more able to control their emotions. Religiosity is not a religion but rather refers to the quality aspect of the religious man. This study aims to analyze the role of religiosity in the influence of cybersex on the habit of masturbation.

2. Method
This research uses quantitative cross sectional method. In this study, 45 people were taken as a sample of late adolescents with an 18-21-year age range. Sampling technique using Snowball sampling with the help of key-informant.

The instrument in this research used a questionnaire about cybersex behavior, religiosity, and masturbation habits. The religiosity questionnaire was modified from the Duke University Religion Index (DUREL) questionnaires [6],[7]. The masturbation questionnaire involves an indicator of motivation, direction of interest, presentation, frequency, and duration. The data of this study were analyzed using multiple linear regression with SPSS computer software.

3. Results
The results are shown in table 1.

| Coefficients | Model | Unstandardized Coefficients | Standardized Coefficients |
|--------------|-------|-----------------------------|---------------------------|
|              | B     | Std. Error                  | Beta                      | t     | Sig. | 95% Confidence Interval for B | Lower Bound | Upper Bound |
| (Constant)   | 5.965 | 29.652                      | .201                      | .842  | .842 | -53.918                      | 65.848      |
| Cybersex behavior | .829  | .346                        | .697                      | 2.394 | .021 | -.060                        | 1.528       |
| Religiosity  | -1.479| 2.996                       | -.327                     | -.494 | .624 | -.7530                       | 4.572       |
| Cybersex and Religiosity | .014  | .037                        | .227                      | .380  | .706 | -.060                        | .088        |

a. Dependent Variable: Masturbation’s Habit

Table 1 shows positive linear effects of cybersex with masturbation habits. The more often cybersex, the higher the habit of masturbation (p= 0.21). Meanwhile, religiosity has a negative effect on masturbation habits. The effect religiosity is less significant. every 1-point increase in Cybersex behavior will raise the habit of masturbating 0.829 points. Each 1-point rise in religiosity will decrease the habit of masturbating 1,479 points. When cybersex behavior is accompanied by religiosity, the influence on masturbation is minimal.
4. Discussion
The results of this study indicate that cybersex improves masturbation habits. This is in accordance with Goldberg's research results stating that of those who access cybersex, 82.8% of men and 54.5% of women masturbate.

The cybersex addiction mechanism is synonymous with drug addiction [8]. In the mechanism of drug dependence, drugs affect the brain by entering its communication system and disrupt the way neurons normally send, receive, and process information. Some medications, such as marijuana and heroin, can activate neurons because they are chemical structures mimicking from a natural neurotransmitter. The similarity in this structure causes the receptor to be deceived and allows drugs to install and activate neurons. Although these drugs mimic brain chemicals themselves, they do not activate neurons in the same way as a natural neurotransmitter, and they lead to abnormal messages sent via tissues. The other drugs, such as amphetamine or cocaine, can cause neurons to release large amounts of naturally occurring neuron. This disturbance ultimately disrupts the nervous system communication channels. Drugs stimulate the expenditure of large amounts of dopamine. Dopamine is a neurotransmitter present in areas of the brain that regulate movement, emotion, motivation, and feelings of pleasure.

High dopamine causes the effect of euphoria. Our brains will repeat the activity of sustaining life by associating the activity with pleasure or reward. Whenever this reward circuit is activated, the brain notes that something important is going to remember and teach us to do it again and again without thinking about it. This is what causes addiction [9]. The research conducted by Mohandas mentions that Limbic Stimulation is also involved in experiences similar to meditation. The results of the examination using fMRI show that on spiritual conditions, the hippocampus modulates cortically. The right hippocampus affects the right lateral amygdala. Right lateral amygdala stimulation produces ventromedial hypothalamus stimulation with stimulation of peripheral parasympathetic system. Increased parasympathetic activity leads to relaxation and then a deeper sense of serenity. This condition decreases the production of corticotrophin releasing hormone (CRH) and cortisol, thus decreasing anxiety [10].

From the side of psychological analysis, Freud argues that fantasy masturbation is a creation of pleasure to bridge the gap between the desires and demands of reality. Thus, doing masturbation will trigger the brain to remove Dopamine, and in the same way will cause addiction.

Religiosity is a picture of the circumstances within a person that encourages him to behave (both visible and invisible behavior) and acting in accordance with the religious teachings he embraces. When a person communicates with his God, there is a mechanism from within his brain. Research suggests that there is an increase in dopamine through the activation of basal ganglia when people are concentrating in prayer. The researchers suspect this increase in Dopamine may be related to the interaction between the prefrontal cortex and subcortical structures that decrease anxiety and increase happiness [11-12]. The results of this research are in line with Rubia's research that says that in a state of connection between man and his God through meditation, the brain produces serotonin which decreases anxiety and increases happiness [13]. Religion provides comfort in the heart and reduces anxiety to worldly problems [14-16]. Thus religiosity needs to be improved in adolescents to protect the impact of cybersex on masturbation habits.

The results of this study indicate that religiosity can inhibit the emergence of masturbation habits in cybersex actors. Relativity inhibitory is not enough to stop the negative effects of cybersex. Parental supervision, good sex education needs to fortify teenagers from sexual disorders due to pornographic shows that are easily accessible via the internet.

5. Conclusion
This study showed cybersex behavior affects masturbation habits in adolescents. Nevertheless, religiosity inhibiting masturbation behavior in cybersex users. This study provides a solution to control masturbation habits due to the large exposure of incoming pornographic impressions, since teenagers full of curiosity.
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