

THE IMPACT OF VIDEO GAME ADDICTION ON DEPRESSION, ANXIETY, AND STRESS AMONG THAI ADOLESCENTS, MEDIATED BY SELF-REGULATION AND SOCIAL SUPPORT

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Abstract: The primary purpose of this study was to examine the direct and indirect influences of video game addiction on Thai adolescents' levels of depression, anxiety, and stress, being mediated by self-regulation and social support. A total of 200 Thai adolescents (aged between 18 and 20 years) participated in this study by filling in a self-administered survey questionnaire designed to measure the study's primary variables (video game addiction, depression, anxiety, stress, self-regulation, and social support). Results from the path analysis showed that the respondents' level of video game addiction directly influenced the levels of depression, anxiety, and stress such that the higher the level of video game addiction, the higher is their level of depression, anxiety, and stress. Video game addiction has indirect influences on the levels of depression, anxiety, and stress when mediated by self-regulation. However, video game addiction has no indirect influence on anxiety and stress when mediated by social support. Nonetheless, video game addiction was found to have a positive influence on social support, such that the higher the level of addiction, the higher is the level of social support. Among the three dependent variables of depression, anxiety, and stress, it was found that only depression decreases in level when the mediator social support is increased, even when the level of video game addiction is high. The study's conclusions, implications, and avenues for future research are discussed.

Keywords: Video Game Addiction, Depression, Anxiety, Stress, Self-Regulation, Social Support.

Introduction

Video game addiction is one of many problems that concerned people in Thai Society. According to the Thai Department of Mental Health, there are 2.5 million video game addicted children out of a population of 18 million children in the country, and the number of addicted children has been growing constantly from 13.3% in the year 2007 to 14.4% in the year 2012 (Manager.co.th, 2013). There is adequate research evidence that children who spend much time playing video games have a high chance

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of becoming pathological gamers and are likely to become depressed, anxious, or develop social phobias (Gordon, 2011). In Thailand, it had been demonstrated that children and adolescents have shown increasing signs of game-playing habit and the risk of video game addiction (Phuphaibul et al., 2005).

Pathological players may try to avoid normal social relationships and play video games to develop online relations as a substitute in order to hide feelings of anger, depression, and low self-esteem. Furthermore, these pathological players need support and understanding from parents, teachers, and friends to help them adjust to society and develop healthy normal relationships (Illinois Institute for Addiction Recovery, 2012).

As a result of all the above reasons, the researcher believes that it is very important to understand video game addiction and its impacts in Thai context, to help addicted gamers to cope with the video game addiction and significant people such as parents, teachers and friends to support pathological gamers and help reduce the level of negative psychological symptoms such as depression, anxiety and stress.

Research Objectives

To investigate the prevalence of video game addiction among Thai adolescents and determine the level of video game addiction, depression, anxiety, stress, self-regulation, and social support among Thai adolescents. To examine the direct influence of video game addiction on the level of depression, anxiety, and stress among Thai adolescents. And to examine the indirect influence of video game addiction on the level of depression, anxiety, and stress among Thai adolescents, being mediated by self-regulation and social support.

Review of Literature

Video Game Addiction

'Video game addiction' is the term used by many researchers to describe excessive, obsessive, compulsive and, generally, problematic use of video games. For example, Van Rooij (2011) defined video game addiction as loss of control over gaming leading to significant harm. Lemmens et al. (2009) referred to game addiction as excessive and compulsive use of computer or videogames that results in social and/or emotional problems; and, despite these problems, the gamer is unable to control this excessive use. Young (2009) demonstrated that pathological gamers, at times, are not willing to eat, sleep, and interact with other individuals and prefer to spend most of their time on video games. The effect of video game addiction, compared to other addictions, is that gamers enjoy playing so much that they spend too much time playing and not realizing that they are having problems.

A Thai-based study demonstrated that children and adolescents in Thailand play video games for various reasons: to relax, reduce stress, have fun and enjoyment, challenge, win, and update video game trends with friends. Most of them prefer to play video games than do other more productive activities such as engaging in sports or reading books. They reportedly cannot stop playing or reduce time spent on video games, causing many problems such as waste of time, money, poor performance in school, inadequate sleep, and negative relationships in the family (Sota, 2011).

Depression

When people are depressed, they may exhibit social avoidance and retreat from the real world into gaming; and after playing excessively for a period of time, they have a high chance of becoming pathological gamers and may become even more depressed, according to research by Gentile et al. (2011). It was found that people who spend more than 33 hours a week playing video games suffer 24% more depression than balanced gamers or those who play for 21 hours (Loton, 2012).

Another study reported that video games may act as a device to reduce the level of depression as it offers a sense of control, power, goals, and rewards that the individual might achieve immediately in the game world, especially violent games, thus providing gamers the chance to cope with stressful and depressing situations in life as they are given power and ability over a controlled virtual environment. Furthermore, social isolation in teens may cause depression such that the more teenagers try to isolate themselves, the more prone they are to depression (Tiwari & Ruhela, 2012).

Anxiety

When children become addicted to video games, they have high chances of becoming anxious and developing social phobia (Gordon, 2011). Loton (2012) observed that people who spend more than 33 hours a week playing video games suffer 15% more anxiety than balanced gamers or those who play for 21 hours.

Gentile et al. (2011) suggested that gamers with pathological anxiety and social phobia become worse, depending on their social avoidance behavior, but will gradually better when they recover from their pathological state.

Stress

In some cases, when an individual is faced with some difficult situation in everyday life and the individual finds it hard to cope, that individual might turn to video games to distract oneself from facing the problem or to escape from reality (Wood & Griffiths, 2007). Video games can help an individual escape from stressful situations in daily life (King & Delfabbro, 2009). A study reported that peer pressures and environmental distresses are the main reasons why adolescents become game addicts. Often, their friends are gamers and it becomes harder for adolescents to recover from addiction because most of them have computers in their room (Young, 2009).

Self-Regulation

Seay and associates (2007) explained the concept of self-regulation in relation to video gaming. Self-observation is when an individual has awareness about the amount of time spent on video games. Inability to realize the amount of time playing video games is failure in self-monitoring. Self-evaluation is when an individual compares the amount of time playing with friends or other players, whether the individual plays more or less. This is followed by self-response which can be a punishment or reward, depending on the thoughts of the individual on self-evaluation. In Thailand, Junmukda and Natirutthakorn (2007) reported the following findings in relation to self-regulation and video game addiction: younger children have higher risk of game addiction due to lower self-regulation; younger elementary school

children have higher chances of becoming addicted to games than older elementary school children; and younger high school children have higher chances of addiction than older high school children.

Social Support

Some people who have problems adjusting to society may turn to video games because the recognition they receive in digital society is different from that of the real world; thus, they face the risk of getting addicted to video games (King & Delfabbro, 2009). People who play video games to avoid stressors or escape from the real world tend to have high risk for problematic use because while playing video games helps them cope with stress, it also keeps them attracted; thus, keeping them further away from normal life rather than having to face it (Seay et al., 2007). People around the pathological gamer can help minimize video game addiction as social support, both tangible and intangible, have been shown to improve physical health and reduce negative psychological symptoms such as depression and anxiety (Longman et al., 2009).

Conceptual Framework

This study is correlational in design as it attempted to explore the relationships among the following variables: video game addiction, depression, anxiety, stress, self-regulation, and social support (among Thai adolescents). This study used the quantitative approach, utilizing descriptive and inferential statistical tools to analyze research data obtained by means of a self-administered survey questionnaire. Figure 1 shows the conceptual framework of this study.

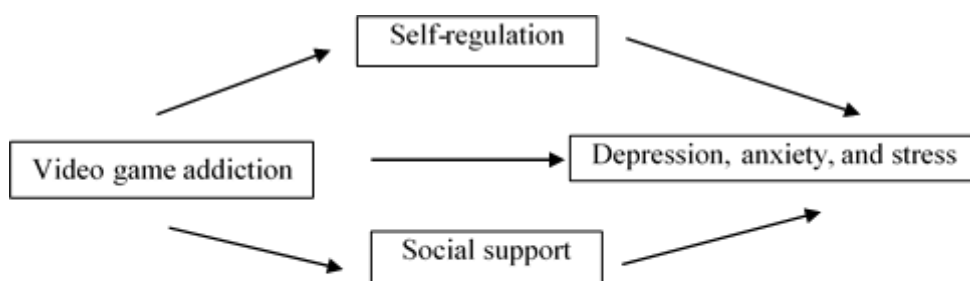


Figure 1: Path Model of the Hypothesized Direct and Indirect Influences of Video Game Addiction on Depression Anxiety and Stress Mediated by Self-Regulation and Social Support

Methodology

This study is correlational in design as it attempted to explore the relationships among the following variables: video game addiction, depression, anxiety, stress, self-regulation, and social support (among Thai adolescents). This study used the quantitative approach, utilizing descriptive and inferential statistical tools to analyze research data obtained by means of a self-administered survey questionnaire

Participants

The target respondents of this study consisted of high school or university adolescent students in Bangkok, aged 18-20 years. The participants were recruited through convenience sampling. The inclusion criteria for participants, male and female, consisted of the following: (a) high school or university students in Bangkok; (b) aged between 18 and 20 years; (c) have video game experience; and (d) willing to participate in the study.

Path analysis via multiple regression analysis was employed to test the hypothesized direct and indirect impacts of video game addiction on Thai adolescents' levels of depression, anxiety, and stress, being mediated by their levels of self-regulation and social support.

Findings/Results

In order to test the hypothesized direct and indirect relationships represented by the path model (Figure 1), path analysis via regression analysis was conducted. The path model with the three dependent variables of depression, anxiety, and stress were run separately. The analysis also involved: (1) regressing the dependent variable of depression on the predictor variables video game addiction, self-regulation, and social support, and (2) regressing the mediator variables of self-regulation and social support on the predictor variable of video game addiction. The same analysis was repeated for the dependent variables anxiety and stress.

The results showed that the respondents' level of video game addiction has a direct influence on their level of depression, such that the higher their level of addiction, the higher is their level of depression (Beta=.48). The results also showed that video game addiction has an indirect influence on the level of depression, being mediated by self-regulation and social support. This means that the higher the respondents' level of video game addiction, and the higher their reported level of self-regulation (Beta=.34), the higher is their reported level of depression (Beta=.42). Subsequently, the higher the respondents' level of video game addiction, and the higher their level of social support, the lower is their reported level of depression (Beta=.25 and Beta -.18, respectively).

The results showed that the respondents' level of video game addiction has a direct influence on their level of anxiety, such that the higher their level of addiction, the higher is their level of anxiety (Beta=.46). The results also showed that video game addiction has an indirect influence on the level of anxiety, being mediated by self-regulation. This means that the higher the respondents' level of video game addiction, the higher their reported level of self-regulation (Beta=.34), and the higher is their reported level of anxiety (Beta=.35). The results also showed that there was no indirect influence of video game addiction on anxiety, being mediated by social support. However, video game addiction has a positive influence on social support.

The results showed that the respondents' level of video game addiction has a direct influence on their level of stress, such that the higher the level of addiction, the higher is their level of stress (Beta=.48). The results also showed that video game addiction has an indirect influence on the level of stress, being mediated by self-regulation. This means that the higher the respondents' level of video game addiction, the higher their reported level of self-regulation (Beta=.34), and the higher is their

reported level of stress (Beta=.35). The results also showed that there is no indirect influence of video game addiction on stress, being mediated by social support. However, video game addiction has a positive influence on social support.

Discussion and Conclusion

Many Thai adolescents are addicted to video games, and that this addiction directly impacts on the negative psychological states of depression, anxiety, and stress. Adolescents in Thailand are, apparently, spending more and more time playing video games instead of engaging in more useful activities such as studying or playing sports. This predilection for video gaming will very likely increase their risk for full-blown depression, anxiety, and stress, if not regulated or controlled.

It is very important that Thai adolescents should try to control their time spent on video games or that helpful interventions be implemented to prevent addiction because, as inferred from the results of this study, the higher the level of video game addiction, the higher the level of depression, anxiety, and stress.

It is concluded that social support can help reduce the level of depression among Thai adolescents who are addicted to video games. It had been established that people who have high level of social support suffer less from negative outcomes, both physical and psychological. Social support in a collectivistic society such as Thailand can reduce negative psychological symptoms because high level of social support enables individuals to cope better with problems and overcome negative aspects in their life, as demonstrated in earlier studies.

The importance of seeking help and advice not only from helping professionals in times of difficulties but, in the first instance, from people one can trust such as parents and siblings, religious leaders, teachers, and friends should be discussed at school, infused in the curriculum, emphasized in mass media, and so on. In this way, young people are encouraged to disclose their personal issues to someone they trust, instead of keeping things to themselves until they implode emotionally.

Recommendations

Recommendations for Thai Adolescents

It is recommended that Thai adolescents learn to regulate/control their actions, avoid playing excessively, and try to engage in more beneficial activities such as sports, reading, and socializing. Additionally, this study showed that the higher the level of video game addiction, the higher the level of self-regulation. This may be due to the desire to play video games as much as possible. Having a high level of self-regulation can be advantageous only if Thai adolescents can divert their attention from video games to more useful activities.

Recommendations for the Parents and Extended Family of Thai Adolescents

The results of this study indicated that social support can help reduce the level of depression. It is recommended, therefore, that people around addicted adolescents monitor them closely and give necessary advice and support, with a view to preventing or reducing the experience of depression. At the same time, social support can also initiate video game addiction in situations when, for example, parents blindly

buy for their children all kinds of hi-tech gadgets such as smart phones and tablets that can be used to play video games. Thus, parents should be wary of the dangers of some technological advances, referred to as the paradox of 21st century living.

Recommendations for the Friends of Thai Adolescents Addicted to Video Games

Friends are a form of social support that has the highest impact in an adolescent's life; that is, most adolescents usually emulate their friends' behaviors. Close friends can be an effective source of help and support, especially when there is a mutual attempt to veer away from the dangers of video game addiction. It is very important that adolescents be aware of the paradox that despite the enjoyment, spending too much time on video games can lead to a variety of negative consequences. Friends of adolescents addicted to video games should try to convince their addicted friend(s) to focus their energy on other more beneficial activities such as education or sports, and take the lead in engaging in more profitable recreational activities.

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