

## THE EFFECTS OF VIOLENT VIDEO GAMES ON YOUTH BEHAVIOR

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### ABSTRACT

The primary purpose is to identify the behavioral effects of youth playing violent video games on various devices. Research in violent video games is still being debated. Although past researchers have examined the positive and negative effects of violent video games, the results have yet to identify whether the effects of playing violent video games can cause a person's behavior to change. Moreover, to determine whether exposure to spending a lot of time playing characters in video games caused them to be easily influenced. In addition, this study also looked at the effects of exposure to video games able to influence players in behavior. Past researchers were more focused on which gender spent more time playing violent video games. The effort of this study is to identify whether playing violent video games can have a behavioral effect on youth. Thus, the Media Dependency Theory was applied to achieve the objective of the study.

**Keywords: Behaviour Change, Effect, Playing Online Games, Media Dependency Theory.**

### INTRODUCTION

Video and computer games have been often criticized in the youth development literature for their adverse behavioral effects (Passmore & Holder, 2014). Video games are usually played for entertainment purposes. However, the level of pleasure varies from individual to individual. The success of video games is determined by their functionality. Types of good game features will increase the number of time players spend playing them (Hyun GJ, Han DH, Lee YS, Kang KD, Yoo SK, Chung US, 2015). These factors have been the key to a successful game nowadays. The violent video games genre is the most popular games preference amongst gamers. Gamers prefer violent video games because they are more thrilling, provide thrills and provide gamers with interactive experiences (Sami Yenigun, 2013). Among the gender most often playing violent video games are men. Men are more interested and geared towards action and violent games because for them it is fun and exciting. Studies

largely demonstrate that men spend more time playing video games than women (Möller & Krahe, 2009, Olson et al., 2007).

Nowadays, E-Games involving violent video games have held many competitions in the whole world including Malaysia. Organizing a competition involving cash prizes has led to the development of these violent video games becoming more widespread. Games such as PUBG, Battlefield, Call of Duty (COD), and others are growing with the support of many people around the world and that is why these games are increasingly known by many people worldwide. As violent games tend to have more intense competition, it may explain why individuals that are more motivated to compete may consider them more enjoyable and may spend more time playing them (Vorderer, Hartmann, & Klimmt, 2003). Besides that, when a player is playing online games, they will get a gift or reward such as getting a full star or new equipment for the game if they win to qualify for the next level. This causes the player to feel the need to continue the game again to get another reward to step up to a higher level in the video game. Subsequent studies showed that after playing violent video games, participants expected better rewards from the characters in scenes in the video game (Bushman & Anderson, 2002).

Beginning towards the end of the 20<sup>th</sup>-century information technology continued to evolve and has changed the way young people think and process information. The key to the development of youth today is education. Education plays an important role in the technological knowledge of the youth because the way of learning nowadays is more exposed to the use of technology. Using technology in education helps youth to learn to communicate, gather information, organize information, share knowledge, research, and explore. As the keystone of technology in education, computer use begins with education and lasts throughout life (Çatak, 2011).

Furthermore, youth nowadays are more advanced and have the opportunity to explore more uses of technology and one of them is online video games. This group of youths spends more time exploring computer technology and eventually they experience a simple and long learning process. Young technology users usually spend their time on the internet or playing video games (Aral and Ayhan, 2007). According to a survey on online video games in Malaysia, 73 percent of Malaysian respondents who were aged between 16 and 24 years old stated that they played online games. The same survey found that a large portion of Malaysian gamers played online games daily (R. Hirschmann, 2021). The global online gaming market consistently growing, currently, there are an estimated 1 billion online gamers worldwide with China, South Korea, and Japan having the biggest online gaming reach among the population. In 2025, online gaming audiences are projected to surpass 1.3 billion (J. Clement, 2021).

However, concerns about this group of youth exist when they spend more time playing online video games. Moreover, with today's technological advances and a variety of video game options and one of the famous is violent video games that are likely to potentially cause a person to be influenced by violence. Violence is negative social behavior presented by youth that can affect them, their peers, and society more broadly (Jolliffe & Farrington, 2006, Munoz et al., 2011). In addition, various E-Games tournaments involving violent video games have been introduced in Malaysia as well as around the world. This has attracted more youths to participate in the tournament. However, these concerns have been a source of considerable and frequent debate in the scholarly community, among politicians, and the general public.

Exposure to violent online games must be looked into seriously by the authorities and additional studies to examine the relationship between violent video games and youth should be continued. The impact of online video games on a person's social behavior has been the subject of various research and debates. This multitude of research claims that these games play a greater role in the social lives of young people, other than entertainment media, including online video games. This study is still ongoing, there are a variety of answers about the effects of social behavior on these games whether good or bad. Online games currently have facilitated significant changes in human behavior and the social environment (Xanthopoulou and Papagiannidis, 2012).

Playing video games online has shown many challenges in player behavior either getting better or worse. Behavioral changes toward a player depend on how a person's response to the content of the video game is displayed and interpreted in the player's mind. The impact of video games on a player's personality can be positive, such as improving social skills, and mental skills and finding solutions. It can also be negative to a player's personality, such as violence, anxiety, and stress. According to some studies, players who play online games have similarities to the behaviors they do in the real world (F. Bayraktar and H. Amca, 2012). According to previous study found that most online video game players make video game platforms as a place for them to find friends to build friendships through their game-based interactions. It is also a matter of debate whether a person's behavioral changes are due to being influenced by interactions with friends in video games or the effects of online video games themselves. Gamers often develop and maintain intimate friendships with their teammates through their game-based interactions (Pace and Bardzell, 2010). Some video gamers prefer virtual social interaction, while others prefer to interact socially in the real world (Ng & Weimer- Hastings, 2005).

Several studies have examined social behavior in online video games. However, game-specific causes of changes in the social behavior of video gamers are limited. For example, researchers have studied to determine the relationship between a player's personality traits and the effect of a content message sent to a player on a player's behavior change (Yee, Ducheneaut, Nelson, & Likarish, 2011). These studies examine specific phenomena of social behavior in gaming.

## **PROBLEM STATEMENT**

Social problems among youth in Malaysia are now becoming increasingly uncontrollable. Lately, their behavior is very brave by committing various misconduct and serious crimes including committing crimes, violence, drug abuse, robbing, bullying, and others. Many ways and methods have been introduced by the government and non-government to ensure that social problems in Malaysia can be controlled (Abdul Rahman Hamid, 2015).

The youth now seem to be indifferent to doing something negative that can harm not only themselves but also others. In Malaysia, the number of illicit drug use by youth showed an increasing trend from 2012 to 2016 (IPH, 2018; National Anti-Drug Agency, 2020). There were 437 cases of substance use for youth aged 13 to 18 years and 18,986 cases for youth aged 19 to 39 years, as recorded by the National Anti-Drug Agency of Malaysia (National Anti-Drug Agency, 2020). The lack of enforcement of illicit drug use among youth has left young people stuck with social problems. Moreover, the sale of cigarettes and alcohol is easily accessible in grocery stores and supermarkets. Among Malaysian youth, it was found that young people became a smoker between 9.1% and 14.6% (Johari et al., 2020; Lim et al., 2017).

Among Malaysian youth males, smoking is the leading predictor of lifetime use of illicit

substances six times more likely than non-smokers (Rodzlan Hasani et al., 2019). Increased problems of youth in the juvenile justice system and adolescent mental health, increased aggression, and behavioral problems are closely linked to youth social problems (Doran et al., 2012). Studies on youth with social problems and caught up with drug abuse in juvenile detention centers showed that imprisoned youth males and females had a higher prevalence of social problems compared to the non-incarcerated group of adolescents, with a prevalence of up to 69% among a group of males (Ahmad & Mazlan, 2014). Another critical factor associated with a social problem in youth is family factors (Du et al., 2015; Malkus, 1995; Matejevic et al., 2014; Zamani et al., 2014). Family dynamic factors such as cohesion, adaptability, family strength, family togetherness, parental marital happiness, and parental drug and alcohol use were significantly related to youth's social problems such as illicit drug use (Malkus, 1995).

Various factors cause social problems among youth in Malaysia to be at a very worrying level. Adolescents are a pillar and hope for future generations. The need to formulate good strategies needs to be enforced by the authorities to eradicate and reduce social problems among adolescents in Malaysia.

The increased popularity of video, computer, internet, and smartphone games has sparked worry among prevention research networks about negative health and risk behaviors (Fineberg et al., 2018; Kim et al., 2016; Mentzoni et al., 2011). The previous study has revealed the potential for harmful video game use, as well as links to mental and physical health issues (Desai et al., 2010; Ferguson et al., 2011; Griffiths, 2008). Indeed, a pattern of persistent or recurrent gaming behavior that may manifest as impaired control, increased priority given to gaming, and sustained gaming despite negative consequences was recently added to the International Classification of Diseases 11th revision under disorders due to substance use and addictive behavior (Billieux et al., 2017).

When a random shooting case took place in Christchurch, New Zealand, it resulted in the deaths of 49 people (Gaura Naithani, 2019). The incident caught the attention of the whole world and some believe it stemmed from a shooter influenced by violent video games. The gunman launched a direct attack in the style of a first-person shooter, copying special scenes from the video game. First-person shooter games are very common because they focus on firearms and other weapon-based combat from a first-person perspective.

The gunman admitted in his 74-page manifesto that playing video games taught him aggression and extremism. He boasts that Fortnite has taught him how to be an assassin, while Spyro The Dragon 3 has taught him ethnonationalism. An interview session with his grandmother was conducted and his grandmother admitted that the gunman has been playing video games since he was a teenager (Gaura Naithani, 2019).

This is not the first time this incident has occurred when violent video games have been linked to mass shootings. After his family members confessed that he was fond of playing violent video games caused the shooter was influenced by imagining him doing a special scene in a video game. A policy statement states that violent video games can affect a person's aggressive mood and behavioral problems. Moreover, it can cause the player's feelings of empathy and sensitivity to aggression and violence to diminish (American Psychiatric Association, 2015).

According to the crime and security report the Malaysian External Security Advisory Council (OSAC), 2020 states Kuala Lumpur is a high-threat location for directed crime. The most common crimes including petty theft such as wallet snatching, pickpocketing, theft

from vehicles and home theft are the most common crime in Malaysia, while violent crime remains uncommon. The poor economic situation of the district can be the reason this occurs (P. Fajnzylber, D. Lederman, and N. Loayza, 2002). As a result, the number of Malaysian players is increasing every year and that could include those who play violent video games.

One of the most famous violent games in Malaysia is Player Unknown's Battleground (PUBG). PUBG is one of the famous and most played video games in Malaysia and around the world. This game is an online multiplayer battle royale developed and published by PUBG Corporation, a subsidiary of the South Korean video game company Bluehole. The game's features are inspired by the 2000 Japanese film "Battle Royale" and creatively evolved into a standalone game under the direction of Greene one of the directors of this PUBG game (Sportskeeda, 2020).

In this game, players will be taken to an island using a parachute and find weapons and equipment to kill others while avoiding being killed. To find the winner, the last player or team living in a tight and restricted area will be selected as the winner. This video game is available on digital platforms on computers, mobile devices, and gaming consoles and have reached sales of 70 million copies by 2020. Moreover, PUBG mobile has generated more than 4.3 billion US dollars on mobile devices in December 2020 (HitechGlitz, 2020).

Therefore, this report also tries to find out as well as investigate the relationship between the impact of violent video games (Media), the factor of influence on youth (Society), and youth dependency on the video game (Audience). Researchers also try to investigate how the impact of violent video games (Media), the factor that influences youth (Society), and youth dependency on the video game (Audience) influence or affect user behavior which is consumer towards youngsters in Universiti Utara Malaysia (UUM). To understand the driving forces of user behavior and the relationship of the impact of violent video games (Media), the factor that influences youth (Society) and youth dependency on a video game (Audience), it is very important to know or recognize how youth continuously playing a violent video game.

## LITERATURE REVIEW

Online games today have facilitated significant changes in human behavior and the social environment (Xanthopoulou and Papagiannidis, 2012). Video games can have a positive effect on a player's personality, such as improving social skills, mental abilities, and problem-solving abilities. Violence, restlessness, and stress can all hurt a player's personality. Players who play online games have similarities to the behaviors they do in the real world (F. Bayraktar and H. Amca, 2012). It is also can harm youth, video game addiction is positively associated with internal behavior problems of the players such as depression and conduct problems. In addition, the negative experiences that can be experienced by the player during video games may have a close relationship with certain problems of the same kind in real life

The past results found little evidence to support the belief that violent video games may interact with mental health symptoms and behavioral problems in some youths. The past issue may have been the assumption that a given type of media has a general and predictable effect on many or most consumers, the frequency of gameplay, and the types of games (Paraskeva et al., 2010). In essence, many studies have assumed and debated that playing violent video games stimulates users to behavior change. This study attempts to bridge this research gap, by systematically reviewing previous studies that have assumed

various other factors cause changes in the behavior of youth who play violent video games. The effort of this study is to identify whether playing violent video games can have a behavioral effect on youth.

## **THEORETICAL FRAMEWORK**

Media dependency theory was first proposed by Ball-Rokeach and DeFleur (1976). In the early 1970s, the theoretical tradition in the communication field was evolving from a strong media effects model to a limited effects model. While early media effects models such as the magic bullet theory emphasized universal and direct effects of mass media for disseminating propaganda messages to citizens, advances in social science research in the mid-twentieth century found individual differences to be crucial factors in theorizing the relationship between media and individuals. While weak media effects theories (uses and gratifications theory; selective influence theory) became mainstream, the advent of television brought about new theories that emphasized the strong effects of television regarding violence (cultivation theory) and public opinion (agenda-setting theory; spiral of silence theory). Ball-Rokeach was dissatisfied with the characterization of media and individuals as inherently strong or weak. Based on late nineteenth to early twentieth-century sociological theories and on the power-dependence theory proposed by Emerson (1962) Ball-Rokeach proposed the media dependency theory, which ascribes media effects to the relationship between individuals, media, and society rather than to attributes of each.

## **HYPOTHESIS OF THE STUDY**

- H1: There is a positive relationship between the impact of violent video games (Media) and user behavior.
- H2: There is a positive relationship between the factor of influence on youth (Society) and user behavior.
- H3: There is a positive relationship between youth dependency on the video game (Audience) and user behavior.

## **METHODOLOGY**

This thesis focuses on the study design of non-experimental quantitative studies, such as surveys, in which researchers often aim to connect or connect variables rather than manipulate them, as defined by (Hopkins,2000). According to (Creswell, 2003), the goal of this research study is to make the survey results more accessible to the community by observing a sample population, which provides a numerical summary of the people's patterns, attitudes, and perspectives. As stated by the American Psychological Association, surveys are commonly used for three purposes: (1) generating an attitude, a position, or a belief in certain questions;

(2) studying population characteristics of certain variables; and (3) gathering demographic information on population characteristics (age, gender, ethnicity, etc.) as stated by the American Psychological Association (Polgar and Thomas,2000). The researchers chose this method because it allows them to collect all the responses from the respondents in a reasonable amount of time and is cost-effective. Furthermore, the essence of the survey is the compilation of cross-sectional data at a single point in time.

The sampling design ensures that a significant number of elements from the analytical unit's whole population are chosen. Following (Sekaran, 2003), it is required to generalize

the entire population. The data will be analyzed using SPSS for Windows Version 26.0, which defines the existence and intensity of the linear relationship between variables. As part of the data processing methods, many analyses will be used. It is used in descriptive analysis to explain the basic features of the data from the report. This is done to rationally simplify vast quantities of data. The data collected via survey questionnaire will be transformed into mean, standard deviation, frequency, and percentage.

The term "population" refers to the whole community of individuals, activities, and things that the researcher would examine. The population in this study involves undergraduate students at Universiti Utara Malaysia, Kedah (UUM). The numbers of students were obtained from Universiti Utara Malaysia's official website. So, the expected total population of undergraduate students at UUM is 5000.

Cronbach's alpha coefficient is the most widely used measure for inter-item accuracy reliability. The Alpha from Cronbach is used to determine the safety of instruments under analysis and two scores of 0 to 1.00 is the most common type of an internal reliability coefficient. Consistent with Bougie & Sekaran (2010) clarified that a generally considered reliability coefficient of 0.60 as the average, and 0.70 and above is seen as a high level of reliability. The questionnaire items in this research were determined to range from 0.7 to 0.9, which were suitable as the minimum reference of Cronbach's Alpha minimum value of 0.50. Table 1 below shows Cronbach's Alpha from the study.

**Table 1: Cronbach's Alpha**

Variable	Number of items	Items dropped	Cronbach Alpha
-The impact of violent vid-eo games (Media)	8	-	0.707
-The factor of influence on youth (Society)	5	-	0.895
-Youth dependency on the video game (Audience)	6	-	0.748

## RESULTS AND DISCUSSION

Below is a gender composition showing that 46.7% are male with a value frequency of 166, while females are 53.2% within the frequency of 189. Next, for the age, the composition with the range from (<23 years old) shows 32.1% with the frequency of 114, and the value frequency for the age of (23-30) is 224 which means 63.0%. Moreover, the composition for age (31-40) with 3.0% with a value of frequency of 11. The last composition for age (>40 years old) shows 1.6% with the frequency being 6. Concerning the educational level shows that college and the high school recorded the same value of percentage as well as the frequency which is 4.5% and 16. However, the university stated the highest among them with a value of 319 also 89.8%. Follow-up by the graduate school shows that the value of frequency is at 4 which is 1.1%.

Otherwise, the race level shows that the Chinese group recorded the value of frequency at 65 which is 18.3%. Furthermore, the Indian group recorded the value of frequency as well as a percentage at 25 which is 7.0%. However, for other group shows a value of frequency of 6 and a percentage of 1.6%. Finally, for Malay group stated the highest among other races with the value at 259 and 72.9%.

There are local students from 14 states studying at Universiti Utara Malaysia and 1 non-local student was recorded. The state level shows that students from Negeri Sembilan

and Melaka recorded the same value of percentage as well as the frequency of 1.9% and 7. Moreover, students from Sarawak and non-locals from Indonesia recorded the same value of percentage as well as the frequency of 0.2% and 1. Followed up by students from Perlis and Sabah that recorded the same value of percentage and the frequency of 1.1% and 4 respectively. In addition, students from Terengganu recorded a value of frequency of 3 which is 0.8% while students from Pahang show a percentage of 1.4%, as well as a frequency value, is 5.

Besides, students from Kelantan show that the value of frequency is 13 and the percentage is 3.6% while students from Johor recorded the value of percentage as well as the frequency which is 5.9% and 21. In addition, students from Penang recorded the value of frequency at 20 and a percentage of 5.6%. Also, students from Kuala Lumpur show that the value of percentage as well as the frequency of 4.2% and 15, while from Selangor stated percentage at 6.4% and frequency of 23. Follow-up students from Perak recorded the value of frequency at 46 which is 12.9%. However, students from Kedah stated the highest among other states with the value at 185 and 52.1%. Table 2 shows the total of respondents.

**Table 2: The total of respondents**

Variable	Frequency	%
Gender	166	46.7
Male Female	189	53.2
Age		
<23 years old	114	32.1
23-30	224	63.0
31-40	11	3.0
>40 years old	6	1.6
Education level		
College	16	4.5
Graduate school	4	1.1
High school	16	4.5
University	319	89.8
Race		
Malay	259	72.9
Chinese	65	18.3
Indian	25	7.0
Others	6	1.6
States		
Kedah	185	52.1
Perak	46	12.9
Selangor	23	6.4
Kuala Lumpur	15	4.2
Penang	20	5.6
Johor	21	5.9
Terengganu	3	0.8
Negeri Sembilan	7	1.9



Kelantan	13	3.6
Perlis	4	1.1
Melaka	7	1.9
Pahang	5	1.4
Sabah	4	1.1
Sarawak	1	0.2
Indonesia	1	0.2

N=355

### Descriptive statistics

A pattern and broad tendencies in data collection are described by descriptive statistics. The tables show descriptive statistics for all variables that consist of (The impact of violent video games (media), The factor of influence on youth (society), and Violent Game Play Propensity (audience)). Thus, all the analysis shows the value for a mean, mean score, and standard deviation analysis.

**Table 3: Descriptive statistics on the impact of violent video games (media)**

No. Item	Mean	Standard Deviation
1. Playing violent video games can cause me to be hyperactive.	3.63	1.024
2. Playing violent video games can reduce my negative feelings such as anger and stress.	3.50	1.072
3. I find that playing violent video games can cause me to commit violent behavior in social media.	2.46	1.186
4. I find that playing violent video games will affect my personality such as anxiety, depression, aggression, and low self-esteem in real life.	2.61	1.194
5. I find that playing violent video games will increase group organization and leadership skills.	3.46	1.148
6. Playing violent video games will Increase my commitment and achievement, and higher self-esteem.	3.47	1.113
7. Playing violent video games influenced me to become a cyberbully on social media.	2.05	1.312
8. Playing violent video games with better graphic quality will give me addiction.	3.68	0.982

**N=355, Mean Score = 3.1081; Standard Deviation = 0.64848**

After analyzing all the answers received from the respondents, the statement "Playing violent video games with better graphic quality will give me addiction" recorded the highest value of the mean of 3.68 while for standard deviation is 0.982. Then, the statement "Playing violent video games can cause me to be hyperactive" shows the second highest mean of 3.63, while the standard deviation is 1.024. Moreover, the other states based on the table also show that "Playing violent video games can reduce my negative feelings such as anger and stress" recorded the value of the mean is 3.50 as well as for standard deviation is 1.072.

The next item for the statement "I find that playing violent video games can cause

me to commit violent behavior on social media” shows that the value of the mean is 2.46 with a standard deviation of 1.186. Furthermore, the statement “I find that playing violent video games will affect my personality such as anxiety, depression, aggression and low self-esteem in real life” recorded the value mean is 2.61 with a standard deviation of 1.194. In addition, the other statement shows “I find that playing a violent video game will increase group organization and leadership skills” recorded the mean value of 3.46 with a standard deviation of 1.148.

The next item for the statement “Playing violent video games will Increase my commitment and achievement, and higher self-esteem” recorded the mean value of 3.47 with a standard deviation of 1.113. The last item of the statement “Playing violent video games influenced me to become a cyberbully on social media” recorded the mean value of 2.05 with a standard deviation of 1.312. However, the mean score for this analysis as shown in table 3 is 3.1081 and the standard deviation value is 0.64848.

**Table 4: the factor of influence on youth (society)**

No. Item	Mean	Standard Deviation
1. I often play violent video games for more than 60 min 3 times a week.	2.07	1.334
2. My parents set strict rules for activities at home made me feel stressed.	1.87	1.167
3. My parents support me and play electronic games with me.	2.01	1.190
4. My parents tell me I can't play a particular video game.	2.15	1.382
5. I often hear or see violence between adults in my home	1.81	1.177
6. My friends suggest and influence me to play violent a video game with them.	3.39	1.229

**N=355, Mean Score = 3.8856; Standard Deviation = 0.78033**

Following a thorough examination of all the responses received from the respondents, the statement “My friends suggest and influence me to play a violent video game with them” shows the highest mean value of 3.39 while for standard deviation is 1.229. Then, followed up by the statement of “My parents tell me I can't play a particular video game” with a mean value of 2.15 as well as a standard deviation of 1.382. After that, the item “I often play violent video games more than 60 min 3 times a week” shows a mean value of 2.07, while the standard deviation is 1.334. Furthermore, the statement “My parents support me and play electronic games with me” has a mean value of 2.01, while the value of standard deviation is 1.190. Moreover, the statement of “My parents set strict rules for activities at home that made me feel stressed” has a mean value of 1.87 with a standard deviation of 1.167. The last statement of “I often hear or see violence between adults in my home” has the lowest mean value of 1.81, while the value of standard deviation is 1.177. Thus, for this analysis in table 4, the mean score is 3.8856, and the value for standard deviation is 0.78033.

**Table 5: Youth dependency on the video game (audience)**

No. Item	Mean	Standard Deviation
1. It is easy for me to play violent video games through online because I have access to the internet.	3.98	.862
2. It is easy for me to play violent video games anywhere because I have all the devices and gadgets such as computers and mobile phones.	4.02	.871
3. It is easy for me to play violent video games be-cause I have opportunities to participate in E-games competition.	3.60	1.062
4. It is easy for me to play a violent video game be-cause it is free on every application and software.	3.88	.915
5. It is easy for me to play violent video games be-cause I can interact with people around the world.	3.95	.926

**N=355, Mean Score = 2.2164; Standard Deviation = 0.83109**

After a comprehensive review of all the replies received from the respondents, the statement of "It is easy for me to play violent video games anywhere because I have all the devices and gadgets such as computer and mobile phone" recorded the highest mean of 4.02, while the standard deviation value is 0.871. Next, the item of "It is easy for me to play violent video games online because I have to access to the internet" shows a mean value of 3.98, and a standard deviation of 0.862. In addition, the statement "It is easy for me to play a violent video game because I can interact with people around the world" shows a mean value of 3.95, and a standard deviation of 0.926. Moreover, the item of "It is easy for me to play a violent video game because it is free on every application and software" has a mean value of 3.88 with a standard deviation of 0.915. The last statement of "It is easy for me to play a violent video game because I have opportunities to participate in E-games competition" recorded the lowest mean value of 3.60, while the standard deviation is 1.062. In meantime, the mean score in table 5 for overall items is 2.2164, while the value for standard deviation is 0.83109.

**Table 6: Correlation Analysis Results**

	The impact of vio-lent video games (Media)	The factor of influ-ence youth (Society)	Youth dependency on the video game (Audience)
User Behavior	0.515**	0.390**	0.147**

H1: The results of hypothesis testing using Pearson correlation at a significance level of 0.01, found that there was a significant moderate positive relationship between the impact of violent video games (Media) and user behavior, ( $r = .515$ ,  $p < 0.01$ ). Meanwhile, the magnitude of the relationship between the impact of violent video games (Media) and user behavior is a moderate correlation. The moderate positive relationship between the two means that students who play violent video games may or may not have an impact on their violent behavior after playing violent video games.

H2: Next, there was a significant low positive relationship between the factor of influence on youth (Society) and user behavior, ( $r = .390, p < 0.01$ ). Furthermore, the magnitude of the relationship between the factor of influence on youth (Society) and user behavior is a low correlation. The low positive relationship between the two means that the fewer youth factors are influenced by playing a violent video game, the less the effect of violent behavior is committed by youth. Thus, it can be said that society may not be one of the important factors that influence user behavior which is youth.

H3: Finally, there was a significant very low relationship between youth dependency on the video game (Audience) and user behavior, ( $r = .147, p < 0.01$ ). In addition, the magnitude of the relationship between youth dependency on the video game (Audience) and user behavior is a very low correlation. The very low positive relationship between the two means that the less youth depend on playing violent video games, the less the effect of violent behavior is committed by youth. However, it can be said that audiences which are youth are not affected to commit violent behavior after playing violent video games.

## **Results of correlation**

### **Objective 1**

#### **Relationship between the impact of violent video games (Media) and user behavior**

According to the findings of this study, there is a positive association between the impact of violent video games and user behavior. Previous studies of media violence and its impact on audiences are some of the most researched and studied topics in communications studies (Hetsroni, 2007). Despite this, the debate about whether media violence leads to aggressive behavior and violence continues, particularly in response to high-profile crimes. Video games, and other forms of media and popular culture, have long been blamed for contributing to violence. As a result, it can be challenging to interpret media effects because commenters often imply a grand consensus that obscures more contradictory and nuanced interpretations of the data. In addition, consistent with (Sparks and Sparks, 2002) Even though controversy still exists about the impact of media violence, the research results reveal a dominant and consistent pattern in favor of the notion that exposure to violent media images does increase the risk of aggressive behavior.

### **Objective 2**

#### **Relationship between the factor of influence on youth (Society) and user behavior**

Past research of this study indicates a positive relationship between the factor of influence on youth and user behavior. As reported by (Helfgott, 2015) research on the influence of media violence on aggression has consistently shown that media violence increases aggression and social anxiety, cultivates a "mean view" of the world, and negatively impacts real-world behavior. Plus, even (Helfgott, 2015; Marsh&Melville, 2014) suggested that in contrast to pushing viewers to commit crimes, media often influences how rather than why someone commits a crime (Helfgott, 2015; Marsh & Melville, 2014). As maintained by (De-Camp, 2017) based on the data, gender, family context, family relationships and support relationships, social environment, academics and activities, and substance abuse messages emerged as themes related to violent video games.

### Objective 3

#### Relationship between youth dependency on the video game (audience) and user behavior

The findings in this study show that there is a positive relationship between youth dependency on video games and user behavior. As stated by psychologist Wayne Warburton has concluded that the overwhelming majority of studies have found that exposure to violent media increases aggressive behavior in the short term and long term increases hostile perceptions and attitudes, as well as desensitizes individuals to violent content (Warburton, 2014). Even though criminologists are generally skeptical that those who commit violent crimes are driven solely by media violence, there is evidence that media is influential in shaping how some offenders engage in criminal behavior. As maintained by (Carnagey, Anderson, & Bushman, 2007) there is some evidence that exposure to violent media creates a desensitizing effect, that is, viewers become less empathetic and psychologically and emotionally numb as they watch more violent media. Lastly, the media are selected and used by the audience in response to their needs and desires. Studies have looked at how one's psychological and social circumstances affect their choice of media. Media, in this context, can serve a variety of purposes for consumers, such as gathering information, reducing boredom, seeking enjoyment, or facilitating communication (Rubin, 2002). Furthermore, consistent with (Chory and Goodboy, 2011) when a user or player is too dependent on video games where they spend a lot of time playing violent video games, is positively correlated with being more open and with being less agreeable.

### CONCLUSION

This research is to investigate the effects of user behavior among the youth. The target population for this research was a group of youths at Universiti Utara Malaysia, Kedah (UUM). Even though the suggested score was 357, the result of respondents was 355. Overall, the study focuses on three factors which are the impact of violent video games (Media), the factor of influence on youth (Society), and youth dependency on the video game (Audience). The correlation analysis shows that all factors (the impact of violent video games (Media), the factor of influence on youth (Society), and youth dependency on the video game (Audience)) have a positive relationship with user behavior. With an understanding of the user behavior, it will help to see the effects of media dependence which is violent video games on consumer behavior among youth by investigating some other important effects that can be the cause of youth behavior change and ways to control and reduce such problems in the future.

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