

## **DYING IN CYBERWORLD: VIOLENT VIDEO GAMES EXTINGUISHED CHILDREN'S DEATH CONCEPT AND ATTITUDE**

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**Abstract:** Death is often a taboo topic in society, especially among the Chinese community. Most of the violent video games spread immoral values of life and death. Hence deformed death concept and death attitude are easily moulded in children particularly without proper supervision from parents. The misconception of death concept and death attitude can manipulate primary school children's attitudes towards death which gradually might lead children to harm themselves or others. This study is aimed at identifying the relationship between violent video games and children's death concept and death attitude (Fear of death, Death avoidance, Approach Acceptance, Escape Acceptance). The differences between the level of exposure to violent video games towards children's death concept and death attitude are also carried out in this study. A total of 397 data was collected from Malaysian Chinese schoolchildren between 10 to 12 years of age by using the purposive sampling method. Instruments used in this study consist of demographic information, Death Attitude Media Violence Exposure. The study showed that a high level of exposure towards violent video games had a significant negative correlation with death concept and fear of death, whilst significantly positive correlation with escape acceptance. The result of the independent samples t-test showed that children with high exposure to violent video games had lower death concept and fear of death and a higher level of escape acceptance. Further research is needed to explore the death concept and attitude among children as technology has become an inseparable part of human beings in the 4th Industrial Revolution.

**Keywords:** Violence Video Games, Death Concept & Death Attitude

## **INTRODUCTION**

Death is a taboo topic that is rarely discussed by parents, guardians, and teachers (McGuire, McCarthy, & Modrcin, 2013) especially so among the Chinese community. They define death in a “less frightening” way by denoting that a dead person is “undergoing an extremely long sleeping process”. The main aim is to hinder children’s understanding of death and avoiding anxiety though this might lead to confusion among children if the real meaning of death is not conveyed to them (Cox, Garrett, & Graham, 2004).

Studies in the area of violent video games are continually debated. Researchers have analyzed both positive and negative impacts of violent games, even though the fact that outcomes up to this point are still inconclusive (Valadez & Ferguson, 2012). The debate on whether violent video games have a positive or negative outcome is still ongoing. This subtopic discusses related research by separating it into two integral parts which ultimately lead to a positive or negative outcome. The positive outcome indicates that indulgence in video games can produce self-reported problem-solving skills and indirectly influence academic grades. However, the negative outcome of those who played violent video games portrayed a more violent character. It also decreases the humanitarian values on oneself and others as compared to nonviolent video game players. Many past researches focused on different age groups, mainly adolescences and adults, especially older adults who are perceived to have a shorter life span when compared to children. As a result, limited researches have been carried out to study the death attitudes of children and practically very limited knowledge regarding is about death with their children through silence (Fonseca & Testoni, 2012). This approach hinders young children from equipping themselves with the correct attitudes towards death, and perhaps their attitudes towards death might be distorted by violent video games under inadequate parental or adult supervision.

A total of 96% of Malaysian males play video games (Sin, Talib, Norishah, Ishak, & Baki, 2014). Approximately 84% of Malaysians have experience in playing video games (Osman, Talib, Sanusi, Tan, & Alwi, 2012). Therefore, there is no doubt that children also play video games through

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different devices. More than 85% of video games contain violent action (Carnagey, Anderson, & Bushman, 2007). The integration between the effect of the rapid development of technology and video games that are filled with massive violent content is predicted to influence children's death concept and attitude. In Malaysia, for every 100,000 of the population, there is a suicide rate of six to eight percent per year (Armitage, Panagioti, Rahim, Rowe, & O'Connor, 2015). A consultant psychiatrist at University Malaya Medical Centre, Nor Zuraida (as cited in Povera, 2017) commented that youths are delving more into endeavored suicide as a means of escape from their troubled lives.

Death education suggests a variety of educational activities and experiences related to death and holds onto those core subjects as implications regarding attitudes and concepts toward death, procedures of death, loss, and care for dying individuals (Cui, Shen, Ma, & Zhao, 2011). The stagnation of the death education concept's progress is not comforting as death concept and death attitude are progressively influenced by improper information, as such children who play violent video games are less likely to understand the death concept and attitude.

## **Objectives**

The present study aims to:

- Examine the relationship between the level of exposure to violent video games, death concept of children and children's four attitudes towards death (fear of death, death avoidance, approach acceptance and escape acceptance).
- To examine the correlation between children's death concept and death attitude with regards to the level of exposure to violent video games (low and high).

## **METHODOLOGY**

### **Research Design**

The research design of the present study is a descriptive cross-sectional study. The purposive sampling technique which falls under a nonprobability sampling method had been implemented. Furthermore, the survey research method had been used in this study to assess Chinese upper primary students' death concepts and attitudes with exposure to violent video games.

### **Respondents**

The sample size was acquired from 384 Chinese upper primary students whose ages range from 10 to 12 years. The initial sample size was increased to 397 to accommodate the expected drop out of subjects.

### **Instruments**

#### ***Habitual Media Violence Exposure***

This scale has been used to assess the level of exposure to violent video games (15 genres). 15 genres were presented: (a) beat-em-ups, (b) shoot-em-ups, (c) first-person shooters, (d) third-person shooters, (e) tactical shooters, (f) survival horror games, (g) genre mix, (h) classic adventure, (i) action adventure (j) role-playing games, (k) general simulations, (l) military simulations, (m) sports games, (n) construction strategy, and (o) military strategy. Participants in this study were required to rate the level of violence in each genre from 1 (nonviolent) to 5 (very violent). The scoring method to assess the level of exposure to violent video games is obtained by multiplying the frequency in each genre with perceived mean violent score in each genre that was obtained from a recent pilot study of each participant. The total level of exposure to violent video games in 14 genres was summed up and then divided by 14 genres for each participant (Krahé et al., 2017).

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***Concept of Life and Death Questionnaire*** (CLDQ; Cuddy-Casey, Orvaschel, & Seller, 1997)

This instrument had been used to assess a general concept of death in four specific sub concepts, namely universality, irreversibility, non-functionality, and causality. This questionnaire consists of 12 questions which cover four categories namely Universality (Question 1 and 5), Irreversibility (Questions 3, 7, 10 and 11), Non-functionality (Question 2, 6 and 9) and Causality (Question 4, 8 and 12). The participating schoolchildren were required to choose from three statements on each question, and marks were awarded based on the chosen statement.

***Death Attitude Profile-Revised Questionnaire*** (DAP-R; Wong, Reker, & Gesser, 1994) Wong and colleagues (1994) created the initial DAP-R questionnaire, 5 multidimensional measures of attitudes towards death. A revised questionnaire that was used in this research contained 23 questions which was further divided into four categories of death attitudes which includes fear of death (Question 1, 2, 12, 14, 17 and 18), death avoidance (Question 3, 8, 10, 15 and 20), approach acceptance (Question 4, 6, 13 and 16) and escape acceptance (Question 5, 7, 9, 11, 19, 21, 22 and 23). Participants were required to submit a rating based on the 4-points Likert Scale ranging from strongly disagree (1), disagree (2), agree (3) to strongly agree (4).

## **Procedure**

Research had been conducted in schools that permitted our request for data collection. Upon approval from the authorities of the particular school, our research team approached 397 Malaysian Chinese students with ages ranging from 10 to 12 years purposively. Informed consent had been obtained from the students in which all information of students were kept confidential. The participation of students in this study was voluntary and they were given an option to withdraw in the event of being in an awkward and uncomfortable situation. After getting the consent, students were required to answer a set of printed and translated Chinese version of the questionnaire. The participants spent approximately 15 to 20 minutes to answer all.

## RESULT

### Results of Demographic Data

Table 1 shows that 45.6% (n = 181) of male children and 54.4% (n = 216) of female children took part in the survey. 31.7% (n = 126) of the children were 10 years old, 28.7% (n = 114) were 11 years old children and 39.5% (n = 157) were 12 years old.

Table 1: Percentage of Gender and Age

Age	Gender	N	Percentage
10	Male	54	13.60
	Female	72	18.10
11	Male	52	13.10
	Female	62	15.60
12	Male	75	18.90
	Female	82	20.65

Table 1 shows that 61.2% (n = 243) of these children had death experience of which involved close family members or relatives, while 38.8% (n = 154) of them had no previous experience. Wi-Fi services were available in the homes of 76.1% (n = 302) of the children in contrary to 23.9% (n = 95) of the children who did not have any Wi-Fi services.

Table 2: Percentage of Children Who Experience Death of Family Member and Wi-Fi Availability at Home

	Yes	No
Experience death of family members and relative	61.2% (n=243)	38.8% (n=154)
Availability of Wi-Fi service at home	76.1% (n=302)	23.9% (n=95)

### Result of Pearson Correlation

Table 3 shows that there was a correlation between the level of exposure to violent video games and death concept,  $r(397) = -.44$ ,  $p < .01$ , fear of death,  $r(397) = -.10$ ,  $p < .005$  and escape acceptance,  $r(397) = .34$ ,  $p < .01$ . There was no correlation between the level of exposure to violent video games and death avoidance,  $r(397) = .05$ ,  $p \geq .05$  and approach acceptance,  $r(397) = .07$ ,  $p > .05$ .

Table 3: Pearson Correlation of Death Concept, Four Death Attitude and Level of Exposure to Violent Video Game

	DC	FOD	DA	EA	AA
Exposure	-.441**	-.104*	.049	.344**	.066

Note. \*\*p=.01, \*p=.005

Note. Exposure= Level of Exposure to Violent Video Game, DC=Death Concept, FOD= Fear of Death, AD=Death Avoidance, EA=Escape Acceptance, AA= Approach Acceptance

### Results of Independent Samples t-Test

Independent samples t-test showed that the differences of high level (M = 30.55, SD = 5.29) and low level (M = 32.50, SD = 3.49) of exposure to violent video games on death concept is significant,  $t(395) = 4.36, p < .05$ . Differences of high level (M = 2.20, SD = .82) and low level of (M = 1.89, SD = .64) exposure to violent video games on escape acceptance is significant,  $t(395) = -4.19, p < .05$ . Differences of high level (M = 2.54, SD = .80) and low level of (M = 2.45, SD = .71) exposure to violent video games on approach acceptance is not significant  $t(395) = -1.16, p > .05$ . Differences of high level (M = 2.99, SD = .70) and low level of (M = 2.89, SD = .65) exposure to violent video games on death avoidance is not significant,  $t(395) = -1.48, p = .14$ . Differences of high level (M = 2.96, SD = .71) and low level of (M = 2.93, SD = .67) exposure to violent video games on fear of death is not significant,  $t(395) = -.45, p > .05$ .

Table 4: Independent Samples t-test of Death Concept, Four Death Attitude and Level of Exposure to Violent Video Game

		Mean	Df	T	P
DC	Low	32.50	1	4.36	.00
	High	30.55	395		
FOD	Low	2.93	1	-0.45	.65
	High	2.96	395		
DA	Low	2.89	1	-1.48	.14
	High	2.99	395		
EA	Low	1.89	1	-4.19	.00
	High	2.20	395		
AA	Low	2.45	1	-1.16	.25
	High	2.54	395		

Note. DC=Death Concept, FOD= Fear of Death, AD=Death Avoidance, EA=Escape Acceptance, AA= Approach Acceptance

## **DISCUSSION**

Results from the present study provide adequate evidence that there was a significant negative relationship between the level of exposure to violent video games and the death concept. Further investigations should be done to find out the causal effect of exposure level to violent video games and death concepts. This evidence opens a pathway to link cyberpsychology with life-and-death studies.

The possible link between the level of exposure to violent video games and fear of death could be experienced by children when constantly witnessing death-related scenes in violent video games. However, the virtual portrayal of their own characters' death causes them to be insensitive to physical pain in real life. Exposure to those fear-inducing experiences could increase the fearlessness of death (Gauthier et al., 2014). Even though the characters, blood, and gore are almost close to real, long-term exposure to violent video games may cause people to be desensitized to it (Engelhardt, Bartholow, Kerr, & Bushman, 2011). To make things worse, those violent scenes are encouraging proviolence attitudes and conceal the real consequences of violence (Funk, Baldacci, Pasold, & Baumgardner, 2004).

Escape acceptance is also defined as death is a welcome alternative when life is miserable and filled with pain (Dezutter et al., 2008). The results of the present preliminary study showed that there was a significant positive correlation between the level of exposure to violent video games and escape acceptance. Past research also found that 5 hours or more of daily exposure to video games was associated with a higher risk of reported sadness, suicidal ideation, and suicidal planning among youths (Messias, Castro, Saini, Usman, & Peeples, 2011).

Through video games, children have a high tendency to imitate behaviors which are portrayed by a character that afflicts harm on others apart from being verbally aggressive. Results also indicate that children with higher exposure to violent video games will have a more inaccurate death concept compared to children with lower exposure to violent video games. The



portrayal of a false concept of death does affect children's perception of death. High levels of exposure to violent video games may mislead the children. They tend to visualize themselves as the main character that will not easily lose their life even after several attacks by the enemy.

Past studies have proven that playing a first-person action-shooter game is associated with higher pain tolerance as compared to playing non-violent racing games among the male adult population. Fearlessness of death and insensitivity to physical pain are a necessary requisite for lethal self-harm. Furthermore, this study suggests that male adults who spend extended hours in action violent video games may be more capable of lethal self-harm if they experience suicide ideation. In other words, long-term exposure to violent video games increases a person's capability to enact lethal self-harm. Studies that investigate suicide cases among the children population concerning violent video games are very limited. The present study was conducted to investigate the difference in children's escape acceptance with their level of exposure to violent video games. The results indicate that children with higher exposure to violent video games are equipped with an escape attitude towards death as compared to children with lower exposure to violent video games. In cases like this, children tend to imitate risky behaviors learned through violent video games and the threshold of withstanding pain may increase due to desensitization.

## **CONCLUSION**

The present study revealed that there was a significant negative relationship between the level of exposure to violent video games and the death concept as well as fear of death. It also clearly denotes a significant positive relationship between levels of exposure to violent video games with escape acceptance in death attitude. Results in the present study further indicated that children with higher exposure to violent video games tend to have less accurate death concepts, a lower probability of fear death and higher probability in employing escape acceptance as their death attitude compared to children with lower exposure to violent video games. Results from the present study alarmed the public on the ignorance in educating children regarding death issue in a formal and informal setting. This may expose children to risky and inaccurate information of death which is portrayed in violent video games. Further action such as effective

parental supervision and implementation of death education should be taken to educate children with appropriate knowledge about death and functional attitude towards death. More research should be conducted in the future to accumulate relevant information in this field of research. There is still a lack of relevant research in this specific area.

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