

Effect of Prosocial Video Games: Do Prosocial Video Games Promote Prosocial Behavior of Players?

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Abstract: As effects of popular media are studied, effects of video games are also studied. Many studies focus on negative effects, especially of violent video games on players' aggression. It has been shown in empirical studies that video game violence does have negative effect on players based on General Aggression Model. It describes how video game violence can be learned and reflected on players' actions. Studies on prosocial video game suggest that prosocial behavior is similar to aggression. Studies on prosocial video games use the General Learning Model, which expanded from the GAM to fit into more general situations. The idea is that anything can be learned in the similar way as violence is learned. Compared to video game violence, prosocial effect of video games is a field that is shallow in theoretical background with methodologies yet to be developed. In many studies, the definitions of prosocial are not concrete. Since the definition of prosocial behavior is not clear, it is questionable the validity of the instruments for the assessment and the prosocial-ness of games used. In this study, it aims to make the definition of prosocial behavior clear to conduct a valid study on the effect of prosocial video games.

Keywords: *Video Games, Prosocial Behavior, General Learning Model*

Video games are popular among young people in different countries. According to Entertainment Software Association (ESA 2012), 49% of U.S. households own an average of 2 game consoles. As effects of popular media are studied, effects of video games are also studied. However, many of video game effect studies tend to focus on negative aspects of video games such as shooting incidents and youth crimes. Negative effects, especially studies on effects of violent video games on players' aggression are being conducted actively.

It has been shown in many empirical studies that video game violence does have negative effect on players. Many violent video game studies have adopted General Aggression Model (GAM; Anderson & Bushman 2002) as their theoretical framework. It describes how video game violence can be learned and reflected on players' actions (Figure 1). There are some criticisms on GAM for its assumption that violence is cognitively learned and for not considering nature aspect of aggression (Ferguson & Dyck 2012). However, Anderson and Bushman (2002) are aware that although GAM only focuses on the present internal state of one episode of learning, the past and the future are also important.

When studies on video game violence look at prosocial behavior, prosocial behavior and aggression are often considered to be the conflicting elements. Many studies on video game violence assume and show that violence in video games increase the aggression and decrease prosocial behaviors of players. Anderson et al. (2010), in their meta-analytic review of violent video game effects, consider prosocial behavior and empathy as part of outcome variables, together with aggressive behavior, aggressive cognition, aggressive affect, and physiological arousal. They show that video game violence decreases prosocial behavior and empathy regardless of research design, while it increases the level of other outcome variables. In many studies, aggression and prosocial behavior are treated as mutually exclusive outcomes of video game violence.

However, it is questionable the view of studies on video game violence on prosocial behavior. From the theoretical perspective, studies on prosocial video game suggest that prosocial behavior is not as different from aggression but they are rather similar. They also adopt a view that prosocial behavior can be learned from prosocial video games. Many of studies on prosocial video games use the General Learning Model as their theoretical frameworks (e.g., Gentile et al. 2009). Buckley and Anderson (2006) developed the General Aggression Model to expand the model to fit into more general situations. The idea is that anything can be learned in the similar way as violence is learned. The model indeed is effective in explaining prosocial effects of video games as well (Gentile et al., 2009). This suggests that the mechanism behind both the effect of video game violence and the effects of prosocial video games are similar.

The history of prosocial effect studies goes back to Chambers and Ascione (1987). They set up an experiment to look at the difference in the effects of prosocial and aggressive video games on donating and helping behaviors of children. Since then, a number of studies similar to this have been conducted to suggest the prosocial effects of video games (e.g., Gentile et al. 2009). However, compared to rigorously studied video game violence, prosocial effect of video games is a field that is shallow in theoretical background and their methodologies are yet to be developed.

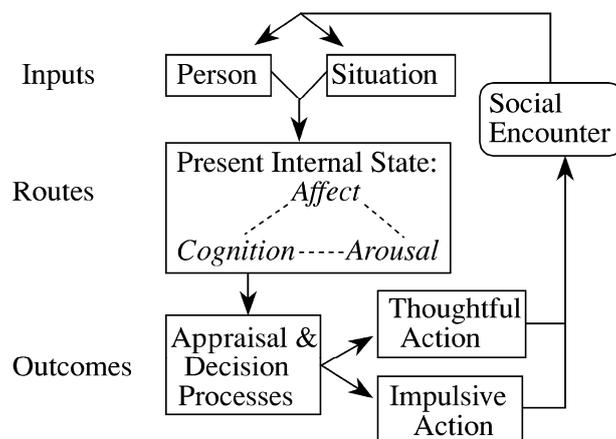


Figure 1. The General Aggression Model (Anderson & Bushman, 2002)

In many prosocial video game studies, the definitions of prosocial are not concrete. Many researchers

have misunderstanding of prosocial behavior as a unidimensional concept. It seems that the definition of prosocial behavior adopted in many studies is the assumed commonsense interpretation of the term “helping behavior,” and often the concept is not defined or defined only briefly (e.g. Gentile et al. 2009). However, if the definition of prosocial behavior is not clear, it becomes questionable the validity of the instruments for the assessment. Also it become questionable whether the study is in fact looking at prosocial video games. Therefore, it is necessary to make the definition of prosocial behavior clear to conduct a valid study on the effect of prosocial video games.

Among many, the following three that are considered to be missing in prosocial video game studies compared to video game violence studies need to be urgently addressed.

First, the definition of prosocial behavior is not clear. Many studies define prosocial behavior as helping behavior. When I played a game used in Greitemeyer and Osswald (2010), I never realized that the object of the game was to help someone. The game was about cleaning a house, but it was not clear for whom. It can be for myself. For the assessment of the effect, the experimenter drops a pencil to see if the participant picks it up for him. Although the study brings out the desirable results, it is questionable that if this task really corresponds to helping behavior. It may be cleaning behavior. Unless the definition is clear, it is difficult to generalize the findings, for people may have different interpretations.

Another problem is that there are not many studies on prosocial effects other than of games with explicit presence of prosocial behaviors. For many games used in those studies, the content is purely about prosocial behaviors, saving citizens from disasters, for instance. Many video games are not as prosocial as those games, although there are games containing some prosocial behaviors. The Legend of Zelda, a popular game from Nintendo, is not a purely prosocial game since it depicts violence. However, the hero helps village people doing chores. Like violent act in game is studied to see the effect it has on player’s aggression, the helping act may be studied to see if it can affect player’s helping behavior.

The last point to look at is the effect of different contexts of prosocial behaviors in video games. There are numerous studies on effects of different contexts of the violence depiction. Shibuya and Sakamoto (2005) listed different contexts violence may be depicted in video games; justified or unjustified, rewarded or punished, to name a few. Some studies suggest that rewarded violence in video games is more likely to promote aggressive behavior than punished violence. Regarding this, it would be reckless to say that all prosocial video games promote prosocial behaviors.

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