

Video Games Make People Violent— Well, Maybe Not *That* Game: Effects of Content and Person Abstraction on Perceptions of Violent Video Games' Effects and Support of Censorship

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This study explores whether people's perceptions of violent video games' potential for negatively affecting others and their support for censoring such games are influenced by whether people consider specific or abstract content and persons. In a 2 (content abstraction) × 3 (person abstraction) between-subjects experiment, 122 undergraduate students from two eastern U.S. universities estimated effects of either a specific violent game or violent games in general on a specific person, others on their campus, or others in the United States, then rated their support for censoring violent video games. Findings indicate that content abstraction influences perceived effects and censorship support.

Keywords: Media Censorship; Perceptions of Media Effects; Video Games; Violence and Aggression

A large and growing body of research explores violent video games' potential for negative psychosocial effects on their players (see Gentile & Anderson, 2006; Weber, Ritterfeld, & Kostygina, 2006). Despite such attention, there is a general lack of consensus regarding the presence and extent of such negative effects, with some studies indicating a link between violent video game play and aggressive thoughts, feelings, and behaviors in players (see Anderson, 2004; Anderson & Bushman, 2001) and others indicating no such link (see Ferguson, 2007; Williams & Skoric, 2005).

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In the absence of scholarly agreement regarding the effects of violent video games on players, which is understandable given the complexity of the issues and the varied perspectives and methods employed by researchers, perceptions among the public and policymakers regarding whether the medium has harmful effects may still influence policy—whether such perceptions are accurate or not. Much research has explored perceptions of media effects on others, most notably work investigating the third-person perception phenomenon (a.k.a. third-person effect). This frequently occurring bias, wherein persons believe that media have greater effects on others than on themselves (Davison, 1983), has been observed in numerous studies (see Paul, Salwen, & Dupagne, 2000). Individuals' third-person perceptions have also sometimes been found to influence their support for censorship and restriction of media messages (e.g., Cohen & Weimann, 2008; Gunther, 1995; McLeod, Eveland, & Nathanson, 1997; but cf. Rucinski & Salmon, 1990; Salwen & Driscoll, 1997), especially in the case of perceived effects of media on antisocial behaviors such as aggression (Hoffner et al., 1999). Given this evidence for a link between individuals' perceptions of negative media effects on others and their support for censorship, the importance of perceived media effects is clear.

If perceived negative effects of violent video games on users might have such implications, one important factor may be how the games and users are being considered. For example, does it matter if specific games and users are considered, as opposed to games and users in general? Some prominent U.S. politicians, such as past Attorney General John Ashcroft (Keynes, 2002), have criticized violent video games in general. Others have condemned specific games like the 2007 release *Manhunt 2*, a controversial offering that has drawn regulatory attempts in the United States and abroad (Snider, 2007). How might such varied content abstraction, ranging from specific violent games to violent games in general, affect judgments, opinion, and policy regarding violent games' effects?

To address the paucity of existing research exploring how content abstraction may influence people's perceptions of media effects on others, this study examined the effects of content abstraction on people's estimates of violent video games' potential for causing aggression in others, as well as on their support for censorship. Additionally, these effects were examined in concert with the effects of person abstraction to ascertain whether the effects of these two types of abstraction might interact.

Literature Review and Hypotheses

Person Abstraction, Social Distance, and Perceived Media Effects

Research on perceptions of negative media effects, particularly research on the third-person perception phenomenon (Davison, 1983), has tended to indicate that these perceptions vary with social distance. Social distance can generally be described as the degree of closeness or similarity perceived between oneself and the person one considers when making judgments of potential media effects (Cohen, Mutz, Price, & Gunther, 1988; Hoffner et al., 2001; McLeod et al., 1997). In many cases, this

perceived social distance is a function of greater ambiguity, or an increase in the scope of the social “border” encompassing both the person estimating effects on others and those persons for whom effects are estimated (Cohen et al., 1988). For example, Cohen et al. (1988) found that participants’ perceptions of a defamatory newspaper article’s negative effects increased with social distance when they considered effects on other students at the same school (lowest social distance), other Californians (moderate social distance), or public opinion in general (high social distance). Hoffner and colleagues (2001) found that participants perceived greater negative effects of television violence when asked to estimate negative effects for those in the United States at large than for those in their community. Duck and Mullin (1995) identified two factors that increased perceptions of negative media effects on other persons: closeness and vagueness in terms of the person considered. Vagueness was a function of whether a specific person was considered or not—in other words, the level of abstraction or specificity applied to the person considered. Given these previous findings, we predict that abstraction of persons considered will similarly influence perceptions of violent video games’ negative effects:

- H1: Participants will perceive violent video games’ effects on aggression to be highest for persons in the United States in general, lower for others on their campus, and lowest for individually identified, concrete persons.

Of course, abstraction is not the only dimension of social distance that impacts perceived negative media effects (Lambe & McLeod, 2005; Tsfaty & Cohen, 2004). Other factors can influence perceptions of negative effects on others, such as whether the estimator perceives the considered persons as belonging to the same categorical group in terms of some identity dimension (e.g., whether there is a shared cultural, subcultural, or demographic identity) (Reid & Hogg, 2005). Given that person abstraction, however, is one key factor that influences perceptions of negative media effects (Duck & Mullin, 1995), another type of abstraction—namely abstraction in content considered—may similarly influence perceptions of media effects.

Content Abstraction and Perceived Media Effects

While much research has explored the closely related issues of person abstraction and social distance, the role of content abstraction in perceived media effects has received less attention. This is unfortunate. Considering the amount of evidence suggesting that abstraction in terms of persons considered influences perceived media effects, it is important to investigate whether content abstraction has a similar influence on perceived media effects.

In considering perceptions of abstract and specific violent content, the availability heuristic provides some conceptual guidance. When people make judgments, such as those concerning frequency or likelihood of certain events, they tend to base estimates on what examples easily come to mind (Tversky & Kahneman, 1973). Estimations may be influenced by availability of confirming instances, availability of

arguments, and availability of causal scenarios, or scripts (Anderson & Lindsay, 1998). In the case of violent video games, for example, thinking about a specific violent video game instead of games in general might increase the availability of specific game elements that could cause aggression, reasons why the game could facilitate aggression, and situations in which aggression stemming from game play might occur. Based on this increased availability from the more specific consideration, a person considering a specific violent game might, consequently, estimate greater negative effects of video games than if he or she had only thought about violent video games in general.

On the other hand, considering a specific violent video game may have the reverse effect and actually reduce perceptions of negative effects if it is difficult to generate arguments for negative effects of the specific game. While recognizing that available information influences judgments, Tversky and Kahneman (1973) noted that the ease with which arguments can be generated is also an important factor in decision making. For example, research has shown that participants asked to list several reasons supporting or refuting a claim may be less persuaded by the task than those who are asked to generate only a few arguments because they conclude that supporting arguments are insufficiently abundant or unconvincing (e.g., Rothman & Schwarz, 1998; Schwarz et al., 1991; Wänke, Bless, & Biller, 1996). Even when participants are not asked to generate specific arguments supporting a claim, imagined difficulty in generating supporting arguments is enough to render the claim less convincing (Wänke, Bohner, & Jurkowitsch, 1997). If people considering a specific game find it difficult to generate reasons that the specific game considered might influence aggression, this difficulty may therefore lead to reduced perceptions of negative effects compared to those not considering a specific game.

Therefore, considering a specific game may plausibly have two different effects on perceptions of negative effects: It may increase such perceptions by making arguments for effects more accessible, or it may decrease such perceptions if arguments for negative effects are difficult to generate. Given these two discrepant possibilities, competing hypotheses are therefore proposed regarding the effects of content abstraction on perceptions of violent video games' negative effects:

- H2a: Participants' perceptions of violent video games' effects on aggression will be greater when considering a specific game compared to violent video games in general.
- H2b: Participants' perceptions of violent video games' effects on aggression will be greater when considering violent video games in general compared to a specific game.

Effects on Support for Censorship

Some studies have found that individuals' perceptions of media effects on others influence their support for censorship (e.g., Cohen & Weimann, 2008; Gunther, 1995; McLeod et al., 1997), while others have not (e.g., Rucinski & Salmon, 1990; Salwen & Driscoll, 1997). Given this inconsistency in linking perceptions of effects

to censorship support, we address the possible effects of person and content abstraction on censorship support with the following research question:

RQ1: What effects, if any, do person and content abstraction have on participants' support for censorship of violent video games?

Method

Participants

Participants included 122 undergraduate students from two Eastern U.S. universities, who were randomly assigned to one of six experimental conditions in a 2 (content abstraction: specific game or games in general) \times 3 (person abstraction: specific person, others on campus, or others in U.S.) between-subjects factorial experiment. Exactly half of the participants ($n=61$) were male and half ($n=61$) were female. The age of participants ranged from 18 to 28 ($M=20.08$; $SD=1.56$).

Materials and Measures

Each factor was manipulated via variations in instructions and item wording in six versions of a paper-and-pencil questionnaire containing all study measures.

Person abstraction manipulation

In a format adapted from Hsee and Weber (1997), abstraction of person considered was manipulated by varying the wording of the study's first dependent measure (see *Dependent Measures* section below) so that it asked participants to consider video games' potential effects on aggression for either "other students in the United States," "other students on this campus," or "the person currently sitting nearest me." For the "specific person" condition, the questionnaire item was also preceded by these instructions to prompt selection of a specific person: "Before you go on, please look around and see who sits closest to you. Do not talk to or disturb that person, but look at him or her for a second and remember how he or she looks."

Content abstraction manipulation

Participants in the "specific game" condition were asked to think of and write down "the most violent game with which you are familiar" on the questionnaire before they completed questions pertaining to the study's dependent measures. Questionnaires for participants in the "games in general" condition did not include this item.

Perceived effects on others measure

Participants' perceptions of effects on others were measured by a 9-point Likert-type questionnaire item with wording varied six different ways to match experiment conditions as described above. For example, in the "specific game, others in U.S." condition, participants were asked to rate their agreement (1 = "Strongly Disagree,"

9 = "Strongly Agree") with the statement, "The video game I listed above could cause most other students in the United States to be more aggressive and/or violent," and in the "games in general, specific person" condition, respondents rated agreement with the statement, "In general, violent video games could cause the person sitting nearest me to be more aggressive and/or violent."

Support for censorship measures

Participants' support for censorship of games was measured by a 9-point Likert-type questionnaire item asking for participants to rate their agreement (1 = "Strongly Disagree," 9 = "Strongly Agree") with the statement, "Limiting access to or censoring some violent video games is appropriate."

Other measures

Questionnaires for the "specific person" condition also asked the participants to list whether or not they knew the person considered to ensure that they had no prior knowledge of the person. To check whether participants in the "specific game" condition actually considered a violent game, the amount of perceived violence in the considered game was measured by a 9-point Likert-type item asking "How violent is this game, compared to other entertainment media (movies, books, etc.) you know well?" (1 = "Much Less Violent than Most," 5 = "About as Violent as Most," 9 = "Much More Violent than Most").

Because exposure to media content has been shown to impact perceptions of effects (Hoffner et al., 2001), familiarity with video games was a control variable measured by a 9-point Likert-type item asking participants, "Compared to most people, how familiar would you say you are with video games?" (1 = "Not at all Familiar," 5 = "About as Familiar as Most," 9 = "Very Familiar"). Items asking participants' age and gender were also included.

Procedure

The experiment was administered to groups of students in campus classrooms. Participants attended sessions in groups of 10 or more participants per session. After completing an informed consent form, participants were told to seat themselves so that the nearest person to them was not someone they knew. Participants were then given one of the six questionnaire versions in randomly assigned order. After participants completed the questionnaire, they were debriefed, thanked for their participation, and dismissed.

Results

Descriptive Statistics

Participants' mean reported familiarity with video games was 3.51 ($SD = 2.01$) on the 9-point scale. Among participants in the "specific game" condition, their mean

estimate of violence for the game listed was 6.13 on a 1-to-9 scale ($SD=1.70$), significantly higher than the midpoint of the scale (5 = "About as Violent as Most" other entertainment media), one-sample $t(52) = 5.12$, $p < .001$, Cohen's $d = .67$. Among participants in the "specific other" conditions ($n = 41$), 51.22% ($n = 21$) considered effects on a male fellow participant and 48.78% ($n = 20$) considered effects on a female fellow participant. All participants in this condition noted that they did not know the considered person.

Effects of Person and Content Abstraction on Perceived Effects on Others

H1 predicted that as abstraction of the considered person was reduced, perceived negative effects would also decrease. A between-subjects ANOVA with person abstraction and content abstraction as independent factors and perceived effects as the dependent measure indicated a significant main effect for person abstraction, $F(2, 116) = 8.54$, $p < .001$, $\eta_p^2 = .128$, with perceived effects lowest in the "specific other" condition ($M = 2.93$, $SD = 1.72$), higher in the "others on campus" condition ($M = 3.43$, $SD = 1.85$) and highest in the "others in U.S." condition ($M = 4.50$, $SD = 1.81$). A trend analysis using polynomial contrast tests showed this linear decrease in perceptions of negative effects as person abstraction decreased to be significant, $p < .001$. These results support H1.

H2a and H2b were competing hypotheses regarding whether content abstraction would increase or decrease perceived negative effects. The ANOVA showed a significant main effect for content abstraction, $F(1, 116) = 8.32$, $p = .005$, $\eta_p^2 = .067$, with perceived effects lower in the "specific game" condition ($M = 3.16$, $SD = 1.75$) than in the "games in general" condition ($M = 4.07$, $SE = 1.94$). This result supports H2b, while disconfirming H2a. The interaction effect between content and person abstraction was not significant, $F(2, 116) = .561$, $p > .05$, $\eta_p^2 = .010$, indicating that the effects of content abstraction are stable across levels of person abstraction.

Effects of Person and Content Abstraction on Support for Censorship

RQ1 asked whether person and content abstraction would influence participants' support for censorship. A between-subjects ANOVA with person abstraction and content abstraction as independent factors and support for censorship as the dependent measure indicated no significant main effect for person abstraction, $F(2, 116) = 1.15$, $p > .05$, $\eta_p^2 = .019$, but showed a significant main effect for content abstraction, $F(1, 116) = 6.31$, $p = .013$, $\eta_p^2 = .052$, with support for censorship lower in the "specific game" condition ($M = 5.02$, $SD = 2.73$) than in the "games in general" condition ($M = 6.15$, $SD = 2.13$). The interaction effect between content and person abstraction was not significant, $F(2, 116) = .131$, $p > .05$, $\eta_p^2 = .002$, indicating that the effects of content abstraction are stable across levels of person abstraction.

Effects after Controlling for Game Familiarity

When the two ANOVA tests were repeated as ANCOVA tests with the familiarity variable added as a covariate, the covariate was significant as a predictor of both perceived negative effects, $F(1, 115) = 15.30$, $p < .001$, $\eta_p^2 = .12$ (negative beta), and support for censorship, $F(1, 115) = 12.24$, $p = .001$, $\eta_p^2 = .096$ (negative beta), such that participants who were more familiar with video games tended to report lower perceptions of negative effects and less support for censorship. However, addition of this covariate in the ANCOVA did not alter the significance of the independent factors' relationships to either dependent variable relative to the ANOVA results.

Discussion

It is valuable to understand what factors influence the public's perceptions about the effects of violent video games, as well as subsequent policy support. This study does not examine actual video game effects, but shows that how people consider these effects can influence their perceptions and opinions. Although person abstraction and related concepts have been previously recognized as factors influencing perceptions of negative media effects, this study contributes to the literature by calling attention to the similarly important role of content abstraction in perceptions of negative media effects and subsequent support for censorship.

Our findings pertaining to the effects of person abstraction on perceived negative media effects are consistent with previous findings indicating that abstraction (i.e., vagueness) is a component of the social distance construct that influences people's perceptions of negative media effects on others (e.g., Cohen et al., 1988; Hoffner et al., 2001; McLeod et al., 1997). However, we did not find person abstraction to have a significant impact on support for censorship. This may be due to genuinely limited effects of person abstraction, or it may be due to flaws in our operationalization of person abstraction. It is difficult to unpack person abstraction from other social distance dimensions. In our manipulation of person abstraction, abstraction may have been confounded with corresponding variation in perceived similarity, social proximity, or other social distance elements. Participants may have also evaluated different group sizes across person abstraction conditions; there are more people in the "others in U.S." condition than the "others on campus" condition, which could have influenced estimates of how many people might be affected. This lack of clarity regarding person abstraction's unique role in our observed effects is a limitation of the study, and further research should work to isolate person abstraction from other social distance and group size elements to more clearly isolate the role of abstraction in social distance. In addition, because this study balanced the number of male and female participants, but did not control the gender of the persons they considered generally (e.g., "other male video game players in the United States"), further study should explore whether gender of persons considered at all levels of abstraction influences perceptions of effects. We concur with Harris, Middleton, and Joiner (2000) and their call to "unpack what it is about social

distance that makes the difference” and “clarify the conditions under which such targets can and cannot be considered abstract” (p. 250).

Much more novel and provocative are this study’s findings regarding the significant role of content abstraction in perceptions of negative media effects. We found that consideration of a specific violent video game, as opposed to violent video games in general, leads to lower perceived media effects on others and diminished support for censorship. These results suggest that content abstraction should receive more attention as a factor influencing perceptions of media effects. Although theoretical guidance related to the availability heuristic suggested that content abstraction might decrease or increase perceptions of media effects (H2a & H2b), our findings indicate that considering a specific violent video game can reduce perceptions of negative media effects and support for censorship compared to considering violent video games in general. One might present the possible alternative explanation that participants were less likely to condemn a specific game because they were defensive about that game, but given that familiarity as a control variable did not influence the effects of the abstraction variables, this explanation seems unlikely. Another alternative explanation for the content abstraction might be that considering only one specific game leads to consideration of less overall video game play exposure (i.e., less total play time) compared to considering games in general, but content abstraction’s observed effects on support for censorship suggests that there is more going on in the effects of content abstraction than just a manipulation of perceived game exposure.

Also of interest, if not directly pertinent to the effects of abstraction, is the finding that the video game familiarity covariate was negatively associated with both perceptions of video games’ negative effects and support for censorship. Even though the familiarity covariate did not alter the effects of abstraction on either outcome variable, the covariate’s effects suggest that, as with other media (Hoffner et al., 2001), those who play video games are less likely to perceive them as having negative effects and that this effect also extends to policy support. Further research should explore what processes cause these tendencies among video game players and whether they may lead to other outcomes, such as making players particularly susceptible to problematic use or other negative effects.

This study suggests that even though considering a specific game might have increased the availability of thoughts regarding how a specific violent game might influence aggression and violence (Tversky & Kahneman, 1973), considering a specific game may also have actually made it difficult for participants to generate a satisfactory rationale for that game having such harmful effects (e.g., Rothman & Schwarz, 1998; Schwarz et al., 1991; Wänke et al., 1996; Wänke et al., 1997). Using a specific violent video game to estimate violent video games’ negative effects on others did not provide participants with a bounty of reasons why such games are dangerous—rather, it appears to have made them less confident in concluding that violent video games cause aggression and that they should be censored. Further research should examine whether increasing content specificity may have the same effects in other contexts. The reverse may be true if specific content easily facilitates

a generation of arguments indicating negative effects and need for censorship. In any case, it appears that content abstraction is important as an influence on perceptions of media effects, and therefore merits further study.

A key limitation of this study is that, as is the case with all experiments, the effects observed here might differ with a different participant group. For example, these participants did not report a particularly high mean familiarity with video games. We consider this appropriate because our study is primarily concerned with perceptions of people in general, not just the perceptions of video game players, given that policy is influenced by publics and individuals beyond the video game-playing population. However, results might be different with another sample of participants, such as a group with more or fewer video game players, a group more varied in age, or a group with more varied educational backgrounds. Further research should examine such participant groups to see if the effects we observed are consistent. Additionally, our research looks at negative effects very generally, asking about perceptions of aggression and violence together. Future research should isolate these and other perceived negative effects to see if results differ from their general investigation here.

Meanwhile, this study's findings, particularly with regard to the effects of content abstraction, introduce interesting questions that may inform the very public debate over video game policy. Discussion and coverage of the issue is frequently accompanied by violent video game imagery and photos. One might think that these materials would increase opinions that video games have negative effects, but our findings suggest that this may not be so. Consider one example: Speaking for a panel overturning an Indianapolis ordinance restricting children's access to violent games in a landmark video game regulation case (*American Amusement Machine Association v. Kendrick*, 2001), Judge Richard Posner noted that the specific game footage provided by the city was far from realistic enough to support claims of harm he called "at best wildly speculative" (p. 8). Considering this study's findings, the city's legal representative might have done better to leave the footage at the office.

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