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#### ABSTRACT

This study investigated the effects of reading extremely violent versus nonviolent comic books on 249 introductory psychology students' interpretations of overt and relational provocation situations. After reading their assigned comic books, participants read hypothetical stories in which an overt or relational aggression occurred, but the intent of the provocateur was ambiguous. After each story, participants were asked a series of questions about the provocateur's intent. Responses were coded in terms of the amount of negative and violent content. Trait hostility was significantly related to hostile responding. Regardless of the type of aggression, participants reading extremely violent comic books responded more negatively than participants reading nonviolent comic books. Males responded more negatively to the overt scenarios whereas females responded more negatively to the relational scenarios. These findings indicate social information processing of ambiguous material appears to be affected by both personality based variables, such as gender and trait hostility, and environmental stimuli, such as violent media. (Contains 15 references.) (Author/JDM)



"I Felt it Tear Flesh": Violent Comics and Social Cognition

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Poster session presented at the annual convention of the American Psychological Association (August, 2001), San Francisco, CA.

## Abstract

This study investigated the effects of reading extremely-violent versus non-violent comic books on 249 introductory psychology students' interpretations of overt and relational provocation situations. After reading their assigned comic books, participants read hypothetical stories in which an overt or relational aggression occurred, but the intent of the provocateur was ambiguous. After each story, participants were asked a series of questions about the provocateur's intent. Responses were coded in terms of amount of negative and violent content. Trait hostility was significantly related to hostile responding. Regardless of the type of aggression, participants reading extremely-violent comic books responded more negatively than participants reading non-violent comic books. Males responded more negatively to the overt scenarios whereas females responded more negatively to the relational scenarios. These findings indicate social information processing of ambiguous material appears to be affected by both personality-based variables, such as gender and trait hostility, and environmental stimuli, such as violent media.



#### Introduction

Although the impact of media violence has been under-reported by news services (Bushman & Anderson, 2001), research has consistently found that exposure to violent media appears to increase aggressive behavior, thoughts and feelings in children, adolescents, and young adults (Anderson, 1997, Berkowitz, 1984, Cesarone, 1998). The vast majority of this research has focused on portrayals of violence in television, movies, and, more recently, video games. However, an understudied source of violent content to which children and adolescents are exposed comes from comic books. In the 1950's, concern that violence in comic books might increase aggression in children led to the development of a Comics Code Authority, a selfcensoring agency for comic book content developed and enforced by the producers of comic books. However, current top-selling comic books are laden with aggressive acts, with many of these comic books displaying graphic gore and sexual themes. Despite the high level of aggression in comic books today, little recent research has assessed the impact of violence in comics on aggressive behavior and thoughts. The research that has been conducted, however, suggests that exposure to violent themes in comic books may have a negative impact on individuals' social information-processing. For instance, violent comic books have been shown to influence both the relational and overt forms of a hostile attributional bias [HAB, (Kirsh & Olczak 2000a; Kirsh & Olczak, 2000b)].

Individuals with a HAB infer hostile intent to the actions of another, even though the intent of that individual is unclear. Overt HAB involves attributing hostile intent to ambiguous situations involving overt aggression (such as pushing and tripping). In contrast, a relational HAB involves attributing hostile intent to ambiguous social situations involving social exclusion



(e.g., not inviting someone to a party) or social manipulation (e.g., spreading rumors, threatening not to be a friend). Overt and relational forms of aggression represent different types of aggression (Crick & Grotpeter, 1995) and thus have potentially different antecedents and consequences. For instance, whereas boys are more likely than girls to engage in acts of overt aggression (Parke & Slaby, 1983) relational aggression appears to be more characteristic of girls than boys (Crick & Grotpeter, 1995; McNeilly-Choque, Hart, Robinson, Nelson, & Olsen, 1996). Previous research suggests that violent comic books differentially influence judgments of overt and relational HAB (Kirsh & Olczak 2000a; Kirsh & Olczak, 2000b). Whereas, violent comic books appear to similarly affect judgments of a relational HAB for both men and women, violent comic books appear to have a negative impact on judgments of an overt HAB for males, but not females. The fact that violent comic books appear to affect males and females differently could reflect the fact that judgments of a HAB are differentially affected by violent media or these differences may simply reflect sampling differences between studies. To date, no study has assessed the influence of violent comic books on both forms of a HAB simultaneously. Thus, the purpose of the present research is to assess the impact of simultaneous influence of violent comic books on both an overt and a relational HAB.

#### Method

The participants were 249 introductory psychology students (67% female) at a mid-sized college in western New York State. To help reduce the demand characteristics of the study (i.e., linking comic books to responses for the ambiguous provocation situations), participants were told that the researchers were developing measures for two <u>separate</u> studies on children and that we need their input to help develop appropriate measures. Specifically, participants were told that



one of the studies deals with children's perceptions of comic books and that the other study assesses children's perceptions of things that happen to them at home and at school. Participants read either two extremely-violent comic books or one non-violent comic book (conditions were equated for reading time). The extremely-violent comic books shown to participants were Cremator, Curse of the Spawn, Dark Realm, Evil Ernie, Homicide, Purgatory, and Undertaker. The non-violent comic books comics shown to participants were Archie, Cherry Blossom, Dexter's Laboratory, Pocohontas, Rugrats, and Sabrina. Participants rated the violence (Aggression), humor (Humor), interest level (Interest), and overall likeability (Like) of their assigned comic book. All questions involved 7 point Likert-type scales. After reading the comic books, participants, read six hypothetical stories in which a child caused either a relationally aggressive or overtly aggressive event to occur to another child, but the intent of the provocateur was ambiguous. Three overt and three relational stories were used. After each story, participants were asked a series of questions about the provocateur's intent. Responses were coded in terms of amount of negative and violent content. Data from like stories were collapsed to form Overt and Relational variables. In addition, participants' trait tendency to respond with hostility and anger was measured several weeks prior to the experimental condition using the Buss-Durkee Hostility Scale (Buss & Durkee, 1957).

## Results

In order to test the contention that violent comic books influence the processing of social information, a 2 (Comic Book) X 2 (Gender) multivariate analysis of covariance was conducted, with Trait Hostility, Like, Humor, and Interest as the covariates. Results indicated a significant multivariate main effect for Comic Book,  $\underline{F}(6,236) = 3.86$ ,  $\underline{p} < .001$ ; Gender,  $\underline{F}(6,236) = 9.44$ ,  $\underline{p} < .001$ 



.001; and for the covariate, Trait Hostility,  $\underline{F}(6,236) = 2.66$ ,  $\underline{p} < .02$ . Results suggest that individuals high in trait hostility gave more negative responses overall than individuals low in trait hostility. The multivariate Comic Book X Gender interaction effect approached significance,  $\underline{F}(6,236) = 2.01$ ,  $\underline{p} < .07$ . Follow-up univariate analyses of covariance (ANCOVAs) were then conducted for each composite variable.

For Overt Intent, the univariate main effects for Comic Book, F(1,236) = 8.95, p < .004 and Gender, F(1,236) = 13.51, p < .001 were both significant. Results indicated that participants reading the extremely-violent comic books ascribed more hostile intent to the provocateur than participants reading the non-violent comic books. In addition, males ascribed more hostile intent than females. The Comic Book X Gender interaction effect was not significant. For Relational Intent, the univariate main effects for Comic Book,  $\underline{F}(1,236) = 5.24$ ,  $\underline{p} < .03$  and Gender,  $\underline{F}(1,236) = 6.69, \underline{p} < .01$  were both significant. Similar to the Overt Intent analyses, results indicated that participants reading the extremely-violent comic books ascribed more hostile intent to the provocateur than participants reading the non-violent comic books. In contrast to the Overt Intent analyses, however, females ascribed more hostile intent than males. In addition, the Comic Book X Gender interaction effect was significant, F(1,236) = 4.16, p < .05. Pair wise comparisons indicated that females reading the extremely-violent comic books ascribed more hostile intent than females reading the non-violent comic books and males reading either type of comic book. However, males reading the extremely-violent comic books did not differ from males reading the non-violent comic books. See Table 1 for estimated means and standard errors. Finally, results suggest that individuals high in trait hostility gave more negative responses overall than individuals low in trait hostility



#### Discussion

The results of the present study are consistent with earlier work finding relationships between exposure to violent media and social cognition (Anderson & Dill, 2000, Bushman & Geen, 1990). As predicted, exposure to violent comic books influenced the perception of both overtly and relationally ambiguous provocation situations. Participants expressed more hostile intent after reading the extremely-violent comic books as compared to the non-violent comic books. Regardless if the dependent variable was overt or relational aggression, extremely-violent comic books depicting only overt aggression, influenced both types of responding. These data support Bushman's (1998) contention that an active aggressive network influences social information processing, even if the source of the activation is different than the type of aggressive responding displayed. In addition, the results of the current study suggest that comic books influence social cognitive processing information in a manner similar to that of other forms of violent media, such as video games (Anderson & Dill, 2000), movies, and television (Geen, 1998).

Significant gender differences in the processing of overt and relational ambiguous provocation situations were evident. For the ambiguous stories involving overt aggression, the responses of males were significantly more violent than the responses of females. In contrast, for the ambiguous stories involving relational aggression, the responses of females were significantly more aggressive than the responses of males. These findings are consistent with research on aggressive behavior that indicates that whereas overt aggression is characteristic of males, relational aggression appears to be more characteristic of females (Crick & Grotpeter, 1995; McNeilly-Choque, Hart, Robinson, Nelson, & Olsen, 1996). Furthermore, these current results



suggest that aggressive networks of both males and females can be activated by violent media. However, these findings suggest that the activated aggressive networks of males may function differently than the activated aggressive networks of females. The aggressive networks of females appear to be more attuned to relational aggression, whereas the aggressive networks of males appear to be more attuned to instrumental aggression. Given that participants responded to both overt and relational scenarios at the same time, why is it that gender was related to the amount of negative responding?

Huesmann (1988) contends that in response to experiences with aggressive behavior, including the observation of aggressive acts performed by others, individuals develop aggressive scripts. These scripts contain information regarding the participants and events surrounding the aggressive act, such as the nature of the provocation and subsequent response. A review of the literature suggests that males and females may have different aggressive scripts, with the aggressive scripts of males focusing on overt aggression and the aggressive scripts of females focusing on relational aggression (Geen, 1998). Similarly, the data from the present study suggest that short-term exposure to comic books may trigger already developed aggressive scripts; overt scripts for males and relational scripts for females. When assessing the impact of violent media on social information-processing, researchers need to more carefully consider the gender and personality of the participants, as well as the nature of the dependent variable (e.g., perception of overt vs. relational aggression).



#### References

Anderson, C. A. (1997). Effects of violent movies and trait hostility on hostile feelings and aggressive thoughts. Aggressive Behavior, 23, 161-178.

Anderson, C. A., & Dill., K. E. (2000). Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. <u>Journal of Personality and Social Psychology</u>, 78(4), 772-790.

Berkowitz, L. (1984). Some effects of thoughts on anti-and prosocial influences of media events: A cognitive neoassociationistic analysis. Psychological Bulletin, 95, 410-427.

Bushman, B. J. (1998). Priming effects of media violence on the accessibility of aggressive constructs in memory. Personality and Social Psychology Bulletin, 24(5), 537-545.

Bushman, B. J., & Anderson, C. A. (2001). Media violence and the american public: Scientific facts versus misinformation. <u>American Psychologist</u>, 56, 477-489.

Bushman, B. J., & Geen, R. G. (1990). Role of cognitive-emotional mediators and individual differences in the effects of media violence on aggression. <u>Journal of Personality and Social Psychology</u>, 58(1), 156-163.

Buss, A. H., & Durkee, A. (1957). An inventory for assessing different kinds of hostility.

<u>Journal of Consulting Psychology</u>, 21(4), 343-349.

Cesarone, B. (1998). Video games: Research, Ratings, Recommendations. <u>Eric Digest</u> (EDO-PS-98-11).

Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. Child Development, 66, 710-722.



Geen, R. G. (1998). Aggression and antisocial behavior. In Dr. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), The Handbook of Social Psychology. (4<sup>th</sup> Ed). Vol 2., pp. 317-356. Boston: McGraw Hill.

Huesmann, L. R. (1988). An information processing model for the development of aggression. Aggressive Behavior, 14, 13-24.

Kirsh, S. J., & Olczak, P.V., (2000a). Violent comic books and perceptions of ambiguous provocation situations. Media Psychology, 2, 47-62.

Kirsh, S. J., & Olczak, P.V., (2000b, August). Violent comic influence relational aggression. Poster session presented at the annual convention of the American Psychological Association, Washington, D.C..

McNeilly,-Choque, M., Hart, C. H., Robinson, C. C., Nelson, L. J., & Olsen, S. F. (1996). Physical and relational aggression on the playground: Correspondence among different informants. Journal of Research on Childhood Education, 11, 47-67.

Parke, R. D., & Slaby, R. G. (1983). The development of aggression. In P. H. Mussen (Series Ed.) and M. Hetherington (Vol. Ed.), <u>Handbook of child psychology: Vol. 4.</u>

<u>Socialization, personality, and social development</u> (4<sup>th</sup> ed., pp. 547-642). New York: Wiley.



Table 1

<u>Estimated Means and Standard Errors (in Parentheses) of Overt and Relational Intent, as a Function of Comic Book Type and Gender</u>

	Composite Variables	
	<u>Intent</u>	
Comic Book Type	<u>Overt</u>	<u>Relational</u>
Non-Violent	2.6 (.21)	2.4 (.16)
Extremely-Violent	3.5 (.21)	2.9 (.16)
Gender		
Female	2.5 (.16)	2.9 (.12)
Male	3.6 (.22)	2.4 (.17)
Comic Book X Gender		-
non-violent comic books female	2.1 (.25)	2.4 (.19)
non-violent comic books male	3.0 (.31)	2.3 (.24)
extremely-violent comic books female	2.9 (.25)	3.4 (.19)
extremely-violent comic books male	4.1 (.33)	2.4 (.25)





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