

Effect of Adult Disapproval of Cartoon Violence on Children's Aggressive Play

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Studies show that children's exposure to violent media increases aggression (Browne & Hamilton-Giachritsis, 2005). Alternatively, in some cases parental involvement suppresses aggression (Singh et al., 2006). We hypothesized that children's behavior would be less aggressive after viewing a violent cartoon with an aggression-disapproving adult (ADA) than with a silent adult (control condition). Second and third graders (6 boys, 10 girls) were randomly assigned to either the ADA or control condition to watch a violent cartoon clip. Afterwards, children played with a variety of toys while observers recorded their behaviors using a 30-second time-sampling method. Children in the ADA condition showed significantly less toy and verbal aggression than those in the control. The parental role in children's media viewing is discussed.

In the classic Bobo doll study, Bandura, Ross, and Ross (1961) demonstrated that aggressive behavior modeled by authoritative adults would elicit this same behavior from the observing children. From this study, a virtual cottage industry of research using variations on the theme of aggressive modeling emerged. For example, in a study conducted by O'Carroll, O'Neal, McDonald, and Hori (1977), children who observed a child confederate play with toys aggressively were more likely to act aggressively later in the presence of that child than in the presence of a different child. This suggests that the actual child modeling aggression contains cues for aggression over and above the modeled aggressive behavior. In some way, the presence of this aggressive model affects the amount of later aggression.

Although aggressive modeling has been the primary focus of the Bandura et al. study (1961), the often-ignored non-aggressive models in that study are central to understanding how to reduce violence. Children who observed non-aggressive models spent significantly more time sitting passively than those exposed to the aggressive models. Also noteworthy is research by Singh et al. (2006) examining autistic children and parenting style. Mothers of autistic children were given training on mindful parenting, which consisted of remaining calm and dealing with the actions and attitudes of the

child in a nonjudgmental way, as well as considering alternative options for situational responses. This specialized form of intervention, implemented across an extended part of the child's day, was found to have a direct effect on reducing the children's noncompliant behavior. Most relevant to the present study, mindful parenting styles exhibited by the authoritative figures reduced prior aggressive behavior.

However, more studies note the impact parenting styles have on children's increased aggressive behavior. For example, Carroll (1977) reported that children who experienced a physically punitive environment were more likely to display the same type of physically punitive behaviors with others. Similarly, Comstock (2005), who monitored children of abusive parents, found that a major contributing factor to whether these children became abusive themselves as adults was their direct exposure to physical violence in the home. Further, Williams, Conger, and Blozis (2007) focused on adolescents and found that the amount of parental hostility predicted interpersonal aggression among siblings.

Other studies examined whether television would provide the same effect as a live model. In particular, Boyatzis, Matillo, and Nesbitt (1995) found that chil-

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dren exposed to the Power Rangers television show committed more aggressive acts per interval than children in the control group. Browne and Hamilton-Giachritsis (2005) thoroughly investigated 108 studies linking aggression and media on children and adults. Children who were exposed to violent scenes in video games, television shows, and movies, experienced aggressive and violent behavior. Browne and Hamilton-Giachritsis concluded that violent or aggressive media produced short-term effects in individuals' arousal, emotions, and thoughts, as well as their relative frequency of both aggressive and fearful behaviors. In short, numerous studies evaluating the effects of an aggressive model on the subsequent aggressive behavior of the observing child provide consistent evidence that exposure to violence, whether live or electronic media, increases violent behavior (Anderson et al., 2003; Bushman & Anderson, 2001; Huesmann, Moise-Titus, Podolski, & Eron, 2003).

Despite these established findings, television continues to provide aggressive programming and parents continue to allow their children to view these programs. Although parents are often urged to sit down and watch television with their children in order to explain what is viewed, exactly how parents help to counteract the impact of media violence and whether their efforts are effective is unclear. Who has a greater impact as a model? Will the child be more influenced by the aggressive action figure who obliterates the bad guy, or the parent who explains to the child that violence is not the best solution? If a child witnesses aggressive television, but an authority figure models disapproval of violence, how then would the child respond?

The present study sought to determine how the modeling of aggression disapproval by an adult watching a violent cartoon with a child, influences the child's later behavior during separate play activity. To this end, we examined four types of aggressive behavior as well as the incidence of neutral and prosocial play. These four aggressive behaviors included verbal aggression, physical aggression, toy aggression, and aggression toward toy. It was hypothesized that children who viewed the violent cartoon in the presence of an actively aggression-disapproving adult (ADA) would show less of all four types of aggressive behaviors in subsequent play than those who viewed the same cartoon with a silent adult. Additionally, it was hypothesized that children in the ADA condition would exhibit more prosocial play than those with the silent adult.

Method

Participants

There were 16 participants from the second and third grades (6 boys, 10 girls), attending a small private

elementary school in northern California. Although all children whose parents signed parental consent forms were selected as participants, the children signaled their additional consent when asked if they would like to play with toys in another classroom.

Materials

The video clip consisted of the last 5 minutes of the *Justice League of America* episode entitled "For the Man Who Has Everything." The clip was downloaded onto a laptop for portability when connected to the classroom television for viewing. The toys with which the children were allowed to play in the observation room included several stuffed animals, a set of plastic dinosaurs, several dolls, and a set of Justice League of America action figures: Superman, Batman, Wonder Woman, Bizarro, and Amazo. A pre-recorded track providing audio cues for ten 30-second time increments was downloaded onto three iPods for the time-sampling observation. Observers who were blind to the child's condition used an aggression behavior data recording sheet to mark the occurrence of six categories of behavior. The following operational definitions were used: a) verbal aggression—name calling or yelling at another person; b) physical aggression—touching another person with negative intent to hurt or humiliate; c) toy aggression—using a toy with negative intent toward another person or toy; d) aggression toward toy—inflicting violence or harm on the toy; e) prosocial play—playing with or using toys in a positive or helpful way; and, f) neutral play—playing in a way that is neither aggressive nor prosocial (see Appendix A).

Procedure

The children were randomly assigned to one of two conditions. The control group was exposed to a 5-minute video clip of the *Justice League* cartoon with a silent female adult present. This adult merely sat with the children and watched the cartoon without comment or judgment. In the experimental group, children were exposed to the identical 5-minute clip of the *Justice League* cartoon in the presence of the same female adult. However, this time, the female confederate made the following aggression-disapproving remarks after each aggressive act in the cartoon, while watching with the children: "Oh, how terrible!", "Well, that's not very nice!", "They shouldn't do that!", or "He shouldn't hit him like that." Immediately following the video clip, the children were escorted to a nearby classroom for observation while they played with toys. The toys in the room included both neutral toys, such as dolls, plastic dinosaurs, a soccer ball, a football, and stuffed animals unrelated to the cartoon, as well as toys explicitly related to the recently viewed cartoon, like plastic figures of

Bizarro, Superman, Wonderwoman, and Batman. In the classroom, four male observers recorded the occurrence of four types of aggressive behavior, as well as neutral and prosocial play, using a 30-second time sampling format.

Before live observation began, observers trained on a videotape in the laboratory using the aggression behavior data sheet until they attained a minimum of .75 inter-observer reliability. Further, inter-observer reliability of .80 was established on observations of a selected sample of children before actual data collection occurred. Although the children were in the playroom for 10 minutes, each child was only observed for 5 minutes. The order that the children entered the playroom determined which observer was assigned to observe their play. The observers were blind to which condition the children were in when in the playroom. As the children entered the playroom, the observers knew which child to observe through a previously established order (e.g., the first, fifth, ninth, and thirteenth child to enter the classroom was assigned to observer one).

Results

Initial Analyses

Descriptive statistics. Table 1 contains means, standard deviations, and comparisons among all study variables. In general, there were significantly fewer instances of aggression in all categories for the experimental group.

Primary Analyses

The first hypothesis, that children who viewed the violent cartoon in the presence of an actively aggression-disapproving adult (ADA) would show less of all four

types of aggressive behaviors in subsequent play than those who viewed the same cartoon with a silent adult, was examined by using an independent samples *t*-test. An analysis of the data revealed significant differences between the ADA and control conditions in two categories. Specifically, the children in the ADA condition ($M = .25$, $SD = .46$) demonstrated significantly fewer instances of verbal aggression than those in the control condition ($M = 1.38$, $SD = 1.30$), $t(14) = -2.30$, $p = .04$. A measure of effect size also demonstrated a relationship between adult disapproval of aggression and later incidence of verbal aggression, Cohen's $d = -1.21$. Additionally, children showed less toy aggression in the ADA condition ($M = .13$, $SD = .35$), than in the control condition ($M = 1.25$, $SD = 1.04$), $t(14) = 2.01$, $p < .01$. A measure of effect size also demonstrated a relationship between adult disapproval of aggression and later incidence of toy aggression, Cohen's $d = -1.35$. Although there were no significant differences found for the other two aggression categories, children showed less physical aggression in the ADA condition ($M = .25$, $SD = .46$) compared with the control ($M = .75$, $SD = 1.17$), $t(14) = 1.13$, $p = .29$.

The second hypothesis was that children in the ADA condition would exhibit more prosocial play than those with the silent adult. When analyzed with an independent samples *t*-test, our second hypothesis was not supported. There was no difference in prosocial play between children in the ADA ($M = 1.13$, $SD = .84$) and control conditions ($M = 2.25$, $SD = 2.77$), $t(14) = 1.10$, $p = .30$.

Discussion

As predicted, less aggressive behavior was exhibited in the ADA condition than in the control condition.

TABLE 1

Means and Standard Deviations of Aggressive, Neutral, and Prosocial Incidents per 5 Minute Interval Between ADA and Control Groups

Behavior	ADA ^a		Control ^a	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Verbal*	.25	.46	1.38	1.30
Physical	.25	.46	.75	1.17
Toy*	.13	.35	1.25	1.04
Towards Toy	.13	.35	.25	.71
Neutral*	9.50	1.07	7.88	.99
Prosocial	1.13	.84	2.25	2.77

^a $n = 8$ for each condition.

* $p < .05$

In particular, verbal aggression and toy aggression occurred significantly less often. These findings are consistent with previous research by Boyatzis, Matillo, and Nesbitt (1995) showing the effects of authoritative modeling of television violence on children's aggression. By introducing an aggression-disapproving adult model into our study, we sought to create a similar condition to the home environment. In this way, our adult model would be comparable to the parent or guardian who watches an aggressive television program along with the child and remarks negatively about aggressive actions.

Consequently, if we were to generalize from these findings, even children who watch an aggressive television program with an adult present will later display more aggressive play than those children who watched the same program with an adult who actively disapproved of the aggressive actions on the screen. In our study, adult attempts to counteract the aggressive cartoon seemed successful because there was less subsequent aggression by these children and verbal agreement with the adult's disapproving statements. When the adult made aggression disapproving comments, several children audibly agreed, making such statements as "Yeah, he shouldn't do that, huh?", "Oh wow, that IS terrible!", and "He's not nice, is he?" The children's agreement could be seen as evidence that the children were aware that the adult did not approve of the cartoon violence and were influenced by the adult. In contrast, the children did not say anything while watching the cartoon violence with a silent adult.

Although the children in the ADA condition may have displayed less aggressive behavior in the short-term, we did not measure long-term effects. They may

have been affected by the aggressive programming later, and especially if they experience repeated viewing of violent media, they may become desensitized to future violence. A longitudinal study by Huesmann et al. (2003) shows this effect. They found that exposure to media violence in childhood is highly correlated with young adult aggressive behavior in men and women. This behavior persists even when influences such as socioeconomic status, intellectual ability, and several parenting factors are controlled.

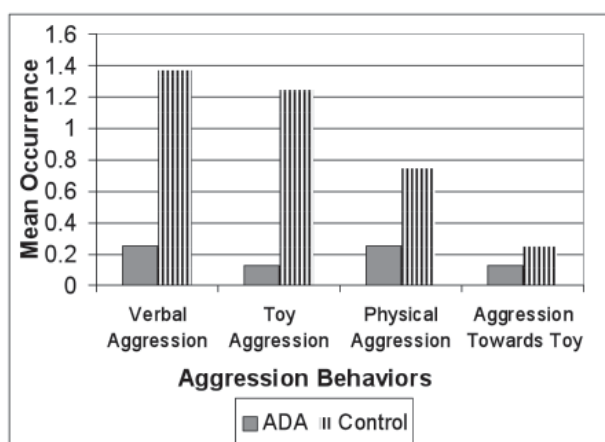
A statement released by six major professional societies declared that over 1,000 studies up to that year pointed to a causal connection between media violence and aggressive behavior among children (Joint Statement, 2000). In addition, the statement reported that based on over 30 years of research, the public health community concludes that viewing media violence can increase aggressive attitudes and behavior, mostly among children. Anderson et al. (2003) reported that violent television and films increase the likelihood of aggressive and violent behavior both in short-term (aggressive behavior, thoughts, and emotions) and long-term (physical attacks, domestic abuse) situations.

Perhaps in an ideal world, parents would restrict their children's television viewing to nonviolent educational and entertainment programming, and provide alternative activities to enrich their children's development. However, because many children are not monitored while watching violent programs on television, it is important for parents to realize that they can lessen the impact of this exposure through vigilant involvement. Although some parents may counteract the negative influence of media violence through banning violent programs, others are unaware of the negative effects of violent cartoons, or prefer to be actively involved in their child's moral development. Ceballo, Ramirez, Hearn, and Maltese (2003) found that increased parental monitoring positively affected the psychological health of children who were less exposed to actual violence; however, parental monitoring diminished as exposure to violence increased. Ceballo et al.'s findings further led Singer, Flannery, Guo, Miller, and Leibbrandt (2004) to suggest that monitoring children's television viewing is beneficial and important in reducing violent behavior, anxiety, and fear.

It is possible that an even larger effect would have been found had the observation room been a more sterile environment. For example, a number of distractions such as a piano and a whiteboard seemed to promote more neutral play in both conditions. Future studies would need to ensure a more distraction-free room. Also, the inclusion of another control group that did not watch a violent cartoon, or one with no adult

FIGURE 1

Mean occurrence of aggression behaviors observed for ADA and control conditions.



present in the room would provide a comparative baseline for aggression behavior in play.

Although the children were randomly assigned to the ADA and control conditions, the small sample size and uneven gender distribution prevented us from analyzing a gender effect. Future studies should strive for a larger sample size that is balanced for gender.

Despite the limitations of this study, it is clear that exposure to media violence leads to increased aggression in children (Joint Statement, 2000). Parents can oversee the media's exposure to their children by helping them to make wise viewing choices when living in today's socio-cultural environment. Rather than becoming censors of the media, today's parents might recognize their limitations and choose critical thinkers over V-chip robots. Parents can teach and discuss and argue as they purvey the values of critical thinking to their children. Yet parents who allow their children to watch media violence either in their home or at the neighbor's, must understand that distracted or passive adult supervision is not sufficient to counteract exposure to aggressive media content. Rather, active parental disapproval of media violence and family dialogue are needed to lessen children's subsequent aggressive behavior.

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