

THE UNIVERSITY OF MANITOBA

TELEVISION VIOLENCE AND GENERAL DISINHIBITORY  
EFFECTS ON CHILDREN'S AGGRESSION:  
THREE NONCONFIRMATIONS

by

WENDY L. JOSEPHSON

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A dissertation submitted to the Faculty of Graduate Studies of  
the University of Manitoba in partial fulfillment of the requirements  
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## ABSTRACT

In spite of what appears to be a general consensus in the scientific literature that violent television has a general disinhibitory effect on children's aggression, an extensive literature search failed to uncover a single relevant unflawed experiment to produce evidence of such an effect.

Accordingly, a field experiment using 90 children from city playgrounds was designed to examine the effects of frustration and three types of television (nonviolent sports, violent sports, and violent nonsports) on one measure of aggression, the number of hits boys and girls would recommend as punishment of another child for a playground crime. Only the subjects' sex significantly affected the amount of punishment recommended.

A second experiment, employing 96 children, was conducted. This time, all children were frustrated, blocking was done on age and socioeconomic status (SES) as well as sex, and the length of exposure was increased from 5 to 20 minutes. A no-television control group was also added. The dependent measure was the number of wet sponges thrown at a child confederate, as opposed to an inanimate alternative target. Only the sex by television condition interaction was significant, and it was no longer significant when results were analyzed in terms of the proportion of total sponges thrown at the confederate. In a second part of Experiment II, 56 children played with either toy guns or cars



prior to being placed in the dependent measure situation. Both the sex effect and the sex by toy interaction were significant.

Experiment III (N = 105) was essentially a replication of Experiment II, but this time it was the confederate who frustrated the subjects. There were no significant main effects or interactions for either the television or toy conditions of Experiment III. The results of this series of research were discussed in terms of past and future research into disinhibitory effects of televised violence on children's aggression.

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## INTRODUCTION

As Liebert, Neale, and Davidson (1973) have noted, social scientists tend to agree that television is an often violent medium (Gerbner, 1972) and that children watch a great deal of television (Lyle & Hoffman, 1972). They thus would agree that violent television has considerable potential for influencing children's aggressiveness. The debate has been over what this influence might be, and lately it has been a rather contentious debate.

### Theoretical Considerations

Several theoretical approaches lead to different predictions about television's potential effects in this regard. Both Dollard, Doob, Miller, Mowrer, and Sears (1939) and Lorenz (1966) have argued (from different bases, to be sure) that humans can have aggressive drives, which Feshbach has suggested can be reduced by fantasy as well as by physical aggression (Feshbach, 1964; Feshbach & Singer, 1971). It is not clear, however, that physical and verbal aggression themselves will reduce subsequent aggression (see for example Doob, 1970; Geen, Stonner & Shope, 1975; Hokanson, 1970; Konecni, 1975; Manning & Taylor, 1975), and the little evidence available suggests that fantasized aggression does not have the same effects that overt aggression has on physiological arousal (Hokanson & Burgess, 1962). Several reviewers (Bryan & Schwartz, 1971; Cater & Strickland, 1975; Goranson, 1970; Krebs, 1973; Weiss, 1969) have recently

argued that the "catharsis hypothesis", as it pertains to television violence, is almost entirely without support. 2

Berkowitz has provided a second theoretical approach to the matter, arguing that violent television will most likely increase children's aggression because it repeatedly associates violence with various stimuli that may be present in the child's environment (Berkowitz, 1965, 1969, 1973). These stimuli might be especially likely to trigger violence, it is argued, when the child is frustrated or otherwise aroused. On the other hand, Berkowitz has argued that cues associated with unjustified or extreme violence can reduce children's aggressiveness because they are associated with anxiety about aggression. The evidence which bears on these two predictions is not altogether supportive, however. The experimental paradigm used to demonstrate the "cue effect" has been sharply criticized by Page and Scheidt (1971), and Meyer (1972) found that witnessing unjustified violence did not inhibit subsequent aggression.

A third approach, pioneered by Bandura and his co-workers (Bandura, Ross, & Ross, 1963a, 1963b) has become quite prominent in recent years. It holds that media violence can affect children's aggressiveness in two ways: a) by adding novel aggressive responses to the child's repertoire through imitation of specific behaviors, or b) by disinhibiting or inhibiting previously learned aggressive responses. The latter possibility, the reader will note, allows for either an increase or a decrease in aggressive behavior. The direction of the effect will be determined, according to Bandura (1973), by the consequences which befall the aggressive model.

But the frequency with which "good guys" save the day on television by out-aggressing the bad guys (e.g. Larsen, Gray & Fortas, 1968; Gerbner, 1972) has led Bandura (1973) and others (Larsen et al., 1968); Liebert et al., 1973; Wertham, 1974) to argue that television violence has, on balance, a general disinhibitory effect on children's aggressiveness ... assuming Bandura is right.

#### General Disinhibition vs. Specific Imitative Effects

It is important to distinguish specific imitative from general disinhibitory effects. There is not much doubt that children can learn specific aggressive acts from television, which they will sometimes then perform. This is hardly to be condoned, but the question as to what to do about it is complex, for there are a great host of things shown on TV which can result in injury if children attempt them. One can imagine that if the lionization of daredevil stuntmen would end, some children would cease to injure themselves leaping trash cans on their bicycles. But should we cease to televise the Olympics, if it turns out that some children hurt themselves or others "pole vaulting", "shot putting", diving into pools, bobsledding, etc.? Should we restrict cooking shows because some children occasionally set the house afire imitating a TV chef? What about slapstick comedy, adventure shows, and the six o'clock news?

As Liebert et al. (1973) have noted, there is widespread concern over TV violence not because of the (relatively infrequent) tragedies which seem traceable to a specific show, but because it is possible that the enormous carnage shown daily on television causes children in general to be more aggressive against many

potential targets in a large number of situations. The apparent instrumental value of aggression, as depicted on TV, can conceivably lead to its being less inhibited in a million schoolyards, back yards, and back alleys across the land. The question of this hypothesized general disinhibitory effect is the most important and hotly contested issue in the debate over TV violence.

#### The U.S. Surgeon General's Report

In March of 1971 the U.S. Surgeon General concluded that televised aggression does have a general disinhibitory effect (Steinfeld, 1972). (See Morgenstern, 1972, and "Violence Revisited", 1972 for an account of the controversy surrounding the different conclusion reached by the Scientific Advisory Committee to the Surgeon General). The studies included in the 1972 report added to a literature which has been growing since 1956. Table 1 lists the 36 research papers the author could find in the scientific journals which investigated the effects of media violence on children's aggression. Any study which used children or adolescents as subjects, used filmed stimuli, purported to be measuring aggression, and included at least one group which saw violent television and one that did not is included in that table.

Twenty-nine of the 36 papers listed in Table 1 are relevant to the question of general disinhibition. Of these, 8 reported a positive effect, 13 reported mixed effects, 6 reported finding no effect, and 2 a negative effect. Since the majority of the studies found at least some positive effect, one might be inclined to conclude that the Surgeon

Table 1

## A Summary Critique of the literature on Violent Television and Children's Aggression

Study	Studied general disinhibition?	"Aggression" = intent to do interpersonal harm? <sup>a</sup>	Violence unconfounded with excitement? <sup>b</sup>	Real-life viewing conditions and context?	Stimulus material similar to real TV programs?	Normal sample? <sup>c</sup>	Methodological problems? <sup>d</sup>	Reported effects of viewing media violence on aggression: <sup>e</sup>
* Siegel (1956)	Yes	Yes & No	No	Yes	Yes	Presumably	s-g	No effect
Himmelweit, Oppenheim & Vince (1958)	Yes	No	No	Yes	Yes	Yes	Unknown rel.; corr./ n.c.i.	No effect
Lovaas (1961)	Yes	No	Presumably	No	Yes	Yes	No alt. beh.; obs. not bl.; s-g	Mixed effects
Mussen & Rutherford (1961)	Yes	No	Presumably	No	Yes	Yes	s-g	Positive effect
Schramm, Lyle & Parker (1961)	Yes	No	No	Yes	Yes	Yes	Unknown rel.; corr./ n.c.i.	Mixed effects
Bandura, Ross & Ross (1963a)	Yes	No	No	Yes	No	Yes	s-g	Positive effect
Bandura, Ross & Ross (1963b)	Yes	No	Yes	Yes	No	Yes	s-g	No effect on disinhibition
* Eron, 1963	Yes	Yes & No	Yes & No	Yes	Yes	Yes	corr./ n.c.i.	Mixed effects
Kuhn, Madsen & Becker (1967)	Yes	No	No	No	No	Presumably	s-g	Positive effect
Walters & Willows (1968)	No	No	No	No	No	No	low rel.; s-g	Positive effect
Hanratty, Liebert, Morris & Fernandez (1969)	Yes	Yes & No	No	No	No	Yes	s-g	No effect on disinhibition
Hartman (1969)	Yes	Yes	Yes	No	Yes	No	s-g	Positive effect



Kniveton & Stephenson (1970)	No	No	No	No	No	Yes	Grps. init. diff.	Positive effect
* Cameron & Janky (1971)	Yes	Yes & No	No	Yes	Yes	Yes	Obs. not bl.; unkn. rel.	Positive effect
Feshbach & Singer (1971)	Yes	Yes & No	No	Yes	Yes	No	Obs. not bl.; grps. init. diff.	Negative or no effect
*Hapkiewicz & Roden (1971)	Yes	Yes	Presumably	Yes	Yes	Yes	s-g	No effect
Savitsky, Rogers, Izard & Liebert (1971)	No	Yes & No	No	No	No	Presumably	s-g	Positive effect
*Steuer, Applefield & Smith (1971)	Yes	Yes	Insufficient information	Yes	Yes	Yes	Nonind. obs.	Mixed effects
Dominick & Greenberg (1972)	Yes	No	Insufficient information	Yes	Yes	Yes	Low or unkn. rel; corr./ n.c.i.	Mixed effects
*Ellis & Sekyra (1972)	Yes	Yes & No	No	Yes	Yes	Yes	Nonind. obs.	Positive effect
*Eron, Huesmann, Lefkowitz & Walder (1972)	Yes	Yes & No	Yes & No	Yes	Yes	Yes	Biased attrition; unkn. rel. and validity for older subjects	Mixed effects
Feshbach (1972)	Yes	Yes	Yes	No	Yes	Yes	s-g	Mixed effects
* Friedman & Johnson (1972)	Yes	Yes & No	No	Yes	Yes	Yes	Corr./n.c.i.; s-g; unkn. rel.	No effect
Hanratty, O'Neal & Sulzer (1972)	No	Yes & No	No	No	No	Yes	s-g	Mixed effects
Kniveton & Stephenson (1972)	No	No	No	No	No	Yes	s-g	Mixed effects
Leifer & Roberts (1972)	Yes	No	No	No	Yes	Yes	Questionable validity	Mixed effects
Liebert & Baron (1972)	Yes	Yes	Yes	No	Yes	Yes		Mixed effects
*McIntyre & Teevan (1972)	Yes	Yes & No	Yes & No	Yes	Yes	Yes	Corr./n.c.i.; questionable validity	Mixed effects

Study	Studied general disinhibition?	"Aggression" = intent to do interpersonal harm? <sup>a</sup>	Violence unconfounded with excitement? <sup>b</sup>	Real-life viewing conditions and context?	Stimulus material similar to real TV programs?	Normal sample? <sup>c</sup>	Methodological problems? <sup>d</sup>	Reported effects of viewing media violence on aggression: <sup>e</sup>
*McLeod, Atkin & Chaffee (1972)	Yes	Yes & No	No	Yes	Yes	Yes		Positive effect
*Stein & Friedrich (1972)	Yes	Yes	No	Yes	Yes	Yes	Low rel.	Mixed effects
Thomas (1972)	Yes	Yes	No	No	Presumably	Yes	s-g	Negative or no effect
Kniveton (1973)	No	No	No	No	No	Yes		Positive effect
Talkington & Altman (1973)	No	No	No	No	No	No		Positive effect
Wotring & Greenberg (1973)	Yes	No	Yes	No	Yes	Yes	S-g; questionable validity	Mixed effects
*Hapkiewicz & Stone, (1974)	Yes	Yes	No	Yes	Yes	Yes	s-g	Mixed effects
Leyens, Camino, Parke & Berkowitz (1975)	Yes	Yes & No	Yes	Yes	Yes	No	Nonind. obs.	Positive effect

Footnotes:

a - "Yes and No" means that the measure of "aggression" included behaviors intended to do interpersonal harm, but also others; in a summed score. It is unknown then to what extent the aggression score reflects the intent to do interpersonal harm.

b - "Presumably" means that information in the publication suggests that the film stimuli used were not too different in excitement level (e.g. two cartoons with titles both suggesting action).

c - By a "normal" sample is meant one that is not obviously abnormal (e.g. juvenile delinquents, emotionally disturbed children). "Presumably" normal samples are those only vaguely described in the publication.

d -

d - "Methodological problems" are keyed as follows:

"s-g" - it seems quite possible that "sheep" (subjects yet to be run in the study, in a classroom for example) could have been "contaminated" by the behavior of "goats" (subjects already run in the experiment), and the article did not describe any steps taken to prevent this from happening.

"corr./n.c.i." - the study was correlational in nature, and no causal inferences are possible. Correlational studies which used cross-lagged or other statistical techniques to estimate the direction of causation are not labelled "corr./n.c.i."

"no alt. beh." - no alternative, nonaggressive behavior was available to the subjects.

"obs. not bl." - observers who rated the subjects' aggressiveness were not kept blind regarding the subjects' experimental condition.

"low or unkn. rel." - the reliability of the scale measuring aggression, or of the raters who were scoring aggressive behavior, was either very low (less than .80) or was not even reported.

"questionable validity" - the validity of the scale used to measure aggression is highly questionable.

"nonind. obs." - the observations of subjects' aggressiveness were not independent; subjects in a treatment group were scored while interacting with one another.

"gps. init. diff." - the treatment and control groups were initially different in their respective levels of aggressiveness.

e - "Mixed effects" means that the results of the study varied from one dependent measure to another (e.g. a positive effect on one measure, no effect on another) or from one subsample to another (e.g. a positive effect for boys, none for girls). The "effects" being described are general disinhibitory effects (see text).

General's statement is reasonably well (if not unanimously) supported by what Cline (1974, p. 179) calls "the overwhelming consensus of the research".<sup>1</sup>

#### Criticisms of the Scientific Literature

Before drawing this conclusion however, one would be well advised to consider several criticisms which can be directed at this literature.

1. Dependent variables. First, the measure of "aggression" used in many of these studies lacked social significance as the "victim" was non-human and, in some cases, was a toy whose only purpose is to be hit (Bryon & Schwarz, 1971; Klapper, 1968; Kniveton & Stephenson, 1970; Singer, 1971; Weiss, 1969; Wilson, 1974). The major reason for concern over the effects of TV violence has been that it might lead children to hurt other humans, especially other children. If aggression is defined as behavior intended to cause interpersonal harm (Klapper, 1968), then a number of the studies in the literature have little to say on this point (See Table 1).

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1

Surprisingly, only 10 of the 55 papers in the Surgeon General's Report were found to bear directly on this issue. Much of the report dealt with media content, population use of media, effects of advertising on children and other such matters. Studies of related effects such as Cline, Croft, & Courier's (1973) investigation of physiological desensitization to filmed violence, Drabman & Thomas's (1974) study on tolerance toward aggressiveness in others, and a study on perception of violence (Rabinovitch, 1971) were also left out of Table 1.

2. Failure to control for excitement per se. Violent TV shows are but one kind of television programming intended to be exciting. It is quite possible that effects attributed to TV violence might instead be at least partly, and possibly entirely, attributable to the arousal which follows exciting stimulation, be it violent or non-violent. There are very few studies which controlled for this possibility by studying the effects of non-violent but exciting material.<sup>2</sup>

3. Environmental context of the studies. A number of the studies in the literature can be faulted because they were conducted in settings so unique and foreign to the children involved that the effects found may have little applicability to the real world (Howitt & Dembo, 1974; Klapper, 1968; Kniveton, 1974; Kniveton & Stephenson, 1970; Roberts, 1973; Singer, 1971). An experiment by Grusec (1972) suggests that imitative behavior may just be a response to the informative aspects of a model's behavior about what actions are appropriate in a strange situation. Kniveton & Stephenson (1970) found, furthermore, that the usual high level of post-film imitation

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2

As in the case of specific imitative effects, this is not an argument that TV violence is harmless or should be condoned, but rather that the harmful effects of television may be more widespread than supposed. They may also be practically impossible to control without major revisions of our lifestyles. If it turns out that exciting programs, be they violent, or non-violent, have general disinhibitory effects upon children's aggressiveness, should only non-exciting programming be allowed on television?

was drastically reduced when the physical setting was no longer novel to the subjects -- even when their prior experience in the situation consisted only of a 20-minute play period.

4. Stimulus material used. Many of the studies listed in Table 1 used as stimulus materials brief (and specially prepared) presentations of simple acts performed in a social vacuum (Klapper, 1968; Noble, 1970; Roberts, 1973; Singer, 1971). Such studies have questionable relevance to the issue of television's actual effects, of course; moreover it can always be countered that such investigations merely demonstrate that psychologists can develop harmful materials, not that actual television programming is dangerous. Studies which use real television programs are obviously more convincing and relevant to the issue.

5. Populations sampled. As can be seen in Table 1, the samples used in a number of the studies deviated considerably from the general population. Findings obtained with juvenile delinquents, the mentally retarded, the emotionally disturbed, etc., are obviously of questionable generalizability.

6. Methodological problems. Finally there are a number of methodological and procedural hesitations about the studies in the literature: (a) the "sheep and goats" problem: it often seems that no steps were taken to insure that subjects who had already served in the experiment were isolated from those yet to be run; (b) the "forced aggression" problem: sometimes the subjects had no alternative but to act aggressively in the dependent variable setting. Such forced

aggression might never have occurred in a natural setting where non-aggressive behavior is possible; (c) aware and unreliable observers: persons who scored the aggressiveness of subjects in the dependent variable setting sometimes apparently were not kept blind as to which experimental treatment the subject had received; also, inter-judge reliability in some studies was quite low (i.e. less than .80), or not even reported; (d) interactional confounding: in some studies the aggression scores were obtained from subjects who were induced to interact extensively with one another. The children's scores were analyzed on an individual basis when in fact the behavior of individuals was not, of course, independent; (e) correlation vs. causation: some studies employed simple correlation designs which do not permit causal inferences.

These complaints, some of which have been termed "quibbling" and "nitpicking" (Cline, 1974; Liebert et al., 1973) cut both ways when one re-examines the evidence in Table 1. But if one requires relevant and methodologically sound evidence before making up one's mind on the issue, the truth is there is precious little to be had. Only 12 of the studies in Table 1 (those preceded by an asterisk) are really very relevant to the issue at hand (i.e. they studied the general disinhibitory effects of at least roughly representative TV violence on interpersonal aggression in a "real-life" setting among normal subjects). Nearly all of these suffer from at least one of the above methodological failings, and very few of them controlled for the effects of excitement per se. If one is

willing to consider them anyway, despite these obvious shortcomings, then the 12 "relevant but flawed" studies present a rather confusing picture. One quarter of them found positive evidence for a general disinhibitory effect; half of them found mixed evidence for such an effect (e.g. a positive effect for boys, none for girls, or a positive effect on one measure, none on another); and one quarter of them found no evidence of a general disinhibitory effect. Clearly one cannot reach any sort of simple conclusion on the basis of these results.

#### The "New York State" Study

Special attention should be given, however, to the impressive study conducted by Eron and his associates in upstate New York during the period from 1960 to 1970. Using the cross-lagged panel correlation technique which allows the researcher to determine causal priority among correlated variables, Eron, Huesmann, Lefkowitz, & Walder (1972) reported evidence that aggressiveness in "Grade 13" males was attributable to some extent to the amount of violent television they had watched in Grade 3.

The study has been criticized from several points of view (Cisin et al., 1972; Howitt & Dembo, 1974; but see also, Kenny, 1972; Neale, 1972) notably on grounds of differential subject loss and the retrospective nature of the aggression ratings obtained in 1970. It should also be noted that this study, like so many others, confounded the effects of excitement per se in its measure of violent TV viewing habits.

Nevertheless, the study was truly monumental in its scope,

and is probably the best investigation ever conducted on the topic.

We would point out, however, that the correlation between TV viewing habits and subsequent aggressiveness was rather small (.31), and the "same-time" correlations between TV viewing habits and current aggressiveness were even smaller (.21 for Grade 3 and -.05 for Grade 13 males). Eron et al., it should be noted, observe that the size of these correlations was limited by the skewed distributions of the variables.<sup>3</sup> In this context the only other "unflawed" relevant study in Table 1, by McLeod, Atkins, & Chaffee (1972a, 1972b) also found weak positive correlations (about .30 or less) between

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The correlation between violent TV viewing preferences in Grade 3 and aggressiveness in Grade 13 females was reported by Eron et al., (1972) to be - .13 and is usually described as being "nonsignificant". But the matter is actually somewhat ambiguous. Eron et al., used a .01 level of significance for testing each correlation in their large battery of measurements. This is normally highly commendable, but in the case of their main variable, one might wonder about the higher chance of a Type II error. The critical value of a two-tailed test of significance of a product - moment correlation at the .05 level with 214 degrees of freedom is  $\pm .134$ . The significance of the long-range effect for females could be argued to depend on the values in the second and third places of the correlation coefficient, which is getting a little fine --- especially if the distribution of the variables was highly skewed. Those who have concluded that Eron et al. found no significant effect for females, should realize how thin the line is which separates them from a significant (but of course small) cathartic effect for these subjects. It should also be noted that for violent sports programs, there was a small but significant positive effect ( $r = .33$ ) for females and none for males (Lefkowitz, Walter, Eron, & Huesmann, 1973, in a further report on the same data).