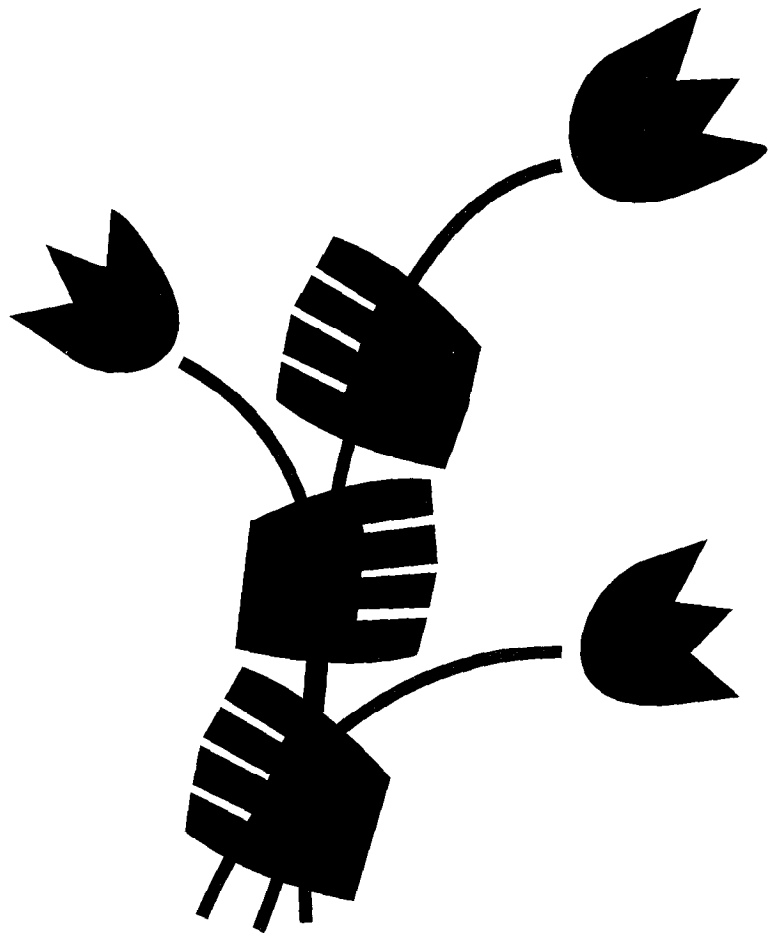


The Effects of Media Violence on Children



The Effects of Media Violence on Children

A Background Paper researched and written by:

Jane E. Ledingham, Ph.D., C.Psych.
C. Anne Ledingham
John E. Richardson

for the

National Clearinghouse on Family Violence
Family Violence Prevention Division
Health and Welfare Canada
Tunney's Pature
Ottawa, Ontario
K1A 1B5

Ottawa, 1993

Additional copies in English or French, as well as additional resource materials, are available from:

National Clearinghouse on Family Violence
Family Violence Prevention Division
Health and Welfare Canada
Ottawa, Ontario
Canada K1A 1B5



Tel.: 1-800-267-1291
TDD line: 1-800-561-5643
Fax: 613-941-8930

The views expressed in this book do not necessarily reflect those of Health and Welfare Canada. Contents may not be commercially reproduced but any other reproduction, with acknowledgements, is encouraged.

Cat. H72-21/91-1993E
ISBN 0-662-20716-5



Introduction

There is a large body of research that documents the way in which exposure to television influences children generally, and much of this relates to the effects of exposure to violent content in programming. The majority of studies reviewed below deal with these two areas of content. However, the media that children are exposed to are broader than television alone. There is almost no research on the effects of violence portrayed in newspapers or books on children, and very little on the effects of films (either shown in theatres or shown in the home on VCRs) and videogames. What little research there is on these latter subjects will be noted, but in general it is the research on television that has served as the model for how exposure to violence in the media affects children. This is probably because watching television is such a high frequency event for children and because violence is portrayed on television as occurring much more frequently than it is encountered in everyday life. We will, nevertheless, attempt to extrapolate from these findings to speculate on how changes in medium and technology may alter the way that children are affected.

The Effects of Television on Children

Research has given us some important information on how children of different ages respond to television and what they are capable of learning from this medium. Before examining the effects of violent programming in particular, we will examine this more general context of effects.

In Canada, almost all households have at least one television set; in 1986, 98% of homes had a television (Liebert & Sprafkin, 1988). Along with ownership of a television come changes in the way that time is allotted within the family unit. A Canadian study that documented the changes in how families spent their time before and after television was introduced into a small town reported that time spent sleeping, at social gatherings outside the home, in conversation, in leisure activities such as reading, knitting, and writing, doing household tasks, and involved in community activities and sports was reduced after television became available (Williams & Handford, 1986). Bronfenbrenner (1973) has commented that the major impact of television may not be in the behaviours that it induces but rather in the behaviours that it preempts.

Television viewing time rises from about 2 1/2 hours per day at the age of five to about four hours a day at age twelve. During late adolescence viewing time levels off at 2 to 3 hours per day (Liebert & Sprafkin, 1988). At six months of age, a child will attend to a children's television program almost 50% of the time (Hollenbeck & Slaby, 1979). At two years of age, the child will attend 78% of the time to a children's program, but will still imitate the actions of a live model more than those of a model on the television. However, by three years of age, the child will attend 95% of the time to a children's show and will imitate a televised model to the same extent as a live model (McCall, Parke, & Kavanaugh, 1977). Nevertheless, until after the age of four, the child does not watch television in a systematic fashion. How

much attention a child pays to a television show is determined by the level of comprehension demanded by the show's content and form and by the presence of distracters such as other children; children pay more attention when the show presents information that they can comprehend easily and pay less attention when other children are present to interact with (Anderson, Alwitt, Lorch, & Levin, 1979; Anderson, Lorch, Smith, Bradford, & Levin, 1981). Visual information is remembered better than auditory information by preschoolers (Hayes & Birnbaum, 1980; Hayes, Chemelski, & Birnbaum, 1981). When there is an adult who comments on the action, the child remembers more information (Watkins, Calvert, Huston-Stein, & Wright, 1980) and is more likely to imitate what he or she has seen (Grusec, 1973). Thus, adults have an important impact on how television affects children.

The sophistication of children's attitudes towards television content changes dramatically over time: 34% of children aged five to seven believe that commercials always tell the truth (already a very low percentage), but this drops to 5% by the age of eleven to twelve; relative to the attention paid to programs, attention paid to commercials drops by 21% between the ages of five and seven and by 42% between the ages of eleven and twelve (Ward, Reale, & Levinson, 1972).

Television is used frequently by parents as a babysitter or distraction device, and the frequency of use depends upon the education of the parents. Parke (1978) reports that 53% of mothers and 44% of fathers with grade school education, versus 21% of mothers and 19% of fathers who are college educated, use television as a babysitter. Probably at least some of the differences in rates reported in this study are due to the availability of other caretakers for parents of different socioeconomic levels.

The Relationship between Violent Content and Children's Aggressiveness

The type of study carried out to examine the effects of watching violent content on television has changed over time. Initially, many of the studies were true experiments in which children who had been randomly assigned to different groups were exposed to different types of television programs. The strength of this approach is that differences in behaviour between the treatment groups can be unequivocally attributed to differences in the content of the television shows rather than to differences between the types of children who chose to watch more or less violent television. These studies demonstrated that children exposed to either a real person or a cartoon character behaving aggressively on television would subsequently behave more aggressively than children who had not seen aggressive acts modelled (e.g. Bandura, 1965; Bandura, Ross, & Ross, 1963; Liebert & Baron, 1972). In general, this research indicated that children are more likely to imitate aggression when the perpetrator of the violence is rewarded or at least not punished and when the violence is presented as justified. Although violence presented as real appears to promote aggression more in adults than violence described as fictional, fictional violence also seems to make aggression more likely than programming without violent content (Atkin, 1983). Whether aggression is presented in a realistic way or in cartoons may, however, make no difference to *children's* propensity to imitate it (Hearold, 1986). When characters use aggressive means to reach prosocial ends (a frequent combination on television) young children understand less of the message of the show than when characters behave consistently in a totally good or totally bad fashion; they also act more aggressively after seeing a mixed prosocial-antisocial character than when the character has behaved consistently in a totally prosocial way (Liss, Reinhardt, & Fredriksen, 1983). Thus, for

very young children, justifying the motivation for aggressive actions does not seem to eliminate the influence of exposure to aggressive acts.

Despite the tight experimental controls employed, the tradition of laboratory research has been criticized on several grounds. First, the short time frame of these studies did not permit assessment of the more enduring effects of repeated exposure to violent content. Second, most of these studies were carried out in the rather artificial environment of the laboratory, making it difficult to know whether results would generalize to the home or to a community environment. Freedman (1984), for example, has argued that the effects of exposure to violence may have been overestimated by only showing children an unrepresentative sample of the most violent shows (when television includes a mix of both violent and nonviolent programming) and that children may have assumed that the experimenters condoned or at least expected the children to behave aggressively. Freedman also suggested that aggression measured towards a blown-up doll designed to be hit in play (the Bobo doll used in many of these early studies) may not reflect real aggression. However, this argument is rendered less plausible by the fact that a study by Johnston, Deluca, Murtaugh, & Diener (1977) found a very substantial relationship (correlations of the magnitude of .70) between reports from peers and teachers of a child's aggressiveness and the frequency with which the child hit the Bobo doll during a play session.

Later studies tend to have been conducted in the natural environment and to have examined the effects of exposure to violence over a longer period of time. These studies have the advantage of being more readily generalizable to the real world, but prevent us from drawing unequivocal conclusions about cause-effect relationships because of the fact that there was no random assignment to groups and no control over the major variable of interest: for example, some children may have watched more violent television than others from the beginning of the studies and it may be that those who did were different in other important ways on additional variables as well, and that these other differences rather than the differences in violence watched produced the later negative consequences. Below we will summarize the major findings of each of these traditions of research.

Most of the studies reviewed below do not assess directly the total amount of violence that individual children actually watch daily on television. Rather, shows are judged on the basis of an analysis of one week of programming as to their typical level of violence and children report which are their preferred shows and how often they watch them. From this, an estimate of the amount of violence they will be exposed to is computed. Some studies assume that, since the rate of violent content is so high on television, a measure of total television watched will be a good index of exposure to violence, since the more television one watches, the greater one's exposure to violence will be. Except for families that monitor their children's viewing very carefully this may not be a bad assumption, since the overall rate of aggressive acts on television is quite high. Williams and her colleagues (Williams, 1986) have described the planning and execution of a very significant study on the effects of television on children's aggressiveness. The study began shortly after it was learned that a Canadian town which had not previously been able to receive television transmissions was going to be able to receive television transmissions in the near future. The researchers planned to assess children's behaviour both prior to and after the coming of television in this town (Notel) and to compare it to the behaviour of children in two very similar towns that received either one television channel (Unitel, which only received CBC) or more than one channel (Multitel, which received CBC plus American programming) throughout the period of study. The strengths of this study were that it provided a long-term assessment of the effects of watching TV (over a two-year period), that it was not conducted in the laboratory but very much in the real world, and that it did not compare children who watched more television with those who watched less due to differences on individual or family factors but rather compared children who initially probably would have watched television if it had been available to children for whom television was already available.

Aggression was measured by observations of children's interactions in the schoolyard during free play, by teacher ratings, and by peer ratings. Longitudinal observations of 45 children first observed in grades one and two and reevaluated two years later indicated that both verbal and physical aggression increased over this two-year

period for children with no access to television initially who later had access to television, but not for children who could watch one or more television channels throughout the study. Virtually identical results were obtained when children tested at the beginning of the study were compared with a different group of children in the same grade level tested two years later. Moreover, this increase in aggressive behaviour was not just present among a subgroup of sample representing the most aggressive children. Children in the town with no access to television initially were classified as either high or low aggressive on the basis of their scores before television arrived; these two groups did not differ two years later on their level of aggression, amount of television watched, or number of favourite shows listed that were classified as violent.

The findings of this study strongly suggest that television viewing is related to aggression. Furthermore, because the results were similar for the town with one Canadian television channel and the town with Canadian plus American channels, it appears that the absolute number or type of channels available is relatively unimportant. In other words, since Unitel, which received only CBC, produced a profile very much like Multitel, which received U.S. channels as well, it does not seem possible to argue that government-run television in Canada produces very different effects from programming produced in the private sector. In fact, Williams (1986) argues that CBC programming does not differ markedly from programming on other networks in rates of violence and noted that CBC documentaries of war and other violent actions may provide one important medium for the exposure of children to violent content.

Two results were somewhat problematic. First, the researchers had hypothesized that Notel would have lower levels of aggression than Unitel and Multitel at the beginning of the project. Although children in Notel did become more aggressive over the two year period following the introduction of television, the levels of physical and verbal aggression in this town were not lower initially than those in the two towns that already had television reception (except that children in Notel were less verbally aggressive at Time 1 than children in Multitel). Second, amount of television watched at the initial time of testing by the

children of Unitel and Multitel did not significantly predict the amount of aggression seen two years later (although aggression assessed in the follow up period was predicted by television viewing assessed at the same time).

A series of studies by a group of researchers including Lefkowitz, Eron, Walder, and Huesmann have contributed substantially to our knowledge of how the violence portrayed on television affects children. The first of these studies initially assessed the aggressiveness of 875 children (as measured by the reports of their classmates) and their preference for violent television shows in grade 3 (as measured by maternal report). Ten years later about half of these subjects were reassessed on the same variables. The results indicated that children's preference for violent television in grade 3 was significantly related to aggressiveness 10 years later for boys but not for girls (Lefkowitz, Eron, Walder, & Huesmann, 1977). Further follow ups of this group of subjects indicated that boys' reports of how often they watched preferred violent television shows significantly predicted the rates and seriousness of criminal offenses at the age of thirty even after the influence of the boys' initial aggressiveness and IQ had been removed (Huesmann, 1986b).

A subsequent cross-cultural study involving this group of investigators explored the extent to which viewing of violent content had a similar effect in countries in which both societal attitudes towards aggression and the content of and access to television programming varied widely (Eron, Huesmann, Brice, Fischer, & Mermelstein, 1983; Huesmann & Eron, 1986a; Huesmann, Lagerspetz, & Eron, 1984). The strength of this approach is clearly that it can test the robustness of the violence-aggression relationship across a wide range of cultural conditions. The countries included in the study were Australia, Finland, Poland, and the United States. These countries differ widely in homicide rates (with the U.S. having the highest rates and Poland the lowest), rates of television ownership, and number of hours per day when programming is available (with the U.S. having the highest rates and Israel and Finland having the lowest rates, respectively). Children were followed from grade 1 to grade 3 and from grade 3 to grade 6 in each country. Measures were obtained of aggressiveness, preference for violent programming, frequency of

viewing, perceived realism of programming, identification with television characters, preference for sex-typed activities, involvement in fantasies of aggressive or heroic acts, and intelligence of the child, and nurturance, rejection, punitiveness, achievement orientation, aggressiveness, viewing habits, fantasy involvement, and socioeconomic status of parents.

Huesmann, Lagerspetz, & Eron (1984) compared the results obtained in the U.S. and Finland in some early analyses from this study. They found that the amount of violent television watched significantly predicted aggression two years later for both boys and girls in the U.S. and boys in Finland. For boys in both countries, later aggression was much higher in those who not only watched a great deal of violent TV but also identified highly with the characters they watched.

In all countries, children's overall TV violence viewing and identification with TV characters were positively correlated with their aggressiveness, as was how real they perceived the violent programs to be. This was true even when initial levels of aggressiveness was controlled for. Neither social class or intelligence accounted for the relationship of early TV habits to later aggression, although lower social class and intelligence were correlated with higher TV viewing in most countries. The relationships were stronger for boys but also existed for girls. In the United States only, there was also a significant relationship for both sexes between higher levels of early aggression and higher levels of later violent TV watching. Huesmann (1986a) concludes that there is remarkably strong evidence in support of the hypothesis that viewing violent television content increases later aggression in a wide range of cultures with quite different television environments and quite different attitudes to aggression.

As in many other studies, parental factors were also found to be associated with children's aggressiveness. Children who were more aggressive generally had more aggressive parents who were more dissatisfied with them and punished them more severely (Huesmann, 1986a).

Eron *et al.* (1983) have suggested that there is a period between the ages of 6 and 10 in which children are particularly sensitive to the effects of

television because viewing time is at a maximum and aggressive behaviour is still increasing but children still regard television as quite realistic. They argue that this age is thus a particularly important one to target for intervention.

Another approach to evaluating the evidence on the relationship of television viewing to aggression is to use meta-analysis to summarize statistically the results of a very large number of studies. Hearold (1986) carried out a meta-analysis of 230 studies which investigated the effects of television on social behaviour. About 60% of these studies were laboratory studies, 30% were survey studies, and 10% were field studies. Hearold concluded that there is stronger evidence for a relationship between watching violence on television and later aggressive behaviour for boys than for girls. In general, research using news programs produced larger effect sizes on later aggression than research using Westerns or crime and detective shows. Overall, however, studies demonstrating the link between positive TV programs and subsequent prosocial behaviours produced *larger* effect sizes than studies examining the link between negative TV programs and subsequent aggression.

Does Violence on Television Affect Only Children Who are Already More Aggressive?

This question is not easily settled. Joy, Kimball, & Zabrack (1986) found that in Notel both children who were high on aggression and children who were low on aggression before the introduction of television became more aggressive after television was introduced. In contrast, Josephson (1987) reported that exposing more aggressive groups of boys to televised violence resulted in higher levels of subsequent aggression than exposing them to a nonviolent show. In contrast, less aggressive groups of boys had higher levels of subsequent aggression after the nonviolent show than after the violent show. Part of the problem appears to involve the fact that there is a feedback loop between watching violent television and being aggressive. Exposure to violence does appear to increase aggression, but being aggressive also seems to increase preferences for violent television, perhaps because the fact that aggressive behaviour leads to peer rejection means that aggressive children have fewer options for alternative activities (Huesmann, 1986b).

What are the Mechanisms by Which Exposure to Violence Might Affect Children?

The simplest way of describing how watching television violence leads to aggression is that children observe novel aggressive behaviours and learn vicariously that aggressive acts are rewarded. They store these new behaviours in memory as part of the repertoire of actions that are available to get them what they want. This model of observational learning was first elaborated by Bandura (1965). Clearly, the more real children perceive violent televised scenes to be and the more they believe the characters are like them (identification), the more likely they will be to try out the behaviour they have learned.

Extensions of this explanation for how televised violence changes behaviour have made reference to how memories of aggressive behaviour are stored and recalled. Huesmann (1986b) has argued that fantasizing about aggressive acts strengthens the scripts previously learned that are encoded in memory. He has also stressed the importance of cues in the environment for retrieving particular patterns of aggressive behaviour. A number of researchers have in fact demonstrated that providing toys that appear in scenes of televised violence the children have just seen or that are associated with aggression more generally will markedly increase the amount of aggression that children show (Potts, Huston, & Wright, 1986; Josephson, 1987).

Televised violence can also change the attitudes that individuals hold about the world, resulting in perceptions that violence is more common or more acceptable than it actually is. Drabman & Thomas (1974, 1976) demonstrated that children who had watched a violent film tolerated more extreme aggressive behaviour in other children before calling in an adult for help with the situation than did children who had seen an exciting but nonviolent film or no film at all. In essence, these children appeared to have been desensitized to the significance of aggression. More accepting attitudes towards aggressive behaviour may subsequently prevent the child from inhibiting his or her own aggression. Thus, to the extent that viewing violence on television creates an unrealistic world view and value system for the child in terms of

what constitutes acceptable behaviour, the child may behave in a manner which is inappropriate in real life settings.

How Much Does Violence on Television Matter, or How Much of the Differences Among Individuals on Aggression is Accounted for by the Effects of Television?

Hearold (1986) presents a comparison of the average effect sizes from studies of televised violence and studies of a variety of other educational and medical treatments. Overall, the average effect size for televised violence on aggression is about half that obtained for the influence of tutoring on mathematical skills, slightly smaller than that of drug effects on psychotics, and about twice the effect size obtained for achievement by reducing class size from 30 to 15. Hearold (1986) concludes that the effect, although small, is certainly not negligible; she argues that part of the reason why the effect size of prosocial programs on prosocial behaviour is larger may be that these effects are generally intentional, and attempts are made to maximize them, while the effects of violent TV content on aggression are largely unintentional.

One standard method for determining the importance of different variables is to compute r^2 , which reflects the proportion of variance accounted for by a given variable. However, Rosenthal (1986) has demonstrated that, even though violence on television may account for only 10% or less of the variance in aggression scores, this is not a trivial relationship in terms of its practical consequences, since it is equivalent to an ability to reduce rates of aggressive behaviour from about 62% to about 38%.

Potts *et al.* (1986) had pairs of preschool boys watch television programs that had either high or low levels of violent content. The boys then played with toys that had either aggressive connotations (including a Bobo doll, boxing robots, and Star Wars figures) or prosocial connotations (including a foam basketball and hoop and ambulance and paramedic figures). Rates of aggressive and prosocial play during the play session were tabulated. Their results indicated that the level of violent content in the television show had a weak effect relative to the effect of type of toy presented. That is, much more aggressive acts were observed

when toys with aggressive connotations were present than when toys with prosocial connotations were presented. In contrast, viewing a television show with more violent content produced no differences in subsequent aggressive behaviour, but actually led to higher rates of helping the peer partner and turntaking with play objects than did viewing a television show with less violent content. The authors concluded that "the demand qualities of the immediate environment can be made sufficiently strong to override the effects of a brief exposure to different types of television content" and that "the accumulated findings to date indicate that the effects of television content and form depend on the environmental circumstances surrounding the child".

The Relationship between Television Watching and Fearfulness

Increased aggression may not be the only consequence of watching televised violence. Exposure to violence in programming may also increase fears and anxieties about becoming the victim of a violent act. Bryant, Carveth, & Brown (1981) asked undergraduates who had been randomly assigned to groups to select their television fare according to several guidelines. Light viewers were asked to watch very little television. Heavy viewers were asked to watch at least 28 hours of television per week. After six weeks, heavy viewers reported that they believed themselves to be more likely to become victims of violence than did light viewers regardless of their initial levels of anxiety and whether the violence they saw was justified or unjustified. Thus, watching television may lead to the development of attitudes that portray the world as a more dangerous place than it actually is because violence is more salient and frequent on television than it is in most real life experiences. In fact, it seems that paradoxically television may both desensitize individuals to violence and sensitize them to it. Perhaps perceiving oneself as more vulnerable to violence also serves to legitimize violent actions as a defence.

The Probable Impact of Expanded Cable Access, VCR Use, and Videogame Exposure on Children

Expanded cable access and VCR use should function to increase the choices in programming that exist at any one moment for children to watch. By itself, this process could make it possible for children to increase either their prosocial diet or their antisocial diet of TV fare. Much of the use that children make of this increased choice will thus depend on factors such as the degree of monitoring that parents carry out of their children's viewing.

Research on videogames is in its infancy, but in many ways parallels the research that has investigated the effects of television. However, researchers have pointed out that playing videogames differs from watching television in that the former activity involves much more active involvement. One drawback of this research is that most of the studies have investigated the effects of only very short exposure to videogames and assessed only very short-term (namely the immediate) consequences. Perhaps because of these factors, the research to date is largely inconsistent and inconclusive.

Cooper & Mackie (1986) assigned 84 children from grades four and five to pairs. One member of the pair played either a violent or a nonviolent videogame or did maze puzzles for eight minutes while the other children watched. The pairs of children were subsequently observed in free play to determine how long they played with violent or nonviolent toys. Finally, children were asked to push a button to show how much a hypothetical child should be punished for doing a bad thing and rewarded for doing a good thing. They found that girls, but not boys, who had been exposed to the violent videogame played more with the aggressive toys and changed activities more often than those who had been exposed to the nonviolent videogame or the mazes. There were no differences between groups on the amount of punishment or reward given to the hypothetical child. Graybill, Strawniak, Hunter, & O'Leary (1987), in a similar study, paired 146 children from grades two to six. One of the paired children played one of three violent or one of three nonviolent videogames for a total of 14 minutes while the other child watched the game. Each child was then individually given an opportunity to anonymously help or hurt a child playing a game in a different room (the child did not really exist) by pushing one button to make a handle easier to turn or pushing another button to make the handle hot. There were no differences in behaviour towards the other child between groups who had played or observed the violent videogames and groups who had played or observed the nonviolent videogames. The results from both these studies indicated no differences between those who had actually played the videogames and those who had observed. Schutte, Malouff, Post-Gorden, & Rodasta (1988) found no differences in the free play of slightly younger

children aged five to seven who had been exposed to either a violent or nonviolent videogame, but the children were only observed playing for five minutes.

Watching a violent videogame may make children less likely to behave in a prosocial fashion. Chambers & Ascione (1987) had 160 children from grades three, four, seven, and eight play either a violent or nonviolent videogame or fill out a questionnaire about videogames for an average of 10 minutes. Children who had played the violent videogame either alone or competitively with another child donated significantly fewer of the nickels they had earned to the town's "poor children" than did children who had played the nonviolent videogame alone (children who played the nonviolent game cooperatively did not differ in donations from any of the other conditions). There were no differences between groups in the number of pencils sharpened to help the experimenters.

What is the Role of Parents?

Parent can provide the most enduring influence of all adults on children. Whereas individual teachers and other models disappear with time, parents endure. They determine what kind of environment children live in, what sort of toys they play with, and how much and what type of television their children watch. They also interpret for children what is happening on the screen. Previously-noted studies by Grusec (1973) and Watkins *et al.* (1980) indicate that adults can have a very significant effect on what children learn from television and how they react to it. Parents can serve as models, gatekeepers, and interpreters for television and other important aspects of the child's life. However, the extent to which they actually serve these functions is another question. A number of studies have indicated that direct parent intervention to prevent children from watching programs with violent or other inappropriate content is infrequent (Bower, 1973; Mohr, 1979; Streicher & Bonney, 1974). St. Peters, Fitch, Huston, Wright, & Eakins (1991) found that parents were most likely to discourage children from watching horror shows and soap operas, but were largely neutral about crime shows, cartoons, and superhero shows. St. Peters *et al.* (1991) also discovered that the type of show that children and their parents watched together was more strongly related to adult preferences than child preferences,

so that children's exposure to violence in crime shows and news programs may largely be a function of parental choices.

It is probably the whole fabric of parent-child interaction that affects the ways in which children are affected by television. Parents model their values repeatedly in a myriad of situations. In some sense, the way that parents respond to television is just a special case of this broader pattern of reactions. Rothschild & Morgan (1987), for example, found that less parental control, both globally and as measured only in regard to television, was related to higher levels of fearfulness in adolescents, especially when combined with lower levels of family cohesion. It thus seems quite possible that some of the effects attributed to children's exposure to violence on television may be due indirectly to more general characteristics of their parents. One of the most frequently replicated predictors of aggression in children is lack of monitoring and lack of effective disciplining in parents (Patterson, DeBaryshe, & Ramsey, 1989). It appears likely that parents who do not check on or effectively control their children's activities will both have children who have more opportunities to watch more violent television and children who can engage in and experience few negative consequences for aggressive behaviour. Thus, parental monitoring and ineffective discipline may be critically important variables in determining the link between viewing of violent content and later aggression in children, while exposure to violence on television may constitute only one of several pathways through which the influence of parental characteristics affects aggression in children. In this context, to make real changes in how aggressive a child is, it may be necessary to address not only what the parent does in relation to the television, but also what he or she does in other interactions with the child.

We should finally point out that parents do have some important constraints on their influence on children. Particularly as children get older and spend more time outside the family in the company of peers, parents exert less influence over them. Eron *et al.*'s (1983) identification of the period between 6 and 10 years of age as a period of particular importance seems to correspond well to the time when parents can still exert substantial control over children's behaviour and can also influence their thinking and attitudes markedly.

Conclusions: The Effects of Violence in the Media on Children

Schramm, Lyle, & Parker (1961) concluded that "For some children, under some conditions, some television is harmful. For some children under the same conditions, or for the same children under other conditions, it may be beneficial. For most children, under most conditions, most television is probably neither particularly harmful nor particularly beneficial." Although we have not reviewed here the evidence for the positive effects for children of television viewing, it is quite clear that they can be substantial, and may in fact be more significant than the negative effects (Hearold, 1986).

Huesmann & Eron (1986b) have stressed the fact that aggression in children appears to be causally over determined. That is, there is a whole constellation of variables besides exposure to violent TV content that predict aggression and many of them must be present for aggression to result. Nevertheless, it does appear that exposure to televised violence does bear an important and consistent relationship to aggression. Its significance may lie partially in the fact that it identifies a discrete focus for some rather straightforward intervention approaches that are perhaps less sensitive than interventions that identify a more general focus such as global parental characteristics.

Industry, Community, and Government Approaches to Countering the Effects of Violence in the Media

In order to survey initiatives of these three sectors, we contacted the Ministers of Education in each province and territory, wrote to each major broadcast network in addition to related organizations (Canadian Association of Broadcasters, Canadian Radio-Television and Telecommunications Commission), and approached community organizations with interests in the area of exposure to violence and its

effects on children (Media Watch, the Children's Broadcast Institute/Alliance for Children and Television, Towards A Gentler Society). Each of these groups was asked to describe any current or future initiatives designed to address the issue of how violence in the media affects children. In general, these consultations revealed that there is much less activity related to this topic than there is to the issues of the effects of advertising, gender stereotyping, and violence directed towards women or children in the media. Media Watch, for example, makes it clear in its mandate that it is concerned almost exclusively with gender issues. This is particularly surprising given the amount of attention that the topic of violence on television has received from government and the community over the last two decades, most notably in the United States but also in Canada and other countries.

All private networks referred us to the Canadian Association of Broadcasters (CAB), who referred us to the Canadian Radio-Television and Telecommunications Commission (CRTC). The CRTC has recently published two reports, available through the CRTC office, that deal with television and violence. The first (Martinez, 1992) reviews scientific studies evaluating the effects of televised violence. The second (Atkinson & Gourdeau, 1992) reviews the findings of previous public enquiries and reports from the international arena (Ontario, Britain, France, Australia, New Zealand, UNESCO) and how violence has been regulated in these other countries. These reviews will serve at least in part as the basis for a new policy on violence in programming, due in early 1993, which is currently in the development stage by the CRTC.

CBC forwarded us a letter which pointed out that it does not produce or acquire children's shows that have significant violent content due to its longstanding concerns with the effects of media violence on young audiences.

Radio Québec furnished us with copies of its policy on televised violence, information on children's shows that address the issues of dealing with conflict in a prosocial manner and how to develop critical viewing skills, and information on a working group to eliminate violence in children's programming which took place in 1991-1992. They indicated that, while recognizing that

violence is part of life, they undertake to avoid presenting violence that could produce harmful effects on the child. They also attempt to produce shows that model more positive approaches to solving problems (Passe-Partout, Robin et Stella, Catimini) and can actually teach children to be less influenced when exposed to media violence (Club des 100 watts).

The aforementioned working group to eliminate violence from children's shows included broadcasters (Radio-Canada, Télé-Métropole, Vidéotron, TQS, le Canal Famille, Radio-Québec) as well as a coalition of organizations and pressure groups whose goal was to eliminate violence from children's programming. The shows identified as problematic by this coalition had been produced outside of Canada and were presented by private-sector broadcasting. The representatives of the broadcasters found it impossible to agree on a common point of view and recommended that problem be dealt with case by case by competent authorities.

The Quebec Ministry of Communications forwarded us a copy of a 1992 report, available through their offices, on the family and television in Quebec (Groupe de recherche sur les jeunes et les médias, 1992), which describes how families use and interact around the television set. This document includes statistics on the frequency with which males and females are depicted as aggressors and victims in French and English drama series (the rates are quite comparable for both linguistic groups).

Of the 10 provincial or territorial Ministries of Education who replied to our request for information, only Ontario specifically covered the topic of violence in the media in a resource book for a Media Literacy course designed for intermediate and senior level students. At the level of the primary grades there is a program dealing with preventing violence (*Second Step*), but it does not specifically focus on media violence. Alberta has prepared a fact sheet on media violence and children for use in Family Violence Prevention Month in 1991 and 1992. The article reprinted on this fact sheet, which appeared originally in the Institute for the Prevention of Child Abuse's publication *Connection* in the summer of 1992, suggests that parents turn off the television more often for children under the age of 10, particularly

when action or horror films are on, encourage more imaginative activities, and teach children what the real life consequences of aggression are. New Brunswick and Prince Edward Island also had specific courses in media literacy with more general objectives such as critical viewing skills specified. Alberta, British Columbia, Manitoba, Nova Scotia, and the Northwest Territories cover units dealing with media literacy in courses such as English, Language Arts, Health, Learning for Living, Personal Life Skills, and Social Studies. Such courses were much more likely to have content specified in the areas of advertisements on television, violence toward women, or sexual abuse than on the topic of violence on television. In general, without a clearly-specified curriculum, the onus appears to rest with individual teachers or local districts to decide whether and how to discuss the influence of television violence.

The Nova Scotia Education Media Library did list one film that seemed particularly relevant to the topic: "Shockwaves: Television in America", Marlin Films, 1984, documents how rates of aggression increased in a B.C. town that received television for the first time (the Williams study).

The Quebec Ministry of Education has prepared a package, available through its office, to facilitate students' discussions of the issues of sexism and violence in music videos ("Clippe mais clippe égal").

The Children's Broadcast Institute, a national coalition of broadcasters, producers, writers, advertisers, and children's advocacy groups, was formed 20 years ago to promote quality television programming for children. To reach this goal it annually presents awards of excellence for both French- and English-language programs. This year the organization renamed itself the Alliance for Children and Television (ACT). Alan Mirabelli, its chairman, indicated in an interview that the organization hopes to represent better the interests of parents and educators in its new format. Several initiatives are currently being developed. Local workshops on issues such as violence in television will be offered and reviews of relevant research will be prepared to better inform parents and teachers, and a regional office will be opened to serve Quebec. ACT does not directly address the issue of televised violence; however, by rewarding the creation of shows that offer more imaginative

and prosocial alternatives for children to watch, the group probably decreases children's viewing of violent content somewhat.

TAGS (Towards A Gentler Society) is a group initiated in Ottawa in 1992. Its main goal is to initiate public debate on the effects of violent toys and television on children. In 1992 the organization held a toy fair to publicize these issues and to make nonviolent toys more easily available to parents.

The North York Inter-Agency and Community Council is planning to hold a conference from May 12 to May 14, 1993 to examine the impact of violence on young children (up to grade 6) and the implications of this for parents and other adults involved with children. One planned focus is how to recognize the influences of the media on children and how to monitor and influence the media.

The C.M. Hincks Institute in Toronto is currently organizing a conference on the effects of televised violence on children. The conference will take place in February, 1993 if funding is obtained, and will bring together representatives of the television industry and regulating board (CAB, CRTC, representatives of the various networks) with advocacy groups, researchers, workers in the area of children's mental health, and members of the public. The goal is to promote dialogue and to serve as a vehicle for public education.

The Centre for Media and Values in Los Angeles, California has produced a media literacy workshop kit, available through its office, that includes handouts and suggested exercises that can be used to sensitize parents to the issue of violence in the media.

Suggestions for Future Initiatives in this Area

Lobbying to eliminate all violence from television programming has been singularly unsuccessful. Part of the problem is that cable television makes available programming from outside of Canada regardless of what is done by Canadian networks, but concerns from private broadcasters about maintaining audiences and about how to define violent content have also worked against such lobbying efforts.

Working to develop good quality children's programming probably impacts somewhat on how much violent content children are exposed to by making available more nonviolent options, but one cannot always be assured that children will watch these shows and children also watch shows primarily designed for older audiences. Nevertheless, encouraging the development of prosocial programming appears to be important as a means of fostering attitudes and behaviour that are incompatible with aggression and this approach should be further supported. Hearold (1986) has demonstrated that these positive effects of television are especially strong.

One strong recommendation for action is that information packages be designed for the use of teachers and parents describing what they can do to counter the effects of television violence on children. These could be distributed through local schools, community groups, and treatment agencies. The schools seem to be a particularly important point of intervention since they reach all children. The existing media literacy materials that we reviewed had little content directly related to this topic, so that clearly new content addressing the issue of violence on television should be developed.

Huesmann, Eron, Klein, Brice, & Fischer (1983) have described a program that is particularly pertinent to this issue. They reported on the

success of two interventions designed to make children less susceptible to the effects of violent television content. Both of these interventions were carried out on children who had the greatest preference for highly violent shows and reported watching these shows most of the time. The first intervention, carried out when the children were in grade 2 or grade 4, involved three hour-long training sessions designed to point out that characters in the violent shows behaved differently than most real people, that television techniques enabled these characters to appear to carry out feats that were actually impossible, and that the average person used different methods than the TV characters to solve problems. A comparison group also watched television and engaged in discussions for three hours but did not see violent programs and did not discuss the realism of the televised presentation. There were no differences between intervention and comparison groups after treatment on the judged realism of television shows and no changes in either group on peer-assessed aggression or reported viewing levels of television violence three months after the intervention. To the extent that the content of this intervention was similar to many media literacy programs, these results suggest that simple media literacy courses alone will not make children less vulnerable to violent content on television.

A second intervention, conducted 9 months later using the same children, employed more powerful procedures to change attitudes and behaviour. Children in the treatment group all agreed to participate in the making of a film to show children who had been "fooled by television or harmed by television violence or got into trouble because of imitating it". They wrote out arguments describing the negative aspects of television violence, were recorded on videotape reading these arguments, watched the videotapes of themselves and their classmates, and answered questions about their presentations during the course of two sessions. Children in the comparison group also wrote an essay, were videotaped reading it, and viewed their own and those of classmates, but the theme of the essay was "Why everyone should have a hobby". After the intervention, the treatment group held significantly more negative attitudes towards television than the comparison group and believed it to be significantly less realistic. More importantly, the treatment group was assessed by peers as

significantly less aggressive than the comparison group four months following the intervention, despite the fact that rates of viewing TV violence for the two groups did not differ following the intervention.

The results of this study strongly suggest that interventions designed to reduce the negative effects of viewing violent TV content should actively involve children in generating reasons why television violence is harmful rather than merely presenting these arguments to them for their passive consumption. Encouraging their commitment behaviorally by having them defend their position in public seems to be especially important component for attitudinal change to occur.

Huesmann *et al.*'s (1983) second intervention could be used as a model in the preparation of programs designed for use by teachers and parents. These programs are based on the principle that reducing the impact of violent content on children is more important than attempting to eliminate exposure to violence in the media. In line with Eron *et al.*'s (1983) findings, children between the ages of 6 and 10 would appear to be the most appropriate focus for these programs. Parental programs could also include suggestions on how parents can monitor and control children's television viewing while at the same time preserving the enjoyment of their own viewing time, and more general suggestions for how to parent effectively. These programs could be publicized through workshops organized for teachers and parents at the local level and under the sponsorship of local schools or children's mental health agencies.

Finally, broadcasting networks could also be encouraged to develop programs designed to help children counter the effects of violent content through attitudinal change. Having actors associated with violent roles stress the fact that their characters are fictitious rather than real and disavow their violent actions in short spots following programs might help children to place what they have seen in a more realistic perspective and limit how much they identify with violent characters.

References

- Anderson, D.R., Lorch, E.P., Smith, R., Bradford, R., & Levin, S.R. (1981). Effects of peer presence on preschool children's television-viewing behavior. *Developmental Psychology, 17*, 446-453.
- Anderson, D.R., Alwitt, L.F., Lorch, E.P., & Levin, S.R. (1979). Watching children watch television. In G. Hale & M. Lewis (Eds.), *Attention and the development of cognitive skills*. New York: Plenum.
- Atkin, C. (1983). Effects of realistic TV violence vs. fictional violence on aggression. *Journalism Quarterly, 60*, 615-621.
- Atkinson, D. & Goudreau, M. (1992). *Summary and analysis of various studies on violence and television*. Ottawa: Canadian Radio-television and Telecommunications Commission.
- Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. *Journal of Social Psychology, 1*, 589-595.
- Bandura, A., Ross, D., & Ross, S.A. (1963). Imitation of film-mediated aggressive models. *Journal of Abnormal and Social Psychology, 66*, 3-11.
- Bower, R.T. (1973). *Television and the public*. New York: Holt, Rinehart & Winston.
- Bryant, J., Carveth, R.A. & Brown, D. (1981). Television viewing and anxiety: An experimental examination. *Journal of Communication, 31*, 106-119.
- Chambers, J.H. & Ascione, F.R. (1987). The effects of prosocial and aggressive videogames on children's donating and helping. *Journal of Genetic Psychology, 148*, 499-505.
- Cooper, J. & Mackie, D. (1986). Video games and aggression in children. *Journal of Applied Social Psychology, 16*, 726-744.

- Drabman, R.S., & Thomas, M.H. (1974). Does media violence increase children's toleration of real-life aggression? *Developmental Psychology*, 10, 418-421.
- Drabman, R.S., & Thomas, M.H. (1976). Does watching violence on television cause apathy? *Paediatrics*, 57, 329-331.
- Freedman, J.L. (1984). Effect of television violence on aggressiveness. *Psychological Bulletin*, 96, 227-246.
- Graybill, D., Strawniak, M., Hunter, T. & O'Leary, M. (1987). Effects of playing versus observing violent versus nonviolent video games on children's aggression. *Psychology, A Quarterly Journal of Human Behavior*, 24, 1-7.
- Groupe de recherche sur les jeunes et les médias. (1992). *La famille et la télévision*. Québec: Ministère des Communications du Québec.
- Grusec, J.E. (1973). Effects of co-observer evaluations on imitation: A developmental study. *Developmental Psychology*, 8, 141.
- Hayes, D.S., & Birnbaum, D.W. (1980). Preschoolers' retention of televised events. Is a picture worth a thousand words? *Developmental Psychology*, 16, 410-416.
- Hayes, D.S., Chemelski, B.E. and Birnbaum, D.W.. (1981). Young children's incidental and intentional retention of televised events. *Developmental Psychology*, 17, 230-232.
- Hearold, S. (1986). A synthesis of 1043 effects of television on social behavior. In G. Comstock (Ed.), *Public communications and behavior: Volume I*. (pp. 65-133). New York: Academic Press.
- Hollenbeck, A.R. & Slaby, R.G. (1979). Infant visual and vocal responses to television. *Child Development*, 50, 41-45.
- Huesmann, L.R. (1986a). Cross-national communalities in the learning of aggression from media violence. In L.R. Huesmann & L.D. Eron (Eds.) *Television and the aggressive child: A cross-national comparison*, 239-257. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Huesmann, L.R. & Eron, L.D. (1986b). The development of aggression in children of different cultures: Psychological processes and exposure to violence. In L.R. Huesmann & L.D. Eron (Eds.), *Television and the aggressive child: A cross-national comparison*. 1-27. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Huesmann, L.R. (1986). Psychological processes promoting the relation between exposure to media violence and aggressive behavior by the viewer. *Journal of Social Issues*, 42, 125-139.
- Huesmann, L.R., Lagerspetz, K., & Eron, L.D. (1984). Intervening variables in the TV violence-aggression relation: Evidence from two countries. *Developmental Psychology*, 20, 746-775.
- Huesmann, L.R., Eron, L.D. Klein, R., Brice, P., & Fischer, P. (1983). Mitigating the imitation of aggressive behaviors by changing children's attitudes about media violence. *Journal of Personality and Social Psychology*, 44(5), 899-910.
- Johnston, A., DeLuca, D., Mustauth, K., & Diener E. (1977). Validation of a laboratory play measure of child aggression. *Child Development*, 48, 324-327.
- Josephson, W.L. (1987). Television violence and children aggression: Testing the priming, social script, and disinhibition predictions. *Journal of Personality and Social Psychology*, 53, 882-890.
- Joy, L.A., Kimball, M.M. & Zabrack, M.L. (1986). Television and children's aggressive behavior. In T.M. Williams (Ed.), *The Impact of television: A natural experiment in three communities* (pp.303-360). Orlando, FL: Academic Press, Inc.
- Lefkowitz, M.M., Eron, L.D., Walder, L.D., & Huesmann, L.R. (1977). *Growing up to be violent*. NY: Pergamon.
- Levin, S.R., Anderson, D.R., Lorch, E.P., Smith, R., & Bradford, R. (1981). Effects of peer presence on preschool children's television-viewing behavior. *Developmental Psychology*, 17, 446-453.
- Liebert, R.M., & Sprafkin, J. (1988). *The Early Window* (3rd ed.) New York: Pergamon.

- Liebert, R.M., & Baron, R.A. (1972). Short-term effects of televised aggression on children's aggressive behavior. In J.P. Murray, E.A. Rubinstein, & G.A. Comstock (Eds.), *Television and social behavior (Vol. 2): Television and social learning* (pp. 181-201). Washington, DC: U.S. Government Printing Office.
- Liss, M.B., Reinhardt, L.C. & Fredriksen, S. (1983). TV heroes: The impact of rhetoric and deeds. *Journal of Applied Developmental Psychology, 4*, 175-187.
- Martinez, Andrea (1992). *Scientific knowledge about television violence*. Ottawa: Canadian Radio-television and Telecommunications Commission.
- McCall, R.B., Parke, R.D., & Kavanaugh, R.D. (1977). Imitation of live and televised models by children one to three years of age. *Monographs of the Society for Research in Child Development, 42*, Serial No. 173.
- Mohr, P.J. (1979). Parental guidance of children's viewing of evening television programs. *Journal of Broadcasting, 23*, 213-228.
- Morgan, M. & Rothschild, N. (1987). Cohesion and control: adolescents' relationships with parents as mediators of television. *Journal of Early Adolescence, 7*, 299-314.
- Parke, R.D. (1978). Children's home environments: Social and cognitive effects. Altman, I., & Wohlwill, J.F. (Eds.) *Children and the environment*. NY: Plenum.
- Patterson, G.R., DeBaryshe, B.D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior on antisocial behavior. *American Psychologist, 44*, 329-335.
- Potts, R., Huston, A.C., & Wright, J.C. (1986). The effects of television form and violent content on boys' attention and social behavior. *Journal of Experimental Child Psychology, 41*, 1-17.
- Rosenthal, R. (1986). Media violence, antisocial behavior, and the social consequences of small effects. *Journal of Social Issues, 42*, 141-154.
- Rothschild, N. & Morgan, M. (1987). Cohesion and control: adolescents' relationships with parents as mediators of television. *Journal of Early Adolescence, 7*, 299-314.
- Schutte, N.S., Malouff, J.M., Post-Gordon, J.C. & Rodasta, A.L. (1988). Effects of playing videogames on children's aggressive and other behaviors. *Journal of Applied Social Psychology, 18*, 454-460.
- Schramm, W., Lyle, J., & Parker, E.B. (1961). *Television in the lives of our children*. Stanford, CA: Stanford University Press.
- St. Peters, M., Fitch, M., Huston, A.C., Wright, J.C., & Eakins, D.J. (1991). Television and families: What do young children watch with their parents? *Child Development, 63*, 1409-1423.
- Streicher, L., & Bonney, N. (1974). Children talk about television. *Journal of Communication, 24*, 54-61.
- Ward, S., Reale, G., & Levinson, D. (1972). Children's perceptions, explanations, and judgments of television advertising: A further exploration. In E.A. Rubinstein, G.A. Comstock, & J.P. Murray (Eds.), *Television and social behavior. Vol IV: Television in day-to-day life: Patterns of use* (pp. 468-490). Washington, DC: U.S. Government Printing Office.
- Watkins, B., Calvert, S., Huston-Stein, A., & Wright, J.C. (1980). Children's recall of television material: Effects of presentation mode and adult labelling. *Developmental Psychology, 16*, 672-679.
- Williams, T.M. (1986). Background and overview. In T.M. Williams (Ed.), *The impact of television: A natural experiment in three communities*. 1-38 Orlando FL: Academic Press.
- Williams, T.M., & Handford, A.G. (1986). Television and other leisure activities. In T.M. Williams (Ed.), *The impact of television: A natural experiment in three communities* (pp. 143-213). Orlando, FL: Academic Press.