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ABSTRACT

Studies and writings on the effects of television on children are reviewed and summarized. Topics are the young people's pattern of exposure to television, the nature of their viewing experience, the way they respond to television, and the direct effects on their values, attitudes and behavior. Research on the influence of television violence on aggressive and anti-social behavior is discussed at length; it is concluded that violent television entertainment increases the probability of subsequent aggressive behavior on the part of children and youth. The question of what, if any, action should be based on these findings is also discussed. (SK)

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WHAT IS THE EVIDENCE?

George Comstock

April 1975

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EFFECTS OF TELEVISION ON CHILDREN:  
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By George Comstock  
The Rand Corporation

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## EFFECTS OF TELEVISION ON CHILDREN: WHAT IS THE EVIDENCE?

George Comstock

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There is no television-related topic with policy implications to which social science has devoted more attention than the question of television's effects on children and youth. A superficial examination of the pertinent scientific literature since the early 1950's, when the widespread public adoption of television began, gives two main impressions--great bulk, and little progress.

The first impression is accurate. A just-completed search of the scientific literature on television and human behavior found that about 60 percent of the more than 2,300 items found concerned television and young people (Comstock and Fisher, 1975).

The second impression is false. Although many of the issues which have been the foci of research were raised very early, it has only been with the passing of time and the accumulation of findings that anything which could be said to pass for knowledge has been acquired. In addition, there are several instances in which early findings or expectations have been reversed.

It is difficult to generalize about such a multitudinous literature. Nevertheless, certain propositions can be said with some confidence to receive support. They cover such disparate topics as (a) young people's pattern of exposure to television; (b) the nature of their viewing experience; (c) the way they respond to television; and (d) certain more direct effects on values, attitudes, and behavior.

### PATTERNS OF EXPOSURE

Viewing itself is an effect of television. The consensus of a large number of studies is that:

- o Children typically begin viewing television regularly three or four years before entering the first grade (Lyle and Hoffman, 1972b).
- o Most children watch some television every day, and most watch two hours or more per day (Lyle, 1972).
- o Individuals vary widely in amount of viewing. In one study of sixth and tenth graders, ten percent did not view at all on a typical school day while 25 percent reported viewing between five and six hours each school day (Lyle and Hoffman, 1972a). In another study of black males in kindergarten and first grade, weekly viewing ranged from five to 42 hours (Murray, 1972).
- o Amount of viewing increases during the elementary school years, then decreases during the high school years (Lyle, 1972).
- o Amount of viewing is greater for young persons who are black, are from families of lower socioeconomic status, and are lower in academic achievement and IQ (Lyle and Hoffman, 1972a; Greenberg and Dervin, 1970).

#### THE TELEVISION EXPERIENCE

The viewing experience itself is an addition to the life of the young person. A variety of studies, including one in which the behavior of families while viewing television was videotaped (Bechtel, Achelpohl, and Akers, 1972), indicate that:

- o Viewing by young persons is highly active and discontinuous. Young viewers often do other things while watching, such as homework (Lyle and Hoffman, 1972a), frequently drift in and out of the room or otherwise divide their attention (Bechtel, Achelpohl, and Akers, 1972), and very young children often disrupt their viewing by imitating what they have just seen (Murray, 1972). These findings reverse earlier studies when television was novel, which reported viewing as rapt, undivided, and continuous (Maccoby, 1951).
- o Amount of viewing is an index of involvement in a variegated experience of which there are several identifiable classes or modes and does not represent the number of minutes or hours attention is given to the screen (Bechtel, Achelpohl, and Akers, 1972).

### RESPONSES TO TELEVISION

The response of young persons to television also represents additions to their lives. A variety of studies indicate that:

- o Children develop definite tastes in regard to television programs as early as age three, and tastes are related to age, sex, and race (Lyle, 1972; Greenberg and Dervin, 1970).
- o Young persons' expressed preference for particular programs ("favorites") is a very poor index of exposure to a class of content (such as violence) because much else may be watched besides favorites, and the television diets of young individuals vary immensely (Chaffee, 1972; McLeod, Atkin, and Chaffee, 1972a; Himmelweit, Oppenheim, and Vince, 1958). These findings mean that amount of viewing cannot safely be used as a proxy for a measure of exposure to a particular class of television content even when television is "saturated" with such content, and that the often-heard opinion of parents that young people all watch the same thing is simply wrong.
- o Young persons frequently describe television drama as accurately portraying reality, and such a perception is more frequent among those who are black or from families of lower socioeconomic status (Greenberg and Dervin, 1970; McLeod, Atkin, and Chaffee, 1972a, 1972b; Lyle and Hoffman, 1972a).
- o Young persons typically turn to television for entertainment and diversion, and prefer music rather than television when they are hurt, angry, or lonely (Lyle and Hoffman, 1972a). However, extremely heavy consumption of television in the individual case should be tentatively interpreted as a symptom of psychological distress (Maccoby, 1964).
- o Commercials are the focus of most complaints about television made by young persons (Lyle, 1972). By the second grade, children begin to express distrust of commercials and by the sixth grade "global" distrust is said to exist (Ward, 1972). However, young children are not typically capable of distinguishing commercials and the

economic motive behind them from ordinary program content (Ward, Wackman, Faber, and Lesser, 1974).

- o Young persons, like adults, typically believe television news is credible (Lyle and Hoffman, 1972a; Bower, 1973).
- o Television for young persons is an experience largely devoid of direct parental influence. Parents typically do not attempt to control quantity or character of viewing, although there are certainly restrictions in some families (Lyle, 1972; Bower, 1973). Even in a sample of nursery school children, 40 percent said they made their own program selections (Lyle and Hoffman, 1972b). However, parents often express concern, and the fact that parental efforts to ban certain programs and to stipulate the viewing of others increases when children approach adolescence suggests unarticulated alarm over television's competition as a socializing agent (Table 7-21, Bower, 1973). Furthermore, the family can hardly be said to be irrelevant because viewing and various attitudes and classes of behavior relevant to television have been found to be correlated with various family attributes other than race and income (Chaffee, 1972; Chaffee and McLeod, 1972; Chaffee, McLeod, and Atkin, 1971; Chaffee, McLeod, and Wackman, 1973).

#### DIRECT EFFECTS

The accumulated evidence suggests that television affects the beliefs and the behavior of young persons. However, "accumulated" must be emphasized. The limits of social science methodology make an inferential leap necessary for such a conclusion, but it is far more consistent with the evidence than a "no effects" proposition. So must the fact that quantitative impact is uncertain. The available evidence is largely limited to the direction of effects; we can speak of the quality but not the quantity of impact. The findings of a vast literature converge in these respects:

- o Television affects young persons' attitudes and information, especially on topics where the environment does not supply first-hand experience or other sources of information (DeFleur and DeFleur, 1967; Dominick and Greenberg, 1972; Gerbner and Gross, 1974; McCombs and Shaw, 1974; Hollander, 1971). However, one would be misguided



to expect dramatic shifts or large effects in regard to beliefs because of the large number of factors which influence them (Klapper, 1957, 1960; Halloran, 1967).

- o The behavior observed on television becomes acquired or learned by young children in the absence of immediate practice or reinforcement, and such acquisition occurs in regard to a variety of classes of behavior, including socially desirable as well as aggressive behavior (Bandura, 1973, 1969, 1965, 1962; Liebert, Neale, and Davidson, 1973; Rubinstein, Liebert, Neale, and Poulos, 1974).
- o The observation of television portrayals can alter the balance between the inclination to perform an act and the inhibitions against such performance on the part of adolescents (Berkowitz, 1962; Goranson, 1969a, 1969b, 1970). Although most of the evidence to date concerns the disinhibition or stimulation of aggression, there is little reason to think the same effect would not occur for other classes of behavior.
- o The actual performance of an acquired act depends on various factors relating to the television stimuli, the viewer, and the environment. Among these factors are the degree to which the observed behavior is perceived as rewarded or effective, the viewer's state of excitation or arousal, the degree of similarity between the observed environment and the actual environment, the availability of a target perceived as appropriate for the act, and the perceived lack of sanctions against the act (Bandura, 1973; Berkowitz, 1962; Goranson, 1970).
- o Probably, exciting television content of a wide variety of classes of which violence is only one example can activate or stimulate behavior which otherwise would not be expressed or would be expressed at a lower level (Tannenbaum and Zillmann, in press).
- o The trend of evidence reverses early findings that television violence reduces aggression among young people by inducing catharsis, although there are circumstances in which the observation of violence will lower aggressiveness (Feshbach, 1955, 1961; Feshbach and Singer, 1971; Berkowitz and Rawlings, 1963; Goranson, 1969a).

### THE BIG DEBATE AND THE HIDDEN ISSUES

The most controversial of television's possible effects has been the influence of television violence on aggressive and antisocial behavior. The question has occupied no less than seven Congressional hearings between 1952 and 1974;\* was treated extensively in a well-known staff report to the National Commission on the Causes and Prevention of Violence (Baker and Ball, 1969); and was the subject of what is sometimes called "the Surgeon General's study," which consists of a report of a twelve-member advisory panel (Surgeon General's Scientific Advisory Committee on Television and Social Behavior, 1972) and 2,300 pages of varied research in five volumes (Comstock and Rubinstein, 1972; Murray, Rubinstein, and Comstock, 1972; Comstock and Rubinstein, 1972; Rubinstein, Comstock, and Murray, 1972; and Comstock, Rubinstein, and Murray, 1972).

In regard to the substantive issue, the most scientifically justifiable conclusion, given the available evidence, is that violent television entertainment increases the probability of subsequent aggressive behavior on the part of children and youth. However, the case cannot be said to be closed, and the social impact implied by that conclusion may be negligible or large (Comstock, 1972).

At present, the most interesting issues raised by the debate are hidden ones. In this respect, television violence provides an excellent example of the way in which social science and social scientists can muddle a policy issue.

A proper starting point is an aside by Thomas Pynchon in his extraordinary *Gravity's Rainbow*:

Proverbs for Paranoids, 3: If they can get you asking the wrong questions, they don't have to worry about answers. (p. 251)

As one small part of an evaluation of the state of scientific knowledge about television and human behavior, all the works which synthesize and review prior research were assembled for what amounted to a "review of the reviews." Of the reviews which could be said to merit particular attention, more than

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\* A House hearing in 1952, and Senate hearings in 1954, 1955, 1962, 1964, 1972, and 1974.

30 dealt with the evidence on whether television can be said to contribute to aggression or socially undesirable behavior.

A polling of the conclusions would lead one to accept the proposition that under at least some circumstances, viewing violence increases the likelihood of some form of subsequent aggressiveness. Nevertheless, it is also difficult to escape the impression that there are very wide differences in the acceptance of the findings. In fact, when one rehearses the various statements, one finds the term "cacophony" appealing.

Let us take several examples:

- o Kaplan and Singer (in press): "The effects of television violence on aggressive behavior in the 'real world' seem slight."
- o Singer (1971): "A careful scrutiny of the formal scientific literature does not yield evidence that warrants a judgment linking the increased violence in the United States to the portrayal of violence in fiction or news reporting on TV or movie film."
- o Klapper (1960): ". . . crime and violence in the media are not likely to be prime movers toward delinquency, but . . . such fare is likely instead to reinforce the existing behavioral tendencies, good or ill, of individual audience members."
- o Surgeon General's Scientific Advisory Committee on Television and Social Behavior (1972): ". . . there is a convergence of the fairly substantial experimental evidence for short-run causation of aggression among some children by viewing violence on the screen and the much less certain evidence from field studies that extensive violence viewing preceded some long-run manifestations of aggressive behavior. This convergence. . . constitutes some preliminary indication of a causal relationship. . ."
- o Bandura (1973): "People who watch commercial television for any period of time will learn a number of aggressive tactics and countless methods of murder. . . ."
- o Berkowitz (1962): "While it may be true that television, movies, and comic books will excite antisocial conduct from only a relatively small number of people, we can also say that the heavy dosage of

violence in the media heightens the probability that someone in the audience will behave aggressively in a later situation. . . . Unfortunately. . . the observer instigated to carry out hostile acts usually injures an innocent bystander."

- o Goranson (1970): "Novel, aggressive behavior sequences are learned by children through exposure to realistic portrayals of aggression on television or in films. . . . The actual performance of aggressive behaviors learned from the media is largely contingent on the child's belief in the effectiveness of aggression in attaining his goals. . . . The mass media typically present aggression as a highly effective form of behavior."
- o Liebert, Neale, and Davidson (1973): ". . . laboratory studies, correlational field studies, and naturalistic experiments all show that exposure to television can, and often does, make viewers significantly more aggressive. . ."

When it is realized that the review by Singer was sponsored by the television industry and that the same industry successfully recommended that Bandura and Berkowitz not be appointed to the Surgeon General's committee, the impression of conflict over the findings is strengthened.\* However, a review-by-review examination leads to the startling conclusion that such an impression is false.

The fact is that, with some exceptions, most of the reviews agree on the interpretation of the findings. For example, Kaplan and Singer concur with Bandura that laboratory studies have demonstrated that frustrated children immediately after viewing aggressive behavior on television may imitate the portrayed actions in a situation in which the same stimuli portrayed on television are present. Berkowitz agrees with Kaplan and Singer that, "By and large, there are no convincing data that the mass media can be included among the major determinants of delinquency and crime." Liebert, Neale, and Davidson nowhere find data which permit the inference that the level of criminal violence is caused by television violence. As one shifts back and forth, there are few statements about findings on which there would be agreement.

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\* For an account of the committee appointment procedure, in which the networks were asked to indicate persons whom they perceived as inappropriate, and the resulting controversy, see Boffey, P. M., and J. Walsh. Study of TV violence: Seven top researchers blackballed from panel. *Science*, May 22, 1970, 168, 949-952.

The perception of disagreement is nevertheless real. But for the most part the disagreement does not center on the interpretation of findings, but on the nature of the questions which should be put to the findings. There are two such questions. They are:

- o The criteria invoked for alarm about effects.
- o The structure employed to lay out the evidence for evaluation.

Another way of putting it is to say that the real issues are:

- o the degree of seriousness of effect which must be demonstrated before one is ready to agree that possible remedies should be reviewed; and,
- o the concepts and general schema which are most useful for making such a determination from the available empirical evidence.\*

In the first instance, the issue is simply what should be regarded as cause for action. Those whose conclusions emphasize that there are effects worthy of alarm give prominence to the criterion of "aggression" without great concern for its severity or illegality. Those whose conclusions emphasize that there is little or no evidence of effects worthy of alarm give prominence to the criterion of real life "serious crime and delinquency."

In the second instance, the context in which the evidence is placed, the concepts employed and the way findings are organized around those concepts, and the degree to which formal theory is used strongly affect the emphasis of the conclusion. For example:

- o Kaplan and Singer place the evidence on television's influence on aggression in the context of other influences, such as war, famine, racial conflict, economic disparities, and other unpleasant human conditions. The effect is to shift attention from the issue of whether television may be said to have an undesired effect, whatever the magnitude, to the question of whether there aren't more threatening things to worry about, while at the same time obscuring the easily overlooked point that of many factors

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\* It should be clear that both issues are entirely independent of the acceptability of likely effectiveness of any possible remedies, and that the analysis of possible remedies is entirely separate from the analysis required to determine whether there is some justification for examining remedial alternatives.

television is one of the more amenable to human control.

- o Klapper sorts the findings in terms of strong, direct effects which occur in the absence of circumstances of personal attributes consistent with such effects vs. effects which are consistent with what would have been predicated on the basis of circumstances or attributes alone. Effects of the latter sort are said to represent "reinforcement" by the media of tendencies already present. An example would be the instigation by television violence of aggression in a highly aggressive experimental subject. As a result, a concept connoting little or no independent contribution by the media ("reinforcement") deters the recognition of such data as illustrating the role of the media in adding to or maintaining already present tendencies whose likelihood of expression is thereby heightened.
- o Bandura relies principally on the laboratory confirmation of hypotheses derived from social learning theory, a theory which he holds to be relevant to real life because a variety of survey and anecdotal evidence is consistent with it, while at the same time employing a definition of aggression that is broad and not limited to serious lawbreaking--"behavior that results in personal injury and in destruction of property." As a result, the kind of data demanded by Singer becomes irrelevant.

That these are the true areas of difference has gone almost unnoticed. One "proof" of the hidden nature of the true debate is that there is continuing argument over the substantive findings and almost none about the legitimacy of the alternative criteria for becoming alarmed about television's contribution to undesired behavior or about the implications for the conclusions reached of the form in which the evidence is arrayed.

The consequence has been to preclude resolution of the problem. Pynchon might conclude that "they" had done a fine job, indeed. This circumstance leads to two recommendations:

- o That analysis be refocused on the various criteria for accepting the proposition that some corrective action is required, and the strength of the evidence for varying classes of criteria.

- o That analysis be refocused on the implications of the alternative conceptual schemas available for evaluating the evidence, and their implications for the emphasis of the conclusion.

No judgment is offered here about which criteria or conceptual schemas might be appropriate. However, it should be pointed out that in an area such as network programming policy, where a private industry makes decisions in response to a wide range of pressures, including indications of public displeasure, it would be an error to believe that the universe is limited to effects construable as "serious" crimes and delinquency. One need not endorse the demand for a reduction in television violence to recognize that it would be perfectly reasonable for parents and others to seek such an outcome solely on the basis of evidence that violent television temporarily makes children and young persons unruly, and that compliance by the industry would simply represent the normal manner in which policy comes about.

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