pects of coverage; the recruiting into journalism and broadcasting of more blacks; the improving of news media coordination with police, including the development of codes for riot reporting; the adoption of guidelines within the media to increase accurate and responsible reporting of racial and riot news; and the establishment of an Institute of Urban Communications to train journalists in urban affairs, increase the quantity of trained black journalists, develop ways to improve press-police relations, evaluate racial and riot coverage, and undertake continuing research.

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Principal Conclusions: The weight of evidence from research is that violence in television entertainment stimulates aggressive behavior, the National Commission on the Causes and Prevention of Violence concluded. The broadcasting industry should eliminate cartoons containing serious violence and reduce programming with violent episodes; undertake more effort to control the context in which violence is portrayed in television drama; and undertake more active and extensive research on the effects of television violence. Parents should supervise children's viewing, and express disapproval of programs to broadcasters.

Theory and Discussion: National concern has grown regarding the effects of the violence portrayed on television, particularly on children, because of the prominent place of television in American life. Research suggests that whether a child learns violent behavior by observing it on television depends upon a number of factors: the degree to which he identifies with television characters, the potential utility to him of the behaviors portrayed, and the extent to which he believes he can gratify through aggressive behavior.

Younger children are particularly susceptible to this form of observational learning, since much of the material on television, being new to them, absorbs their attention; they are also less able to discriminate between reality and fantasy. Even adolescents consciously rely on television models to learn how to behave in real-life situations.

A large body of research confirms that children can and do learn aggressive behavior from what they see on television, and they learn it equally well from real-life, fantasy, or cartoon models. Their reenactment of this behavior is also influenced by the rewards and punishments received by the models they observe. Although some authorities maintain that violence on television can drain off aggressive tendencies, the majority of experimental studies indicate that observed violence stimulates aggressive behavior. Aggression is most likely to occur when the observed aggression is justified and presented in a context similar to the child's own situation.

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Principal Findings: The media habits of manufacturing employees who shifted from a five-day to a four-day workweek were influenced by the restructuring of work and leisure time. Exposure to television increased moderately on the weekend, while weekday television viewing time remained essentially the same, in spite of the fact that the time spent watching television during the week now accounted for a greater proportion of the reduced leisure time. The types of television programming that were viewed shifted in the direction of leisure-oriented shows, such as fish and game reports, gourmet cooking programs, and so on. There was also a large gain in magazine reading time, but newspaper reading did not change. Comparison of differences soon after the switchover to the four-day week versus differences after a full year of experience indicates that most magazine changes are of a long-range nature rather than immediate, while television changes occurred immediately.

Design and Methodology: A Denver manufacturing firm specializing in recreational equipment was the study site. The firm, employing about 550 people, went to the four-day workweek in February 1971. After the change, all employees worked 9-3/4 hours daily from Monday through Thursday. Subjects were a random sample of 230 of the employees as of June 1971 who received self-administered questionnaires distributed through company channels. After completing the questionnaire, employees placed them in sealed envelopes and deposited them in a special box near the time clock for their building. Usable questionnaires were returned by 186 workers, a return rate of 81 percent. In the initial survey, there were a number of items on use of time and media use for "whenever on a 5-day week" and for "now on the 4-day week." Respondents were also asked whether they had started watching any of a set of specific television programs since the start of the shorter workweek, or if they had increased viewing time for these programs since the change. A second-wave survey was conducted in February 1972, after a full year of experience with the new workweek. Of the original 186 respondents, 100 fully completed the second questionnaire. The attrition was due primarily to the loss of 50 workers who had left the firm. The follow-up sample did not differ from the original group on any of the key demographics.

Theory and Discussion: Analysis of one-year changes by demographic characteristics revealed important differences only on weekends. Blue-collar workers watched more television on weekends, and white-collar workers watched less. A parallel difference was seen for those respondents with some college training and higher incomes, who watched less television on weekends, while those with less education and lower incomes increased their viewing. Women watched the same amount of weekend television after the transition, while men viewed more. Newspaper reading time did not change. Magazine time did not increase immediately, but had more than doubled at the end of one year. There was no reliable change in the primary source of news.

The changes in media use were attributed to greater amounts of leisure time on weekends with the four-day workweek. Not only did exposure increase in response to the increase in available time, but specific types of content appear to have been sought out for possible utilitarian applications to leisure activities. This is supported by the finding that special-interest magazines had an increased readership time of about 18 percent, while general readership magazines had increases of only four percent.

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Principal Findings: Preschool Southern black children presented with televised black and white models, who were either rewarded or punished, imitated the white more than the black model and the rewarded more than the punished model. The model's race seemed to be as important as the consequences of the portrayed behavior, with the punished white model being imitated at approximately the same frequency as the rewarded black model. No difference was found between 20 and 80 percent reward or punishment rates.
Design and Methodology: Subjects were 80 black boys and girls, ages three to five. Each subject was individually shown a display of toys and asked to make a choice. The subject was then presented with the “open-ended” choice task, which involved choosing one or another toy in 15 pairs. “If you will do this for me, I will give you a toy like the one you chose earlier,” the experimenter told the subject. The experimenter then turned on the monitor, which showed a model making his first choice without consequence. This procedure continued until the child had completed his choices. The subject was then presented with the “experimental” choice task of 25 toy pairs and then viewed the televised sequence in which the model was rewarded or punished after each choice. The primary measure was the number of imitative choices made by the subjects. Comparisons were made between the operant level of imitation and the level of imitation produced by the experimental situation.

Theory and Discussion: While earlier research has indicated that the greater the percentage of positive reinforcement of the model, the more likely he is to be imitated, the present study revealed no effect for the percentage of reinforcement. Perhaps the most striking finding in the study was the increased tendency of the black subjects to imitate the white model. The authors note that this result might have been influenced by the fact that the subjects were drawn from a low-status environment—government-sponsored preschool centers in disadvantaged areas of the urban South. But because of the striking difference in the rate of white imitation between the “open-ended” and “experimental” phases, it seems possible that the introduction of response consequences in the experimental stage served as a cue to the subject that certain behaviors were more appropriate than others, including racial imitation.


Principal Findings: Independent television stations spend less time on local news coverage than do network affiliates. Independent UHF stations averaged 10.5 minutes daily and independent VHF stations, 11.8 minutes daily, while the network affiliate average was 23.3 minutes. Other negatives found for independent UHF stations were limited locally originated public affairs programming and limited airing of either news or public affairs programming in primetime. However, independent VHF stations did appear to be providing more diversity in local news than the UHF stations and to be presenting more public affairs programming in primetime than the network affiliates.

Design and Methodology: In each of 10 randomly selected markets, two stations were chosen, a network affiliate and either a UHF or VHF independent. Basic data for each station included the following: complete copies of all locally aired newscasts from a single selected weekday; time listings of all locally aired newscasts presented on Saturday and Sunday; and times and descriptions of all local public affairs programs broadcast during the sample week.

Theory and Discussion: In regard to the significant differences between UHF and VHF stations, the author argues that the FCC’s strong backing for utilization of the UHF spectrum in the public interest has not borne fruit. He believes the most probable reason for this appears to be a lack of financial strength among UHF independents.


Principal Findings: Second-grade girls imitated televised boys significantly more frequently than boys imitated girls. White and black girls differed in peer models imitated, with white girls choosing to imitate the white and black boys most frequently and black girls choosing to imitate the black boy most frequently and the white boy least frequently. Video attention also affected preference. In each sequence, the camera zoomed in on one of four models. Children who were the subject of the camera zoom were imitated with a frequency greater than chance.

Design and Methodology: Subjects were 60 second-grade children (15 white females, 15 white males, 15 black females, and 15 black males). The children answered a set of 20 multiple-choice questions, 10 of which were purposely too difficult for the second-grade subjects, as they viewed a videotape of four age-peers answering the same questions. The four age-peers reflected the racial and sexual composition of the sample—there was a white female, a white male, a black female, and a black male. After each question was read by a female narrator, each of the four age-peers marked prearranged answers which the quartet help up simultaneously. The first camera shot included all four models. Then the camera zoomed in on one and his answer and moved slowly to the other three answers. Each model was the subject of the zoom one out of four times. The subjects answered the questions concurrently with the models. The dependent variable was the degree to which the subject’s answers matched those of the various alternative models.

Theory and Discussion: The finding that girls favored boy models is contrary to previous work in which like-sexed models were favored over cross-sexed models. The unexpected effect of the camera zoom suggests that the television camera is an important discriminative cue for today’s children.


Principal Findings: Second-grade children imitated adults more than peer models. Given the choice of same-sex and opposite-sex peer and adult models, both white and black girls imitated the woman, and black boys imitated the man. White boys imitated both the man and the woman to an equal extent. Generally, boys imitated less than girls and their model choices were more varied.

Design and Methodology: Subjects were 60 second-grade children (15 white females, 15 white males, 15 Negro females, and 15 Negro males). The children answered a set of 20 multiple-choice questions, 10 of which were purposely too difficult for the second-grade subjects, as they viewed a videotape of four models answering the same questions. The models were an adult male, an adult female, a boy, and a girl. After each question was read by a female narrator, each model marked prearranged answers which the quartet held up simultaneously. The first camera shot included all four models. Then the camera zoomed in on one model and his answer and moved slowly to show the answers of the other three models. Each model was the subject of the zoom one out of four times. The subjects answered the questions concurrently with the models. The dependent variable was the degree to which the subject’s answers matched those of the various alternative models.

Theory and Discussion: The observed preference for adult over peer models is consistent with the hypothesis that it is most rewarding to imitate those who are superior in an age-grade hierarchy or some other system of superordination.
Noble, G. Discrimination between different forms of televised aggression by delinquent and non-delinquent boys. *British Journal of Criminology*, 1970, 11, 230-244.

**Principal Findings:** Delinquent boys were less able than nondelinquents to classify and describe aggressive television programs. Delinquent boys frequently repeated verbal categories and gave significantly fewer verbal categories than did nondelinquents. However, the more aggressive delinquents did not provide significantly fewer verbal categories than either less aggressive delinquents or nondelinquents. Seven types of categories accounted for 91 percent of those elicited, and there were no significant differences between delinquents and nondelinquents in regard to six of the seven categories. However, unlike nondelinquents, delinquents tended to differentiate between aggressive television programs where the hero fought alone and aggressive television programs where the hero fought in the company of friends. Delinquents did not view aggressive television programs in a more homogeneous or undifferentiated way than nondelinquents. Delinquents, whether aggressive or not, did not perceive fighting in television programs as significantly more real or lifelike than nondelinquents. Delinquents, whether aggressive or not, were also not more likely than nondelinquents to perceive that the fighting seen on television was to stop crime or was justified.

**Design and Methodology:** Thirty-seven delinquent boys, aged 12 to 15 years, were interviewed for a year. They were divided into the following groups: boys without a social conflict, boys with a social conflict, and those with a conflict and a delinquent friend. Delinquents without a social conflict were more likely to perceive the fight as a way of solving the conflict. Delinquents with a social conflict were more likely to see the fight as a way of asserting dominance. Delinquents with a conflict and a delinquent friend were more likely to see the fight as a way of avoiding a conflict.

**Theorists and Discussion:** The study supported previous research which found that delinquents were more likely to use aggressive television programs to reiterate the theme of aggression (e.g., because it's a Western) than were nondelinquents. The investigator argues that this finding may not warrant the label of "cognitive poverty" used by others because delinquents were somewhat more likely to produce verbal categories which were independent from each other than were nondelinquents. The author believes that it may be possible for delinquents to use aggressive television as do nondelinquents for escapist functions without direct imitation.


**Principal Findings:** Observed in a classroom play setting, children played significantly less constructively after viewing realistically rather than stylistically filmed aggression and after seeing aggression filmed so that they could see the victim. They played most constructively after viewing stylistic aggression filmed at a distance so the victim could not be seen. Significant amounts of destructive play were apparent only after realistically filmed aggression had been viewed.

**Design and Methodology:** The subjects, 48 racially mixed working-class students between the ages of six and seven, were randomly assigned to one of four groups. Each group viewed a different film depicting either realistic or stylistic aggression and filmed either with the victim in view or at a distance. Measures of constructive and destructive play were taken during a play observation session, in which the children played in self-selected pairs using toys normally available in the classroom.

**Theory and Discussion:** The author argues that constructive play was depressed by anxiety, which was presumably strongest when the aggression was portrayed realistically with the victim in view. He notes, however, that the constructive play scores were greatest for the control group which saw no film. However, the pattern was reversed for working-class children, who engaged in more constructive play and interacted more after viewing the war film.

**Design and Methodology:** A random sample of 28 six-year-old children was drawn to include eight children of above-average intelligence, 12 children of average intelligence, and eight of below-average intelligence. Six groups of children of equal ability were formed, with one group of children of average ability serving as a control group. On the first day of the experiment, the children were allowed to play and were led to believe they were being photographed. On the second day, half of the groups were shown a war film and the other half, a puppet film. On the third day, each experimental group was shown the film which they had previously seen. The control group played with toys both days. During all sessions, the children were invited to play with toys for 20 minutes, and six half-minute segments were filmed for later scoring, using time-lapse photography. The toys represented objects relevant either to the war film or the puppet film, or were neutral in character. A principal measure was the frequency with which each child played with each class of toy. "Constructiveness" of play was rated in terms of the degree to which the toys were used in imaginative play. Social interaction was scored on the basis of whether the child talked to, tried to talk to, or played with another child.

**Theory and Discussion:** The research objectives were to test the hypothesis that viewing a film would influence children's play with particular toys, not because of modeling effects, but because of contiguity in time of similar stimuli, and to ascertain whether viewing a war film would cause both a decrease in frequency of social interaction and a regression in the creativity of play, presumably because of aroused anxiety. Evidence for the contiguity hypothesis was mixed, since the puppet film did not increase play with puppets. Middle-class, but not working-class, children did interact less and regression in their play behavior after watching the war film. The authors interpret this result as support for the anxiety hypothesis, explaining that exposure to violent films would be expected to arouse more anxiety in middle-class than in working-class children.
could have been influenced by factors other than anxiety, such as the degree to which the children enjoyed the films.


Principal Findings: This study was undertaken to assess the effects of a massive anti-smoking campaign launched on television in the late 1960s. Although viewers in the area surveyed could have been exposed to as many as 80 to 100 commercials per week, 10 percent of the sample could not recall viewing a single anti-smoking commercial, and about 80 percent were unable to recall a specific commercial. Nonsmokers were more likely than smokers to perceive the commercials as effective. When smokers were asked whether the commercials had affected their personal smoking habits, 34 percent of a student sample and 29 of a general population sample said they had cut down; 34 percent of the students and 40 percent of the general population samples said they now thought more about the harmful effects of smoking; and 22 percent of the student but none of the general population sample actually stopped smoking. The commercials were more likely to influence those who wanted to stop smoking, but only about half of those who reported that the commercials had helped them cut down.

Design and Methodology: The respondents were 621 students from Central Florida junior and senior high school and freshmen at Florida Tech and 300 residents of the area. The students filled out questionnaires in class, while the respondents in the general population sample were interviewed by telephone.

Theory and Discussion: In the general population sample, heavy smokers were least likely to be influenced by the commercials. However, among the student sample, heavy smokers were most likely to report influence. The lighter student smokers appeared to feel that their smoking would cause few, if any, health problems. Although 63 percent of the student smokers and 73 percent of smokers in the general population believed that smoking is harmful, two-thirds had not changed their smoking habits.

The author concludes that the campaign was severely limited in producing behavior effects, noting that only those persons who were already inclined to give up smoking reported that the commercials were effective and fewer than half of these cited the commercials as an incentive to stop. He also observes that many respondents were apparently able to live with dissonance, as the great majority of smokers responded that smoking was hazardous to health, but relatively few were taking steps to restore cognitive consistency by stopping.


Principal Findings: Preschool children responded more emotionally to films portraying human and cartoon violence than to nonviolent films. The children selected the human violence film as scariest, recalled more details from the human violence film, liked the cartoon nonviolence best, and liked the two cartoon films better than the two films involving human characters.

Design and Methodology: Subjects were 12 boys and 13 girls selected from the University of Georgia Preschool Laboratories, ranging between 4.5 and 5.5 years of age and estimated to be of normal intelligence. Five subjects were black; the others Caucasian. Five 3- to 4-minute television episodes were shown to all subjects.

One was the introductory episode which was shown first to all subjects—a lady playing a guitar. For the other four episodes, order of presentation was randomized. In the “human violence” episode, a grandmother was strangled in the presence of a young child. In the “cartoon violence” episode, Spiderman is trapped in a cave after encounters with several monsters. In the “human nonviolence” episode, a boy and a girl in Switzerland visit a town and their grandfather’s farm. In the “cartoon nonviolence” episode, a boy and his dog go on a picnic. The dependent measure was galvanic skin response (GSR), a recognized physiological measure of emotionality. Time-sampled GSR measures covered the latter portion of the introductory episode and all other episodes.

GSR data for the first post-introductory episode were analyzed separately to avoid carryover effects. Independent variables were film character (cartoon vs. noncartoon), film violence (violent vs. nonviolent), and time of measurement (15 sec. vs. 30 sec., etc.).

Theory and Discussion: Emotionality was correlated positively with the presence of violence and later measurement within an episode. The “human violence” film increased emotionality over the baseline more than the other episodes. Emotionality was greater during the “human violence” episode than during the “cartoon violence” episode, and greater during the “cartoon nonviolence” episode than during the human and cartoon “nonviolence” episodes. Only measurements made during the latter half of each 3- to 4-minute film reflected reactions to that episode unaffected by carry-over effects of preceding episodes.

Post-experiment interviews indicated that the “cartoon nonviolence” episode was best liked and the “human violence” episode was considered “scariest” both immediately and one week after the experiment, and that the “human violence” episode was best recalled.

The investigators speculate that the greater emotionality induced by human violence than by cartoon violence may be due to the greater unreality associated with the physical and behavioral attributes of cartoon characters. The data are said to raise interesting questions about the relationship of emotionality to recall and it is suggested that the possible relationship of emotionality to information storage and retrieval warrants further analysis.


Principal Findings: In three field experiments, two in the United States and one in Europe, adolescent boys who viewed violent films for five successive week nights engaged in greater subsequent real-life aggressiveness than those who viewed nonviolent films. The effect was greater for boys initially high in aggressiveness. Boys who saw the violent films missed television less than those who viewed the nonviolent films.
Design and Methodology: Each of the three experiments covered seven weeks. In each, the stimuli, the circumstances of exposure, and the dependent measures were selected to approximate ordinary television and movie exposure, and the dependent measures were selected to approximate ordinary television and movie exposure. In all three, subjects were 14- to 18-year-old inmates at schools for delinquent boys. In the first U.S. experiment, the boys were observed and scored in regard to a variety of aggressive and other behaviors three days a week over a three-week period. Then one group saw a different violent movie for five nights during which no television was watched, while the other group saw five nights of nonviolent films. Each of the two groups was made up of the entire population of residential cottages to which individuals originally had been randomly assigned by the institution. The violent series included Death Rides a Horse, The Champion, and The Chase, while the nonviolent series included Ride the Wild Surf, and Buena Sera, Mrs. Campbell. The major dependent measures were the observing and scoring of the boys in regard to a variety of aggressive and other behaviors during the week and the two subsequent weeks. In addition, there was a laboratory measure of aggression following the final day of viewing, which involved the amount of insults delivered by the subjects to a confederate of the experimenter. In this laboratory measure, some subjects had themselves previously been insulted by the confederate, and some had not.

The second U.S. experiment and the European experiment followed the same basic design. However, the second U.S. experiment involved two additional experimental conditions—a group which saw only one violent movie, and a group which saw only one nonviolent movie.

Theory and Discussion: The three experiments were designed to meet some of the objections raised about prior laboratory experiments, which demonstrated that the viewing of aggression in films increased subsequent aggressiveness. In all three, the stimuli consisted of whole pieces of entertainment such as might ordinarily be encountered; viewing was done with a social group for entertainment, and the dependent measure was the observation of actual behavior.

The strongest findings were for the overall measure of aggression. However, there was also evidence that interpersonal aggression was affected in the same way. In addition, in the second U.S. experiment, the laboratory measure of aggression was similarly affected. This convergence of results provides some validation for such laboratory measures.

The violent films were rated by the subjects as more interesting and enjoyable, and viewing of the violent films was accompanied by greater verbal and physical activity. It is important to note that measures of subsequent general activity were not affected by the films. This finding leads to the rejection of the hypothesis that increased aggressiveness after viewing a violent film simply reflects an increase in general activity level. The data for the single film groups in the second U.S. experiment, together with data comparing early and later behavior during the week for those who viewed five movies, provided no evidence on whether the effects of exposure to media violence are increased or decreased by repetition. The data from the three experiments are consistent with the findings of laboratory experiments. However, although the naturalistic circumstances of field experiments give them an aura of superior generalizability, there are certain kinds of issues which probably can best be tested in the laboratory because of the greater range of variables which can be manipulated there, and the greater degree to which control can be maintained. In addition to the naturalistic circumstances, other features of these studies merit comment. For one, they involve the measurement of effects while subjects interact with others exposed to the same stimuli, and the subjects themselves have been in association for some time. These conditions raise the question of the role of the social context. It is possible that a violent film may have a triggering effect in which the film leads to aggression on the part of one or more, who then become models for emulative aggression, or who by their behavior evoke retaliatory aggression. A film portrayal also might sensitize subjects to responding aggressively, thereby increasing the likelihood that aggression will occur in response to outside stimuli although the film itself does not directly lead to aggression. Furthermore, when groups are relatively permanent, stable relationships with dominance hierarchies are likely to be found, and these may have implications for the effects of the mass media on aggressive behavior.

The authors conclude, "In general, our results support the proposition that exposure to movie violence increases aggressive behavior of the viewers. More importantly, these effects were obtained with unedited commercially available films and the measures of aggression were based on observations of the boys in a naturalistic setting."


Principal Findings: Consumption of comic books, pulp magazines, movies, and radio was lower among a population of children in a community with television than in a community without television, but there were no differences in newspaper reading, book reading, or nonpulp magazine reading.

Design and Methodology: Data were collected from 913 children in the first, sixth, and tenth grades in two communities in Canada in 1959 which were highly similar except that one had television and one did not.

Theory and Discussion: The data indicate that television reduced use by young people of certain media but not others. Those whose use was reduced were those which serve the same function as television—entertainment and fantasy facilitation. Those whose use was not reduced serve a different function than television—information provision. The data support the interpretation that a new mode of behavior, such as television viewing, will be adopted when it serves needs more effectively than present behavior and at least as effectively as any alternatives.


Principal Findings: The introduction of television reduced library circulation. In the set of data examined, the reduction amounted to one book per person per year. Fiction was more affected by television than nonfiction. The net reduction was four-fifths of a book for fiction, and a fourth of a book for nonfiction, per person per year. During the period studied, 1953-58, juvenile circulation increased faster than adult circulation, and this difference was unaffected by the introduction of television.

Design and Methodology: Fourteen Illinois communities where television saturation occurred early were matched with similar communities where television saturation occurred later. Library circulation trends were compared for communities with and without television. Library data were obtained by questionnaires. Originally, 19 pairs of matched communities were identified; the 14 whose data were analyzed represent those for which complete circulation data could be obtained.

Theory and Discussion: The author interprets the data as reflecting the influence of a new medium of communication on the use of older media. Presumably, a new medium supplants an old when it performs the same function more conveniently. Thus, it was hypothesized that fiction would be more affected than nonfiction because the former serves the same function as
television entertainment of "fantasy facilitation or immediate gratification," while the latter serves the function of "information provision or delayed gratification" not so well served by television.

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Principal Findings: Indicators of personal stress and anxiety were related to a declared enjoyment of television programs which help people forget "personal problems and troubles."

Design and Methodology: Interviews were conducted with 736 television owners randomly drawn from a Southern city, with middle- and upper-middle-class people overrepresented to insure variability in program preferences and anxiety. A viewer was classified as an "escape" viewer if he said he "very much enjoyed" programs which "help us forget our personal problems and troubles." Otherwise, he was classified as a "reality" viewer. Anxiety and stress were measured by items about satisfaction with the achievement of aspirations, concern over the merits of friends, and the hopelessness of improving the world.

Theory and Discussion: The study explores the possibility that persons may use television to cope with stress. Declared enjoyment of escape viewing was found to be positively correlated with dissatisfaction with the achievement of aspirations, and the beliefs that friends take advantage of a person, that one must be careful in choosing friends, and that not much can be done to improve the world. These data suggest that anxiety and stress are related to an escapist orientation toward television. If people under stress do turn to television, it could be dysfunctional by diverting that from practical solutions; on the other hand, it could also be functional by providing temporary but needed relief.

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Perrow, M. V. A description of similarity of personality between selected groups of television viewers and certain television roles regularly viewed by them. Doctoral dissertation, University of Southern California, 1968.

Principal Findings: Personality traits of viewers tend to be correlated more positively with the perceived personality traits of liked television characters than with the traits of less liked television characters. However, there may be no agreement on the traits of a character, since those who express high and low liking for a character may attribute the same traits to that character.

Design and Methodology: A nonrandom sample of 206 couples in Los Angeles completed personality scales as they thought television characters would complete them and also completed them for themselves, maintained three-week viewing diaries, and rated television characters in regard to their liking for them.

Theory and Discussion: The focus of the study was whether identification with television characters is dependent on similarity with personality traits of the viewer. The data suggest that the answer is yes. There were also suggestions in the data that the most important trait for creating liking for a character is character strength and stability. However, other factors were also related to liking or not liking a character. The broad implication is that television popularity may be partially dependent on a match between the traits of principal characters and the traits of audience members, and thus that producers should take the model or typical personality profile of their intended audience into account.

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Principal Findings: Subjects classified as highly hostile were found to be more vigilant for violent or aggressive visual stimuli than were subjects relatively low in hostility. Highly hostile subjects also scored low and less hostile subjects scored high in regard to inhibition of aggression. No significant sex differences were observed. Design and Methodology: Subjects were 20 male and 20 female student volunteers from an introductory psychology class at Loyola University, Chicago. The Bunn-Durkee Inventory of Hostility was administered and the male and female groups divided separately at the median to form the high-hostility and low-hostility groups. Subjects also completed an inhibition of aggression scale. Subjects then viewed pairs of pictures, one violent and one neutral. The pictures were presented by a binocular method which presented a picture of violence to one eye and a neutral picture to the other. Each pair was presented twice reversing the left/right position. The subjects were asked to describe what they saw, and the dependent measure was the degree of violence content reported.

Theory and Discussion: The major hypothesis was supported: individuals scoring high on a standard psychological inventory of hostility perceived significantly more violence than low scorers in the binocular rivalry situation. The failure to replicate a significant sex difference found in earlier research may be partly a function of the relatively small sample size and number of stereogram exposures used in this study. The authors conclude that the observation that highly hostile people perceive more violence and commit minor aggressive acts in an experimental situation does not necessarily mean that such people are more likely to commit assaultive acts than less hostile people.

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Principal Findings: College students and persons living in a university town were much more willing to agree to statements which placed television commercials and television advertisers in a bad light than they were willing to agree to statements placing them in a good light. In general, students and townspeople agreed. A major exception was the statement, "There is a connection between commercials for pharmaceuticals and the nation's rising drug usage among young people." The students disagreed by about 2 to 1; the townspeople tended to agree, with 48 percent agreeing vs. 39 percent disagreeing. Design and Methodology: Nine hundred respondents, including 446 students at the University of Florida and 456 residents of Gainesville, were interviewed. The measures of perceptions of advertisers and commercials were based on the respondent's agreement or disagreement with a number of statements reflecting either the advertiser as "good guy" and commercial as "anti-hero" or the advertiser as "bad guy" and the commercial as "anti-hero." There were six favorable statements and eight unfavorable statements. For example, one favorable statement was, "Most children's television commercials present a true picture of the product advertised." One unfavorable statement was, "Television commercials often arouse anxieties and feelings of insecurity in children."

Theory and Discussion: The total sample tended to reject four and agree with two of the favorable statements. Thus, in 11 out of 14 instances, the sample aligned itself with a negative perception of television commercials or television advertisers. The students and townspeople for the most part were in accord.
The major exception was their opinions on the effects of drug advertising. Age differences were marked here, with the percent "strongly agreeing" that drug advertising contributed to drug usage by the young rising from 10 percent for those 17-19 years old to 32 percent for those 50-59 years old. The two also disagreed somewhat in regard to the goodness of advertisers' motives, with the students less favorably disposed, and in regard to vitamin advertising, with the students more favorably disposed. Because of the large sample and the one-sided nature of the responses, the authors conclude that the data should be taken as evidence of public skepticism about children's television advertising.


Principal Findings: There is no scientific evidence that television and other mass media are "primary" causative factors in juvenile delinquency, or that programs fail to promote respect for legal authority. Television does provide techniques and rationalizations for crimes and violence, but so do other readily available sources ranging from encyclopedias to peers.

Theory and Discussion: Television and other mass media cannot be directly blamed for increases in juvenile crime. The viewer's social class, emotional condition, and developmental level, as well as the viewing situation and program content, must be taken into account in assessing television's effects. Television and other mass media reflect the society's values, and are only part of the social system to which a juvenile is exposed. "However," concludes the author, "scientific information exists neither in quantity nor in depth to dismiss completely assumptions which maintain that mass media . . . have a negative impact on emotionally unbalanced personalities."


Principal Findings: Children who viewed a children's program into which 30-second spots stressing sharing behavior had been edited in lieu of the usual commercials were found to be more likely to play a game cooperatively and less likely to play competitively than children who saw the same program with regular commercials. The prosocial spots also received more attention than the commercials, according to observers who monitored the children's eye movements.

Design and Methodology: The subjects were second- and fourth-graders from a public school (number of subjects is not reported). The children were exposed either to a prosocial spot called "The Swings" or regular television commercials. The "Swings" opens with a boy and girl, approximately eight to 10 years of age, running across a field to reach a swing on a playground and beginning to struggle over it, each claiming first rights. After a moment during which battle seems inevitable, one of the youngsters suggests that they take turns and suggests that the other child go first. The last seconds show each of the children taking turns and joyfully swinging through the air with the help of the other. After viewing, the subjects played a game in which they could earn points in order to win a prize. The game was designed so that cooperation could facilitate both children's learning points. The subject's choice was to cooperate for mutual benefit or fight it out to assess a positive outcome for himself. The children's play was monitored and the number of seconds spent in cooperation or competition was calculated.

Theory and Discussion: The author concludes that this research not only shows that children will attend to, learn, and accept televised prosocial modeling cues but also suggests a research format for evaluating the efficacy of prosocial children's programming. The author observes that similar research can guide necessary revision and insure effective programming, thereby increasing the power of television as an agent of socialization.


Principal Findings: The three major television networks did not cover racial relations uniformly from 1968 to 1970. NBC gave significantly more news play to the race issue than did the other two networks. ABC tended to clearly attribute fewer of its reports and inferences, and NBC consistently portrayed authorities and officials more positively than did CBS.

Design and Methodology: One day per week was selected at random for the period of August 1968 through April 1970 and transcripts were made of all race relations items. These were coded according to news emphasis, language structure, and direction. Language structure refers to whether sentences were reports, inferences, or judgments and whether the sentences were attributed or unattributed. Direction was coded as either positive, negative, or neutral. Coding was done by one primary coder and two check coders. Intercoder reliability was .81.

Theory and Discussion: The authors conclude that the data indicated neither a "systematic denigration of political authorities, nor a consistent undergirding of white authorities." They note that blacks and police both received relatively balanced treatment.


Principal Findings: In the spring of 1971, CBS coverage of fighting in Laos portrayed the United States slightly less favorably than did ABC coverage. However, the two networks did not differ in portrayals of strength or morality. The results did not differ when coding was done from audio only instead of audio and video.

Design and Methodology: Three "symbols"—the government or forces of the United States, North Vietnam, and South Vietnam—were the foci of analysis. Units of analysis were "cut-to-cut" segments. In a typical report from Indochina involving a newsmen's "head shot" and verbal lead-in, a film with narration, and a closing comment with head shot by the reporter, there would be three "cut-to-cut" segments. For each unit of analysis, coders were instructed to code direction (positive, negative, or neutral) and the two dimensions of strength and morality. Two teams of coders were used. One team both watched and listened; the other team listened but could not watch.

Theory and Discussion: The study involved a comparison of the evening newscasts of CBS and ABC, which is generally regarded as more supportive of the Administration than is CBS. A charge by Senator Robert Dole that CBS coverage of the Laos incursion had been disproportionately biased against the Administration served as a focus for the research. The authors note that the difference between the treatment of the Laos incursion by ABC and CBS was not great but provocative enough to warrant further investigation into the consistency of this difference and any possible effects upon viewer perceptions. They interpret the data as providing justification for using transcripts as a data base with confidence that the absence of the video component
does not significantly alter results, but the authors point to the need for the development of other procedures to assess any possible influence of the visual component of television.

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Principal Findings: Fifth- and sixth-grade children who had viewed entertaining television programs subsequently described simultaneously-shown violent and nonviolent slides as less violent than children who had seen less entertaining programs. This effect occurred regardless of the violent or nonviolent content of the program.

Design and Methodology: The subjects were 53 fifth- and sixth-grade school children, who were randomly assigned to four experimental groups. Each of the groups viewed a program that was either violent and pleasing (Adam 12), violent and less pleasing (Monty Nash), nonviolent and pleasing (Beesheets), or nonviolent and less pleasing (Family Affair). After viewing the programs, the children rated their feelings of pleasure. Then, they viewed a stereoscopic projection during which violent and nonviolent slides were concurrently flashed on a screen, and the children described what they saw. The descriptions were scored according to their violent content.

Theory and Discussion: The children's perceptions of violence appear to have been affected by the entertainment value of their previous viewing rather than its violent content. The author interprets the data as supporting the "satisfaction hypothesis" that any kind of aesthetically pleasing or entertaining presentation, including a pleasing violent presentation, will lessen violence perception. According to a familiarit, perceptual defense, or catharsis explanation, violence perception would have been influenced only by changes in violent content. The author also notes that the study lends some support to a satisfaction explanation of the catharsis experiments (Feshbach, 118).

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Principal Findings: Images of actual police and of police portrayed on television were found to be quite different among adolescents. Perceptions of actual police were diverse, ranging from highly favorable to openly hostile, while television police were perceived in a relatively homogeneous and positive way.

The youth generally believed that television characterizations of police are idealized and unrealistic. Delinquent adolescents and nondelinquents do not differ in their perceptions of either television or real police.

Design and Methodology: A quota sample of 42 male and female students was drawn from three schools in a large midwestern city. It included 14 ninth-graders from a middle-class school, 14 persons aged 13 to 16 from a correctional school, and 14 16- to 18-year olds from an upper-middle-class high school. Each student was asked to sort 56 statements about police, which had been obtained from exploratory interviews with another group of teenagers, into nine categories with the number that could go in any category restricted. First they sorted the statements from those "most like" to those "least like" actual police, then they sorted them according to their view of television police.

Theory and Discussion: In conclusion, the authors write: "Our research suggests that the informational value of television drama featuring police should not be overlooked. While idealized images of police presented on television may encourage those who are already positively predisposed toward police, we have indications that adolescents having negative and hostile feeling toward actual police are unimpressed and perhaps angered by what they see on the screen."

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Principal Conclusions: In order to understand the way in which opinions and attitudes are formed, it is necessary to study the structure of the social situation in which opinion and attitude formation occur, which may affect differences in the use of the mass media. Sociological factors which should be taken into account in regard to the impact of the mass media include the receiver's actual group memberships, reference groups, and degree of "strain" or pressure experienced because of the social situation.

Theory and Discussion: Karl Mannheim's "interest hypothesis" (a vested interest may determine an attitude) and "focus of attention hypothesis" (social position determines awareness of, and perspective on, problems) serve as useful starting points.

Undiscovered social factors of this sort may be responsible for unexplained differences between media users. For example, a study of 200 children concentrated on peer group vs. family relationships. Family membership seemed to be associated with reading of "fantasy" animal comics, and listening to Western, mystery, crime programs on radio or television—perhaps because the family "problems" of these children make them peculiarly susceptible and in need of fantasy worlds with which to identify. Interest in such programs appears to remain high for children who do not belong to a teenage peer group but consider it their reference group, rather than their family. "Strain" is more evident among these older children in that they are more likely to feel that they fall short of parental expectations. Reference group affected not only what was liked, but the reasons it was liked; thus teenage peer group members used programs for "social utility"—as inspirations for play—while family group members accepted them only as absorbing drama. Seekers after peer group status (that is, peer group members who want to do better in various activities) tended more to use media with some utility (information on dating, etc.).

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Principal Conclusions: Television and other mass media are among the sources of information available to children and youth, who are in a period of very rapid change and development during which they are likely to be seeking information. The nature of this change and development must be taken into account in assessing the effects of mass media on children. For example, cognitive skill, which is age-related, affects the quantity of information that can be comprehended and the way it is processed; language acquisition is affected by socioeconomic and
other environmental factors, and language ability affects response to a wide range of communication stimuli, including the mass media, and observational learning, which can occur from viewing television, depends on attention, retention, motoric capability, and incentives or motivation, all age-related. The effects of the mass media on a child will depend to a great extent on the characteristics of the child; however, to the extent that television provides information, the picture of the world the child develops will also depend on television.

Theory and Discussion: "Childhood is a period of information seeking during which the child learns what to expect from the world and what the world expects from him," writes the author. The mass media are one source of information. Since much of the impact of available information would appear to depend on factors related to age, developmental variables must be taken into account in regard to the mass media. The implication is that how a child uses the media today will probably differ from how he uses it next year.


Principal Findings: In three surveys conducted at different points of the Vietnam war, a television network's news program was generally rated by the public as one of the most credible of four possible sources—the network, the White House, Stanford students, and the Stanford University news service.

Design and Methodology: Telephone interviews were conducted with random samples in the San Francisco Bay area in May 1970 (401 persons), December 1971 (299 persons), and January-February 1973 (299 persons). Whoever answered the phone was interviewed. Respondents were asked to rate the credibility of each of the four news sources in regard to each of three issues—air pollution, unemployment, and the Vietnam war. The network specified was CBS. In order to avoid any possible effects emphasizing Stanford sources, half of each sample was asked to rate Stanford students and half the university news service.

Theory and Discussion: The sources ranged from relatively impartial to highly involved (the White House and, in the case of the Vietnam war, students), and the issues from relatively low controversy (air pollution) to extreme controversy (the Vietnam war). On the grounds that the perception of lack of vested interest increases credibility, it was expected that less self-interested sources would be more credible. On the grounds that controversy increases the likelihood that a source will be perceived as having a vested interest, it was expected that credibility would be less when the issue was controversial. On the grounds that credibility is influenced by the perceived relationship between a source and a specific issue and that events will change that relationship, it was expected that there would be shifts in credibility over time that would not be alike for all sources and all issues. The data were consistent with all three expectations. The network was generally rated the most credible; credibility was lowest on the most controversial issue; and there were various shifts in credibility over time that were not parallel for all sources and issues.


Principal Findings: Boys who tended to perceive television commercials as designed to induce purchases were older and had parents of higher educational levels than were those who did not perceive persuasive intent. Children who were capable of recognizing commercials as persuasive messages tended to be able to distinguish commercials from programming; to recognize the existence of an external commercial sponsor; to perceive the idea of an intended audience; to be aware of the symbolic nature of commercials; and to cite instances of negative discrepancies where the product did not meet expectations based on a commercial message. Finally, children who perceived commercials as intended to assist rather than persuade both trusted and liked them more.

Design and Methodology: In this study, 289 upper-middle-class boys, drawn from the first, third, and fifth grades of five Catholic schools in the Philadelphia area, were interviewed using open-ended questions. The data reported here came from the second of four waves of interviews conducted as part of a larger study. Responses were coded by three judges (agreement ranged from 96 to 100 percent). Independent variables included age, parental education, parent-child interaction, presence or absence of older siblings, and peer integration.

Theory and Discussion: The authors conclude that recognition of persuasive intent is the main determinant of the child's attitudes toward television advertising; that attribution of persuasive intent is age-dependent, reflecting not only maturation of cognitive factors but also cumulative experience with commercial messages; that the development of the perception of commercials as persuasive acts is a cognitive defense to persuasion, in that it lowers levels of trust and liking for commercials, as well as reducing consumption requests; that younger children who do not attribute persuasive intent to commercials are more persuasive; and that the cognitive antecedents to attribution of persuasive intent are discrimination between programs and commercials, perception of a sponsor, perception of an audience, awareness of symbolic representation, and awareness of the possibility of discrepancies between commercial messages and products.

The authors raise the social policy question of whether younger children are deserving of some form of special protection from the effects of advertising. On the one hand, they note that exposure to advertising is a necessary prerequisite for the development of cognitive defenses against advertising's persuasive effects. On the other hand, they observe that a Piagetian position would hold that the child's persuasibility would be related to his level of cognitive development, which is highly correlated with age, and that this suggests limits or restrictions on the amount of advertising or the form of advertising to children below a certain age. Finally, they suggest that a learning theory position would want increased parental efforts as well as increased exposure to advertisements, and that this is not consistent with restrictions of advertising.


Principal Findings: American adults spend about 28 percent of all leisure time watching television as a primary activity; the figure for watching television as a primary activity is higher for men (32 percent) than for employed women and housewives (25 percent). Of other leisure activities, only visiting or entertaining friends or relatives came close—17 percent.

Design and Methodology: Time-budget diaries were collected from a national sample of 1,244 males and females chosen to represent the employed urban population of the United States (the sample was confined to members 18-65 of households in which one such member was employed for 10 or more hours per week), with similar sets of data collected from a single U.S. city and sites in 11 other countries. Each respondent completed a diary covering 24 hours. All data are based on self report. The figures for viewing as a "primary activity" mean that it was so
described. Additional viewing occurred when television was “secondary” to something else—eating, child care, etc. Total leisure time averaged five hours per day across seven days, with “obligatory” activities—shopping, eating—excluded.

Theory and Discussion: Television has had a large impact on the way people spend time. When cross-national data are examined, it appears that amount of viewing increases with television set saturation, but there is probably a limit to the amount of time that people in a society will spend with television; expansion cannot be indefinite. In the U.S., there is little reason to expect that persons with television will begin viewing more, and saturation is almost 100 percent; thus, television may have achieved its maximum audience. However, the influence of various social changes on television viewing are hard to predict—increased leisure may lead to greater viewing, or involvement in other jobs and activities, if indeed there is actually a decline in the workweek; increasing educational level may result in higher taste levvas than the current audience; increased income may lead to involvement in activities which will compete with free television. In any case, any increase in sophisticated tastes may pose a problem for broadcasters, since such tastes are specialized and diversified, so that it is hard to satisfy more than a small proportion at any time.

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Principal Findings: Analysis of data from a national panel survey conducted before and after the 1968 Presidential election showed that persons who perceived their newspaper as supporting a candidate were about six percent more likely to vote for that candidate than for his opponent. Thus, the largely pro-Nixon coverage carried by the newspapers in 1968 was associated with some shift in the vote in Nixon’s favor.

Newspapers were most often perceived as taking sides. Newspapers were perceived as taking one side or the other by 50 percent; magazines, by 29 percent; television, by 22 percent; radio, by 18 percent. The newspaper bias was perceived as favoring Nixon. Twenty percent said the papers favored Nixon, 12 percent that they favored Humphrey. Television was perceived as more favorable to Humphrey, but only seven percent said television favored Humphrey, and five percent said television favored Nixon.

The public ranked television as its most important and relatively unbiased source of campaign news in 1968. However, the perceived support of television did not affect voting. Voting in the direction of perceived newspapers bias was greatest among undecided voters, suggesting that persons who are committed to vote but uncertain of which candidate to support are open to media influence and that the most influential medium was newspapers.

Design and Methodology: Personal interviews were carried out before and again after the Presidential election of 1968 by the Survey Research Center at the University of Michigan, with a national probability sample of 1,346 adults. Perceived media bias was measured by the following question: “Would you say that the (newspaper, radio, magazine, television) reporting you heard, read or saw is more favorable to (Humphrey, Nixon) or that it is not?” The analysis compared two election vote intentions, perceived bias of media used, and actual vote. The six percent media “effect” represents the estimate after 12 variables in addition to media bias were controlled, including the two strong determinants of voting: party identification and pre-election vote intentions.

Theory and Discussion: The author interprets the data as indicating that in the 1968 election, newspapers influenced votes and constituted a positive reference group for voters. Since effects were greatest for those with less intense party loyalty, the data also support the hypothesis that “people mainly influenced by the media are those who do not have stronger alternative forces acting on them.”

The finding that newspaper bias can be influential is contrary to earlier voting studies. The author notes that the earlier studies failed to examine closely the potential of this influence among undecided voters who are most open to influence.

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Principal Findings: When data from the United States, Western and Eastern Europe, and Latin America are analyzed for relationships between television set ownership and the allocation of time to various activities, the U.S. television experi-
ence appears to be different from that in many countries, although there are many relationships which seem to be common across societies. Where television set ownership is greater, more time is spent by individuals each day in viewing. Contact with one more mass media tends to be fairly constant across societies. In the U.S. data, education was inversely related to amount of time devoted to the mass media, and almost three-fourths of that time was devoted to television. However, in many societies the relationship was curvilinear, increasing with education, then declining. In one case the relationship was positive—mass media use increased with education.

In the United States, the trend in set ownership over the years of television's spread tended to be curvilinear in regard to education, rising with education, then falling. This does not parallel the data for non-U.S. sites where television is in an early stage of adoption. In many instances, ownership is directly related to education; in others, curvilinearly or inversely related. In the United States, despite increases in quality of political coverage, the correlation between education and following the campaign on television has declined from slightly positive to nil since 1952 (14 to 0.02). Thus, the information activities of television lost a disproportionate number of the better-educated.

When set owners and nonowners are compared across societies, set owners spend an hour more in mass media consumption, because of the time spent watching television, and spend less time sleeping, at social gatherings away from home, listening to the radio, reading books, in other leisure, in conversation, on travel related to leisure, at the movies, watching television away from home, on religion, and on miscellaneous household tasks. There are marked sex and social class differences in regard to sleep: the relationship is strongest for white-collar males and blue-collar females. Employed men who own sets spend more time with their families than those who do not own sets. Total amount of viewing, and frequency of viewing at home each day, are relatively constant across societies, with the former ranging from 82 to 109 minutes a day, and the latter from 81 to 76 percent.

Design and Methodology: Data from a 1965 UNESCO survey of the way people spend each day are analyzed. Fifteen sites in 11 countries were sampled to collect data bearing on the effects of industrialization. The sites were primarily cities between 50,000 and 150,000 in population with 30 percent or more of the labor force in industry. In the two U.S. sites, set ownership ranged from 98 to 99 percent; in the 13 other sites, from 26 to 85 percent. In each site, procedures were identical, with respondents completing diaries about a day's activities. On the basis of the diaries, each day was allocated among 96 categories eventually summarized into nine clusters: total work, total housework, household care, total child care, personal needs, nonwork travel, study and organizational participation, total mass media use, and total leisure.

Theory and Discussion: A panel design in which respondents reported on their behavior before and after purchasing a television set would have been preferable; however, a study of this design conducted in the United States found identical results for panel and after-only analysis (Coffin, 78). Thus, argues Robinson, "these data afford an excellent opportunity to observe the way television appears to have quantitatively affected daily behavior in the Western world."

The data are interpreted as refuting the argument that television viewing is unaffected by content. For example, in East Germany, a country with high television saturation, there was little relationship between viewing and education, while in Peru, where there is low saturation, there was a negative relationship between education and viewing. Such disparities are hard to explain except as the effects of content differences. In the United States, major impact of television is probably the reordering of the leisure of the less-well-educated, for there has been an inverse relationship between amount of viewing and education since television's introduction.

On the whole, the influence of television on the way time is spent cannot be said to be small. Similar data on the relationship of auto ownership with time spent on transportation, and on the relationship of major appliance ownership with time spent in housework, show slight differences compared to the large increase in time spent with the mass media associated with television set ownership. "Thus, at least in the temporal sense, television appears to have had a greater influence on the structure of daily life than any other innovation in this century," concludes Robinson.

Principal Conclusions: Television viewing appears to be motivated by a desire for entertainment, rather than for information or to consume unoccupied time. Nevertheless, most people feel their favorite programs are realistic and instructive. Theory and Discussion: Findings from various studies dealing with television viewing, attitudes, learning, and information-seeking are reviewed. Entertainment appears to be most viewers' motive—in a national sample, three times as many persons cited a positive reason for viewing, such as "entertainment" or "relaxation," rather than mere time consumption, such as "killing time," only 10 percent spontaneously indicated they viewed television to get information, and few nonentertainment programs were cited as favorites.

Identification of personalities in the news was inversely related to news program viewing; however, exposure to television weather reports was associated with increased knowledge about weather dynamics. A majority of viewers said their favorite drama programs were realistic and instructive, particularly in regard to solutions to real-life problems and medical knowledge. Women, blacks, and persons under 30 were more likely to feel they learned from their favorites; education increased the likelihood that a person would think that he learned from his favorites, and decreased the likelihood that he would perceive it as realistic.

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Principal Findings: Preference for violent television programs was positively correlated with interpersonal aggression among 19-year-olds who were initially high in aggression. When less serious and more serious delinquency were analyzed instead of interpersonal aggression, heavy violence viewers were slightly more likely to report arrest and getting into trouble with police, and considerably more likely to report major theft. Heavy violence viewers did not differ from others in regard to less serious delinquency, such as petty theft, shoplifting, or drinking.

Design and Methodology: Questions on television use were added to the fourth and final wave of a panel survey of a large national sample of young men. The three television items asked for large increases in viewing; rather than the day, for four favorite programs, and whether more had been learned from television in school. The sample consisted of 1,559 men, about 70 percent of the original probability sample of 2,200 in 87 public high schools.
scattered throughout the United States. At the time of data collection, a large proportion had just finished the first year of college, although others were in the military or in the labor force. The average age was 19. Favorite programs were scored for violence on the basis of judges’ ratings of violent content.

Theory and Discussion: For the total sample, interpersonal aggression and preference for violent programs were correlated when other factors were uncontrolled. When amount of viewing, education, and interpersonal aggression in the previous wave of the survey were taken into account, the relationship held only for those high in interpersonal aggression at the time of the earlier measurement.

When delinquency was examined and general level of activity taken into account by separating less from more serious delinquency, a positive correlation was found between preference for violent programs and serious delinquent behavior. The boys reported an average of 1.7 hours of viewing per day, slightly more than half the average of three hours for a national adult sample. The authors conclude that boys who prefer violence on television differ from those who have less violent favorites or do not name favorites by participating in more serious delinquent behavior. However, they note that causal inference about television's influence would not be justified on the basis of their data alone.

Rogers, R. W. An analysis of fear appeals and attitude change. Final report, August 1973, University of South Carolina, Grant No. 1 R03 MH22157-01 MSM, National Institute of Mental Health.

Principal Findings: Public health films dealing with cigarette smoking, safe driving, and venereal disease resulted in increased intentions to adopt preventive measures when the recommended practices were presented as efficacious. In the case of venereal disease, a more fear arousing appeal enhanced attitude change only when the remedy was presented as efficacious. In the case of smoking, probability of occurrence enhanced attitude only when the remedy was presented as efficacious.

Design and Methodology: In each of three experiments, film content and other communications about smoking, safe driving, and venereal disease were varied. The experimental film manipulation was high versus low magnitude of noxiousness of the depicted event; other experimental manipulations involved high versus low probability of an undesired event's occurrence, and high versus low efficacy of a recommended preventative response. In addition, there were control groups for each film topic. The dependent variable was intent to comply with the recommended practices. There were 80 experimental subjects served in the smoking study, 72 in the driving study, and 64 in the venereal disease study; posttest-only control groups included 32, 40, and 19 subjects in each study, respectively.

Theory and Discussion: In each case, the film designated as more noxious aroused greater fear. Since many health organizations frequently utilize fear appeals in their persuasive messages, the finding that such appeals are effective in producing changed intentions only when remedies are presented as efficacious is highly relevant to the planning of health communications. "The present data suggest that not only are effective preventative needed when fear-arousal is high," the author writes. "But also when the probability of exposure is high."


Principal Findings: Predeluscent Boy Scouts imitated a film portrayal of a peer more when the peer was portrayed as having similar background and interests. Perceived similarity had a stronger effect on imitation than whether the portrayed behavior was punished or not.

Design and Methodology: The subjects were 90 Boy Scouts, randomly assigned to nine groups. The experimental sessions were conducted at a troop meeting place. The boys were first asked to fill out a personal information sheet and then shown the equipment for a war strategy game. The experimenter then introduced a film which featured a boy playing the same game, who was described as either being very similar or dissimilar to the boy in the room in regard to interests, abilities, and group membership. Three alternative endings were prepared for the film. One showed the experimenter praising the peer, one showed him criticizing the peer, and the other involved neither praise nor criticism. Imitation of the peer was measured by the boys' subsequent behavior in playing the war game.

Theory and Discussion: The author concludes that the study demonstrates the role of perceived similarity as a determinant of imitation and clarifies the effects of similarity as induced by reference to interests, abilities, and group membership toward which attitudes are generally positive. The effects of similarity in characteristics that are negatively valued should be a concern of future research.
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Principal Findings: Third- and fourth-grade subjects who observed a model yielding to temptation also yielded to the temptation of leaving a task to watch a cartoon more than did subjects who saw no model. Subjects who observed a resisting model devoted less than did the control subjects, but the effect was less pronounced.

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Principal Findings: Angered male college students who were given the chance to aggress against their tormentor and saw either a violent film, a sexually arousing film, or film combining sex and violence aggressed their tormentor at a higher level than angered students who had the same opportunity but had seen a film without violent or sexual content. There was no difference among the three kinds of film in the level of subsequent aggression. When the tormentor was perceived as female, the level of aggression was higher.

Design and Methodology: Subjects were 180 freshmen and sophomore males at Ohio University, randomly assigned to 12 groups of 15 each. All subjects wrote a short essay on the value of college, which was evaluated by an unseen student by means of electric shock, and all received eight shocks, a "bad" grade. Subjects were then told they would be able to grade the unseen student's short essay and while they were waiting for it to be written watched one of four film segments. The four segments included one in which violence was depicted as justified; one that could be said to be sexually arousing; one that combined sexual and violent content; and one without sexual or violent content. After the film, subjects received the unseen student's composition and administered a grade, which could vary from one to 10 shocks varying in intensity from one to seven. In addition, social acceptance was varied by admonishing some subjects not to exceed six shocks intensity (the experimenter later feigned preoccupation with other activities, making transcription of his warning without detection possible), and sex-of-target was varied by telling half the subjects the target was female and half it was male. In addition, another set of subjects in the four film conditions were told that the grading scale was from zero to 10, thus creating a condition in which subjects did not have to aggress if they did not choose to do so.

Theory and Discussion: The angered male subjects displayed more aggression after viewing justified violence, erotic behavior, or sex-and-violence. When the target was perceived to be a female, the level of male aggression was higher. Forcing male subjects to shock at least once had no effect, except when the target was perceived to be a female. Subjects almost entirely aggressed within the socially-sanctioned six levels of shock intensity, and tended to perceive themselves as aggressing at a lower level than what they had received.

A possible interpretation is that viewing justified violence increases aggression toward a deliverer of earlier aggression because of the creation of a state of higher arousal which heightens the tendency to respond. This is one interpretation of the result that sexual content had the same effect on aggression as violent content. Another interpretation is that viewing aggression increases aggression because of the effects of the violent content, and the viewing of sexual material was followed by aggression because of the reproduction. By forcing aggression against a female, inhibitions apparently were overcome which otherwise would have restrained all aggression. This particular experimental paradigm produces only responses perceived as relatively socially acceptable.
man beings making appropriate responses, as is the case in most studies of imitative aggression.

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**Principal Findings:** Children's cognitive and attitudinal defenses were operative at the beginning of the peak Christmas toy and game advertising period, but were neutralized by its conclusion. That is, children with the strongest defenses to commercials selected fewer television-promoted toys and games early in the Christmas advertising season than did children with weaker defenses. However, after four to five weeks of concentrated advertising, defenses became ineffectual predictors of preference. This phenomenon was the result of increased television item preference among children with initially strong defenses.

**Design and Methodology:** The study is based on interviews with 289 first-, third-, and fifth-grade boys in the Philadelphia area Catholic school system. Structured, open-ended interviews were used to measure each child's level of understanding of commercials (cognition) and his associated belief, affect, and motivational disposition with respect to them (attitude). Composite intercoder reliability coefficients for the total set of cognitive and attitude dimensions ranged from .79 to .97. The children were interviewed in early November, before the onset of peak pre-Christmas advertising for toys and games, and again in mid-December. On each occasion, they were asked what they wanted for Christmas.

**Theory and Discussion:** This study investigated the relationship between the "choice behavior" instigated by television commercials in regard to toys and games on the part of children exposed to heavy pre-Christmas advertising; the children's "cognitive defenses," defined as the ability to discriminate between the commercials and the programs and to comprehend the purpose of commercials; and the children's "attitudinal defenses," or the child's degree of belief, liking, and tendency to want products advertised in commercials. A shift in importance from attitudinal defense to cognitive defense occurs over increasing grade levels. Looking only at the pre-peak Christmas advertising data, only attitudinal defense is effective in resisting advertised toys among first-graders. By third grade, cognitive defense assumes some importance; and by fifth grade, it is the only effective screen.

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**Principal Findings:** Socially constructive content in television entertainment can be measured and coded on a number of dimensions, so that such content can be used as a variable in scientific research. In an experiment, children who saw a Lassie episode involving an instance of helping later engaged in greater analogous helping behavior than those who did not view such an episode.

**Design and Methodology:** The coding scheme measures occurrences of prosocial or desirable behavior on seven dimensions—altruism, delay of gratification or task persistence, reparation for bad behavior, sympathy, control of aggressive impulses, resistance to temptation, and the explanation of the feelings of self or others. The code is being used to analyze the prosocial content of 400 nationally televised programs. In the experiment, subjects were 15 boys and 15 girls from first-grade classes in a middle-class, predominantly white suburb. There were three conditions. In the prosocial condition, the children saw a Lassie episode in which help was given to a puppy in distress. In the neutral condition, the Lassie episode contained no such dog aid. In the control condition, the children saw a Brady Bunch episode. All television programs were shown as broadcast, including commercials. After watching the television, the children were asked, while at play, to monitor a kennel by earphones, and to press a button signaling the attendant that the dogs might be in distress if the child heard barking over the earphones. The principal dependent measure was the quantity of button-pressing in response to barks.

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**Principal Findings:** Pro- or anti-Administration bias was virtually nonexistent in NBC and CBS coverage of the Vietnam war during 1969 and 1970. Bias was defined as statements of opinion or fact which would influence one to support or oppose the President or his policy. On a scale ranging from +5 to -5, the average bias score of both networks did not exceed -1, a point equivalent to the weekly anti-Administration statement, "Many people go hungry in South Vietnam." A trend analysis over the two years also showed that there was no "caving in" of the networks in their Vietnam coverage after Agnew's charges against them in his November 13, 1969 speech in Des Moines. If anything, there was slightly more anti-Administration reporting after the speech. Looking at specific aspects of the war, there did appear to be bias in certain areas, such as civilian casualties caused by U.S. ground forces and the President's victory, but these were canceled out in the overall reporting of the war.

**Design and Methodology:** First, a scale was constructed in which each of 10 statements were assigned a numerical value ranging from -5 to +5 which reflected their position on a pro- and anti-Administrative continuum. Second, statements from a sample of television newscasts were judged in regard to their equivalence to the 10 pro- or anti-Administration statements in the scale. Third, each broadcast statement was given the score of the pro or anti statement to which it was said to be equivalent. To construct the scale, five Yale students of diverse political opinions were asked to order, from most anti-Administration to the most pro-Administration, 100 cards on which were written simple statements about the war. Ten of these statements, which represented a wide range of the bias spectrum and showed low variance in judges' ratings, were selected for the final scale. Statements were assigned values from +5 to -5, with positive values reflecting pro-Administration sentiment and negative values, anti-Administration sentiment. Then, each statement from the news broadcasts was assigned to the score of the statement on the scale to which it was judged to be equivalent in anti- or pro-Administration sentiment. The coding task was done independently by the author and two researchers not involved in the present study. Interjudge correlations were .84, .78, and .80. From a universe of more than 1,400 broadcasts, the
author drew a sample of two broadcasts per month, yielding 48 broadcasts per network or a total of 96.

Theory and Discussion: The author notes that because television is the primary source of news for most Americans and leads other media in credibility, the question of bias in network coverage is a significant problem. He concludes that although this study does not offer a definitive answer, it does present the results in such a way that the reader is able to adjust the scale to his own beliefs and reach his own conclusions about network bias and fairness.

Principal Findings: First- and second-grade boys were found to imitate the aggressive actions of a filmed peer model against a human victim. For children not exposed to the film, aggression was associated with self-reported anger. However, neither frustration nor the observation of the aggressive model elicited reports of anger; and frustration did not affect overt aggression.

Design and Methodology: The subjects were 48 first- and second-grade boys, drawn from a rural public school and randomly assigned to experimental conditions. These included presence or absence of aggressive film content, presence or absence of frustration, and whether the self-reported anger was measured before or after a free-play period. The film, developed by the authors, depicts a nine-year-old boy using a mallet and toy machine gun to aggress against a human clown. Frustration was induced by giving the subject the chance to pick an attractive toy, then telling him he would not be able to have the toy since there were not enough toys for everyone. Independent variables were self-reported anger and aggression during free play. In the anger test, the children were shown photographs of adult males displaying various emotions and asked to point to the one in each pair shown that felt most like them. The behavioral aggression measure was based on the amount of imitative aggression exhibited during a five-minute free-play session in a room with the human clown and props shown in the film.

Theory and Discussion: The author advances three purposes for the study. One was to replicate the finding that children would imitate the aggressive behavior of a filmed peer model against a human victim. Another was to demonstrate that a measure of anger can be used to predict over aggression, and a third was to explore the extent to which frustration elicits both anger and overt aggression.

Principal Findings: Preschool children who for four weeks daily viewed violent television in a nursery school did not display greater harmful aggression against persons or objects than those who saw nonviolent situation comedies. However, the presence of a noninterfering adult appeared to increase harmful aggression.

Design and Methodology: Subjects were 16 girls and 24 boys randomly assigned to four experimental conditions. The two variables were television content (violent vs. nonviolent) and adult presence (or absence). The violent television was Batman programs, the nonviolent, Gilligan's Island. The children saw the television daily for four weeks. Measurement was by observation of actual behavior. Television and measurement occurred while the children were in playgroups.

Theory and Discussion: The intent was to study the effects of repeated exposure to violent television and the presence of an adult on the interpersonal aggression of children of varying levels of aggressiveness in a setting resembling ordinary viewing conditions. It was expected that the violent television would increase aggressiveness, and that passive adult presence, by implying approval, would do the same. The absence of content effects is probably attributable to the very different capacities of the two television series to elicit behavioral activity. The violent material appeared to elicit playful imitative behaviors incompatible with harmful aggression; the nonviolent material did not elicit anything; thus, in this instance harmful aggression was restrained as the result of exposure to violent television. The findings emphasize the importance of taking into account specific content factors, situational factors, and individual characteristics.

Principal Findings: Elderly persons in a senior citizen's community expressed high interest, high use, and great dependence in regard to television, although there was considerable individual variation in the role television played in their lives. Television had assumed such an importance in the community that other activities were not scheduled during popular television shows.

Design and Methodology: The study consisted of an analysis of those community, obtained through unstructured interviews with staff members; intensive, focused interviews with 32 female and 18 male residents; and a television use questionnaire distributed by the director of activities to any willing participant. Of the 170 questionnaires distributed, 85 were completed. Population of the community was 238; the median age, about 80.

Theory and Discussion: The average elderly viewer reported watching television three-and-a-half hours every weekday. There was no unanimity between men and women on favorites except in regard to Lawrence Welk, which was a favorite of both. There was far more inclination to name favorites than to cite disliked shows, and among those frequently cited as disliked, action programs were predominant for both men and women. In general, the elderly expressed appreciation for and devotion to television. An extreme example was the 81-year-old woman who has severe hearing loss and vision so poor that she could not distinguish the interviewers voices within three feet. "She turns up the volume," the author writes, "is seated with her face within two or three feet from the television screen, and watches this way on the average of 10 hours per day weekdays. She resents mealtime schedules since they interfere with some programs she enjoys."

Although television is almost the sole source of news for the elderly, they are not, at least by this age, attracted to documentaries, panel discussions, or other serious treatments of issues. A number of factors characteristic of the elderly give television a special role in their lives. These factors include physical deterioration, social isolation, and a tendency to adhere to routines. Because television often depicts a lifestyle contrary to the aged person's ideals, extensive exposure created conflict for many residents. A common mode of resolution was disapproval of the viewing of such programs by youth coupled with feelings that they (the aged) were immune to bad influences. The author concludes that the residents used television as a primary means of need gratification. The author suggests that the aged represent a loyal but neglected television audience. Television producers place most of their effort upon attracting the 18 to 34 age group. In spite of this lack of programs designed to appeal to them, the elderly appear to be consistent and extensive users of the medium. The
author suggests that commercial stations allocate public service time for programs with appeal for the aged and that the possibilities of the use of educational television for this purpose be explored.

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**Principal Findings:** German adults and college students made more favorable evaluations of blond type actors than of dark-haired, dark-eyed actors. Exposure to a counterstereotypical movie resulted in improvement in the evaluations of the dark-haired actors.

**Design and Methodology:** The experiment was conducted in two sessions in the studios of a West German television station. Fifteen students, nine male and six female, participated in one session. Twenty-six adults, 15 male and 11 female, participated in another session. None of the participants realized that they were serving as subjects.

After two short musical fantasy cartoons intended as warm-ups, subjects were told that the network wanted viewer opinion on the casting of major roles. Photographs of six actors of medium-to-slight fame were projected on the screen. Two represented the blond, blue-eyed type. Subjects were asked to rate the actors on various scales in regard to attributes and the ability to fill certain roles. Subjects were then shown movies in which actors of the dark type were "good guys." In order to conceal the experimental nature of the situation, unrelated travelogue was interspersed, and every film was evaluated as to its strengths and weaknesses and its appeal. Before the last film was shown, subjects were asked to rate several male actors that the station "had in mind for a project in preparation." Six pictures were shown, three of which showed the same actors as before. Most of the change in overall evaluation was due to changes on "bad guy" attributes.

**Theory and Discussion:** The author notes it cannot be said whether the results of the study are generalizable to situations in which ordinary people, not actors, are evaluated. He also notes that the observed differences in evaluation of dark and blond types cannot be used to evaluate the influence of mass media on the perception of persons, and that the preference for blond types may be due not to media influence but to a general cultural phenomenon utilized by the media to convey certain types of characters.

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**Principal Findings:** In the late 1950s and early 1960s, elderly persons were heavy users of television. However, newspapers were perceived by the elderly as more important to them, and perceived importance of newspapers increased with age. Old people spent more time watching television than in any other activity. Over two-thirds of persons 85 and over spent some time with television each day, and the average amount of viewing for this group was three hours a day. As people enter their sixties, people tend to report turning toward use of television and away from movies. There was also some evidence of a shift with aging toward information programs on television. These findings may reflect a tendency for people to turn toward more serious media as they grow older. It is quite possible that the mass media serve the function once served by direct social interaction in the lives of the elderly, of keeping them engaged in social events.

**Theory and Discussion:** Leisure is time free from work and obligatory activities, and the quantity available increases with old age. At a given time, there are age-related leisure patterns. However, with the passage of time, the question arises as to whether the young will carry different leisure patterns into old age, or whether old age in our culture tends to dictate an age-specific set of activities. The elderly spend a sizable amount of their leisure time on mass media. Television is the most widely used, consumes the most time, and is the most frequently engaged-in leisure activity. The mass media generally give little attention to the elderly, and cater to younger tastes. It is plausible to think that the mass media serve a somewhat different function for the elderly than for others, and that one such function would be providing information and engagement in social events which others obtain from direct social interaction. Given the probability that tastes and needs of the elderly differ from the tastes and needs of younger persons, it is reasonable to ask whether the mass media, and especially television, devote sufficient attention to them.

**Design and Methodology:** In the 1968 publication, data and findings from a variety of studies are collected. Data are presented in tables, with succinct statements of the findings. In addition to the elderly and the mass media, there are summaries of the data on the elderly; the allocation of time; the pattern of activities; visiting; hobbies, studying, and cultural pursuits; outdoor activities; vacation and travel; and attitudes toward leisure. Interpretations and commentary are not offered. In the 1969 publication, Schramm analyzes and discusses these and other data on the elderly and the mass media.

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**Principal Findings:** Children had begun viewing television regularly by kindergarten age. At age three, the average child spent 45 minutes a day with television; viewing increased until about age 12, when it reached three hours, then declined slowly to about two hours at the end of high school. However, there were great individual differences, with some children spending four hours or more and others less than 30 minutes a day with television. Children's viewing does not match the programming category of children's television, and by the first grade 40 percent of viewing time is devoted to programming classified as "adult."

Amount of viewing was related to a number of individual characteristics. During the first six to eight years of viewing, brighter children viewed more, but later brighter children turn away from television and intellectually slower children become heavier viewers. Amount of viewing is also correlated positively with having family troubles or unsatisfactory social relationships.

Television gives children a larger vocabulary when they enter the first grade, but the difference disappears in a few years. Later, heavy viewers know more about entertainment personalities but less about public affairs, which light viewers apparently learn from print media, and there are no differences in subjects like science, where the school is the chief communicator.

**Design and Methodology:** Data were collected in 11 different studies between 1958 and 1960. In a San Francisco study, data were obtained by questionnaire, interview, and diaries from 2,688 children in the first six grades and the eighth, tenth, and twelfth grades, and from 1,030 parents. In a second San Francisco study, 188 families were interviewed together. In five
Rocky Mountain studies, data were obtained from 1,708 children and 284 parents in five communities. In two studies, data were obtained from 913 children and 269 parents, in two communities comparable in most respects except that one had television and one did not. In a tenth study, data were obtained from 473 children in an American suburb. In the eleventh study, data were obtained from 304 children in Denver. In all the studies, teachers and school officials were interviewed. Altogether, information was collected on 5,991 children, 1,958 parents, and several hundred teachers, officials, and other persons in the various communities.

Theory and Discussion: The question is not so much, "What does television do to children?" but "What do children do with television?" For some children, write the authors, "under some conditions, television is harmful. For other children under the same conditions, or for the same children under other conditions, it may be beneficial. For most children, under most conditions, television is probably neither particularly harmful nor particularly beneficial." The principal use to which children put television is entertainment and escape. The totality of evidence does not indicate that for most normal children television causes violent behavior or delinquency. However, a child with deviant or psychopathic tendencies may be influenced in the direction of violent acts. The major antedotes to any potential harm to a child from television are a warm, secure family life, and satisfactory peer relationships.

Principal Findings: Exposure to a violent audio broadcast increased aggressive behavior on the part of previously angered college males, but decreased such behavior on the part of previously angered college females.

Design and Methodology: Subjects were 20 male and 20 female undergraduates randomly assigned so that there were five males and five females in each of four conditions: angered-violent broadcast; angered-neutral broadcast; not angered-violent broadcast; and not angered-neutral broadcast. In the angered condition, subjects were frustrated and verbally insulted in a problem-solving situation. In the not angered condition, there was neither frustration nor insult. The broadcast was three-minute taped news reports presented as part of a current events test. The violent tape reported on Vietnam and Middle East conflict, and murder and theft; the neutral tape, on such nonviolent events as a medical advance and the farm situation. Aggressive behavior was measured by median level of shocks delivered to another person as feedback for failure on a task. Subjects were told that threat of shock increased learning to receive ESP messages, and were asked to deliver shocks when another person failed to correctly receive a three-digit ESP "message." Fifteen messages were sent and 15 wrong answers returned; thus, each subject 15 times delivered a shock ranging in intensity from one to 10. The experiment was described as concerned with learning under various conditions, thus making the manipulations plausible.

Theory and Discussion: The authors interpret the results as indicating that when in a state of arousal, females inhibit aggressive responses when exposed to violent stimuli but that such cues have a disinhibiting effect when there is no prior arousal. Arousal did not play such a sensitizing role for males. These data suggest that "... the presence of inhibition is based not on the presence of aggressive cues but on the level of arousal." The data also indicate that aggressive cues can facilitate aggressiveness in the absence of prior arousal. The latter result is contrary to the findings of Geen and Berkowitz (132), but parallels those of Hartmann (169). Arousal did not appear to play the same role for men. Aroused males increased significantly in aggressive behavior after exposure to violent stimuli. For nonaroused males, the aggressiveness score was lower after the violent than after the neutral stimuli, although the difference was not significant.

Principal Findings: An hour-long televised debate between three of the Chicago Seven and three liberals appears to have produced large shifts toward New Left positions among college students. The debate did not influence overall beliefs and impressions, but also changed beliefs about small, discrete bits of information. The Chicago Seven trio made progress among every group, but shifts were more pronounced among liberals. The students were more inclined to agree with the goals rather than the methods of the Chicago Seven. After seeing the film, about ten percent more of the liberals agreed that leftists believe "violent protest is justifiable in the U.S. even if some lives are lost."

Design and Methodology: About 175 student volunteers at Brooklyn College were polled before and after the showing of a televised debate featuring Jerry Rubin, Abbie Hoffman and Rennie Davis of the Chicago Seven and liberal journalists James Wechsler and Richard Rovere and Law Professor Norman Dorsen.

The questionnaire was designed to gauge basic political outlook and beliefs and attitudes about the Chicago Seven. In order to test for any possible effects of responding to the prebroadcast poll on postbroadcast responses, a small control group was excluded from prebroadcast polling.

Theory and Discussion: The authors conclude that the data indicate that a televised debate can be persuasive. The authors suggest that the program's selection of participants, open-ended format, and repeated statement of extremist views in an abrasive manner enhanced its potential for influence.

Principal Findings: The number of television portraits of various population groups deviated from their proportion in the national population. There was a gross underrepresentation of females within all categories analyzed. Occupationally, professional and managerial roles were overrepresented. There was an underrepresentation of occupations with low prestige, except for the service area. Minorities were more likely than American whites to be portrayed in fields of personal service, and were likely to suffer from stereotyped portrayals. Minorities tended to appear in portrayals of less than three minutes. The greatest overrepresentation occurred for males providing protective and security services.

Design and Methodology: Data were collected from a total of 250 half-hour units of television programming. Observations were made between the hours of 3:30 p.m. and 11 p.m. daily, and from 10 a.m. to 11 p.m. on Saturdays and Sundays for five consecutive weeks in February and March of 1971. The universe of programs for content analysis was defined as programs depicting persons interacting in modern settings in which activities revealed occupational status. Altogether, data for 1,830 distinct portrayals were collected for role, sex, ethnicity, and performance time. Reliability was obtained by having extra coders view 80 percent of the total sample and classify the data in-
dependently. Reliability coefficients of .95 and above were obtained.

Theory and Discussion: It would be very difficult for a viewer to obtain much accurate information about the distribution of occupations by watching television, conclude the authors. They argue that television provides distorted ideas and false conceptions about important characteristics of occupational distribution. They recommend that identifiable groups be portrayed as active throughout the entire range of occupations while at the same time the educational prerequisites for admission to an occupation are emphasized in order to reduce some of the distortion apparent in current portrayals of all minority groups.

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Principal Conclusions: After reviewing work on the effects of television commercials on children, the authors conclude that the topic has been neglected in favor of research on the effects of televised violence, on political socialization through television, and on the instructional uses of television. They also note flaws in the methodology of existing studies. "It is evident that compared with other aspects of television, research on the effects of TV commercials is very simplistic and cannot be used for anything more than generating hypotheses for future research," they write. The authors suggest that several of the charges made against the advertising industry be reformulated into testable hypotheses and studied in a more systematic way.

Theory and Discussion: The authors express agreement with the view which attributes the lack of interest in the past research on children's advertising to academic values. It is suggested that compared with other television research, the advertising is not sufficiently respectable in academic circles, and that many developmental researchers share the view that research would have little impact or is likely to be used erroneously by policymakers.

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Principal Conclusions: This review of modeling research shows that a wide variety of behaviors, both desirable and undesirable, are learned by observation of social models. This occurs whether contact with the model is face-to-face or via film or television. There appear to be variations in the probability of performing modeled behaviors according to such factors as the model's response consequences, the model's social characteristics, and constraints placed upon the subject, but the evidence generally supports the hypothesis that children can learn both prosocial and antisocial behavior from viewing models on television. The evidence is particularly strong in the case of the effects of televised violence.

Theory and Discussion: The author argues that a total redirection of emphasis of television content toward prosocial material in children's programming is needed. He notes that there is much evidence that antisocial content can have adverse effects on the audience and virtually no evidence that it can have desirable effects. Using research evidence, he refutes the idea that children like violent content better than prosocial content. In conclusion, he advocates using research talent to create good programs rather than to analyze the effects of bad ones, and cites Sesame Street as a good beginning.

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Principal Findings: No significant differences in aggressive behavior, anxiety, and guilt were found among nursery school children when their play behavior was monitored following presentation of aggressive and nonaggressive films. However, sex differences were observed, with males exhibiting more aggressive behavior and greater anxiety and guilt than girls. The children's aggression scores also correlated significantly with teachers' ratings of habits of aggression in the nursery school.

Design and Methodology: In order to control for aggressive drive, each of the 12 male and 12 female subjects served as his own control, with each child seeing both the aggressive and the nonaggressive films at sessions one week apart. The children viewed the films in pairs and were then left alone in a playroom for 14 minutes, where their play was scored for aggression, and for behavioral signs of anxiety and guilt, by observers behind a one-way mirror.

Theory and Discussion: This experiment was intended as a test of the catharsis hypothesis, which holds that fantasy aggression reduces the instigation of all other forms of aggression. The author suggests that her null findings may be the result of inappropriateness of the aggression scores as indices of drive strength and that the hypothesis be further examined under conditions of frustration.

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Principal Findings: Second-grade children who heard a radio drama portraying a taxi driver behaving in an aggressive manner used more aggressive language in completing a newspaper story exercise about taxi drivers than did children who had listened to a radio drama featuring a nonaggressive taxi driver. Those exposed to the aggressive taxi driver drama also used more aggression in their completions to stories about taxi drivers than in their completions to stories about other role occupants. Children exposed to the aggressive driver attributed more aggressiveness to taxi drivers than children exposed to the nonaggressive driver only when the first part of the news story to be completed replicated the first part of the radio drama.

Design and Methodology: The experimenter used two intact second-grade classrooms, with 29 and 15 children, for the experiment. Assignment to the respective classrooms had been made on a random basis by school administrators. A bogus radio drama was presented to the children during three class sessions. After a common introduction to establish the occupational role of a taxi driver, the endings of the dramas were varied, with the experimental classroom listening to a story about an aggressive and belligerent driver and the control classroom hearing about a nonviolent driver. A role expectations test, designed to elicit the child's conception of the role of taxi drivers through a series of newspaper story completions, was then administered orally.

Theory and Discussion: The author concludes that the data support the hypothesis that audiences generalize from the content of the mass media to their social world. However, the author cautions that confirmation of the hypothesis requires many independent tests and investigation of the conditions under which generalization occurs, such as the maturity and social experience of the child and the realism and social consistency of the media portrayal.

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Siegel, A.E. The effects of media violence on social learning. In
Principal Conclusions: Television is an especially authentic medium because of its vividness and apparent fidelity in portraying what is before the camera. This makes television news especially credible, and much evidence indicates that television entertainment also is often perceived as credible—as a reasonable representation of the way people behave. A great deal of learning occurs through observing others; television can be a source for such learning. Adults as well as children may imitate what they observe. The immediate increase in airline bomb threats following the television showing of The Doomsday Flight, which involved a bomb on an airliner, is an example.

There is a great deal of violence on television, and it seems probable that children do learn violent acts from what they observe on television. They probably also learn how people behave in violent and other situations. Whether aggressive or other behaviors learned from television will be performed depends on many circumstances. Television violence, however, would seem to increase the likelihood that aggressive behavior will occur, and would seem to give shape to whatever aggressive norms occur.

Theory and Discussion: Various experiments clearly demonstrate that children can learn from observation without reinforcement or immediate practice, and that such observational learning can occur from watching television. Television is one of the agents socializing children. Television violence increases the likelihood of behaving violently because children learn violent acts. The research was concerned with the world hostile and many persons and agencies, such as the police. Thus, television gives an impression of the world that would make aggressive behavior more justifiable. Television may be particularly influential in shaping the behavior of younger children, because they are less able to distinguish between fact and fiction when each is presented with similar vividness and fidelity, as occurs with television. Nevertheless, adults, too, may be affected, as the Doomsday experience indicates.


Principal Findings: College students who watched television monitoring of a female experimental subject receiving electric shocks evaluated the girl less favorably only when told that they were watching the session live rather than by videotape and totally described so that they believed the shocks were real and the subject was in the condition with recognizing emotional states. Evaluations of the subject were more negative when the subjects knew the experiment was concerned with reactions to victims, even if they believed the shocks were real, or they were informed about the experiment's purpose and the shocks. As soon as the subjects were given the true purpose of the experiment, subjects in the "live" condition no longer rated the victim less favorably than did those in the taped playback condition.

Design and Methodology: The subjects were 158 volunteers from introductory psychology classes at the University of Pennsylvania randomly assigned to conditions. The pre-manipulation measure for all groups consisted of rating a "typical female college student" on various attractiveness scales. Next, the subjects read one of the eight explanations of the experiment which affected expectations as to future treatment of a girl victim. The "past-event" groups were told that a visiting faculty member

and some students in the department had, in the course of their work, made some tapes of experimental sessions. The "mid-point" groups were told that these experimenters were currently running some experimental sessions in another building and that an arrangement had been made whereby one session was to be seen live through a closed-circuit television apparatus. Four levels of deception were then set up within the "past-event" and the "mid-point" groups. The "total deception" groups were told that the experiment was designed to discover particular cues that allow people to perceive emotion in others and led to believe that the victim was actually receiving shocks. "Partial-truth" groups were told the real purpose of the experiment but led to believe the victim was actually being shocked. "Complete truth" groups were accurately informed as to both method and purpose, and "role-playing" groups were truthfully informed and asked to play the role of an observer of a punished subject in a real learning experiment. All groups viewed the same video portrayal of a college girl receiving shocks. The post-manipulation measure was the rating of the girl victim on the same scales on which the subjects had previously rated a "typical female college student."

Theory and Discussion: The experiment was designed to test a hypothesis about the contribution of the deception employed in obtaining findings which suggest that innocent victims will be devalued because of their very innocence. This "just world" hypothesis holds that when persons observe someone punished and cannot attribute that punishment to external forces, they will attribute it to some inferiority or fault on the victim's part. As a result, they will hold the victim in lower esteem. This "just world" hypothesis is questioned by these authors, who suggest that the apparently supportive results from other experiments are an artifact of the circumstances peculiar to the deception involved. They test their hypothesis by varying the degree of deception. In addition, they test the usefulness in these circumstances of role-playing as a substitute for deception. They conclude that deception is required for the "just world" effect. They also conclude that role-playing cannot substitute for deception. They comment that, because devaluing did not occur when observers understood the subject to be in a painful situation not of her choosing—that is, an innocent victim—the findings can be interpreted as suggesting that in real life devaluing does not occur when victims are clearly perceived as truly blameless for their plight.


Principal Findings: A comparison of American CBS and Canadian CBC television news shows that on every one of 21 consecutive days monitored, the CBS evening newscast exceeded the Canadian newscast in items on violence, protest, and war. On one day, April 30, 1970, CBS news carried 78 percent aggression items, compared to 38 percent for the CBC. When war items were removed from the analysis, CBS continued to show more aggression items than did the CBC.

Design and Methodology: CBS and the CBC evening newscasts were monitored between April 20 and May 10 of 1970. The coding scheme involved the news locale and its substantive concern (labor, war, space, business, politics or government, protest, violence, etc.). A test of code disagreement based on a smaller sample of days yielded a figure of two out of ten percent, with a mean of 4.6 percent.

Theory and Discussion: Noting research evidence that the reporting of violence instigates other violent acts, the author questions whether such a high incidence of violence needs to be reported on network television. It is also possible, he notes, that the reporting merely reflects a true state of affairs in the two
countries or that countries with greater rates of violence tend to overreport it.


Principal Findings: Interviews with roughly matched samples of arrestees and nonarrestees in the Detroit riot of 1967 indicate that: In regard to experience with television prior to the riot, arrestees reported seeing more reports of riots, more violent acts such as fighting and police brutality, and less property damage; more often perceived the police as responsible; and less often “felt bad,” although they did not differ in the proportion which felt the riot was justified. In regard to media effects at the time of the riot, nine percent of the arrestees heard about the riot over television; among the arrestees, learning by indirect means was associated with communication afterwards with another person—about 50 percent of those learning by television, radio, or telephone communicated then with someone else, compared with only 37 percent for those learning from another person directly and 28 percent for those at the scene; and, among arrestees, the broadcast media was said to tell about looting and arson, the actual precipitating incident, and the imposition of a police curfew more often than telephone conversations, face-to-face conversation, or direct experience.

Design and Methodology: At the jail 499 black male arrestees were interviewed. Two to three weeks later, a black male living near each arrestee was interviewed. This produced “arrestee” and “community” samples for comparison.

Theory and Discussion: The authors suggest that intrurban and interurban media effects should be distinguished. In this Detroit data, they find evidence for the latter, interpreting the differences in exposure and perception of televised riots as indicating the development of a “riot culture” for a subpopulation. They conclude that television was not important in the immediate spread of the riot, although they observe that since only about a fourth of the arrestees were at the scene, mass media must have been an initial source for the persons who spread the news face to face or by telephone to about half of the arrestees.


Principal Findings: Black subjects who had heard an aggression-arousing recording against segregationists were no less likely to appreciate humor than were subjects who had heard a nonarousing recording. For highly aroused and involved subjects, only hostile humor reduced tension. However, for the moderately aroused and involved, both hostile and neutral humor was tension reducing. Posthumor tension and aggression levels were unrelated to humor appreciation.

Design and Methodology: The subjects were 144 male blacks aged 17 and 51 years of age, all of whom had at least 10 years of formal education. They were recruited by the two black experimenters from organizations sympathetic to civil rights causes in the New Haven, Connecticut, area. Subjects were assigned randomly to experimental conditions and tested in groups of three in naturalistic settings. The stimulus materials were tape recorded. The subjects were first exposed to either a vivid antisegregationist or a noninflammatory account on race relations. Then, they were submitted to either hostile humor, which belittled the duplicity of superficially egalitarian whites; neutral humor, which featured the same black comedian talking about other political topics; or a lively documentary about a black author and the problems he encountered. Humor appreciation was measured by a short questionnaire, and the dependent measures of tension and aggression by a mood checklist. One-half of the experiment was conducted as an after-only design, and the other half was conducted by pre-post design, with an additional mood checklist administered immediately after the initial arousing or nonarousing communication.

Theory and Discussion: The author suggests that humor can have profound cathartic effects without in any way altering external reality. As such, it is seen as a mediator “affording the possibility of delay between impulse and action, and furnishing a satisfying alternative to action on the one hand and rigid suppression on the other.”


Principal Conclusions: The scientific evidence to date does not lead to a judgment linking increased violence in the United States to the presentation of violence in entertainment or news presented on television or in the movies. However, experimental and survey research raise the possibility that certain children and adults strongly frustrated after observing media violence may engage in imitative behavior. Experimental evidence also suggests that the viewing of justified aggression may lower inhibitions against behaving aggressively. Self-restraint by the media in regard to violence may be desirable because of this evidence of possible negative effects. Research techniques in regard to studying the effects of television and film have become quite sophisticated; however, much new research would have to be done before the evidence could be said to show a link between societal violence and what is presented in the media.

Theory and Discussion: There have been many social events since the turn of the century which might affect the level of violence in society, including large-scale wars, which have offered youth models of military effectiveness; vast armament and military training programs; and the rising aspirations of the urban poor. "Thoughtful consideration of the major historical developments in the almost 70 years of this century make it clear that far more potent factors than the effects of popular communication media are at work," writes the author. Still, compared with past centuries, people now experience less direct violence and threat and a vastly increased quantity of such experience vicariously through movies and television, which is especially important because of its ubiquity.

There is a great deal of violence in the media, but one must also recognize that the evolution of popular entertainment has been humanitarian given a history of Roman circuses, public turnouts for torture and executions, bear-baiting, or even bloody bare-fisted prize fights. There is also the possibility of some positive benefits from violent television entertainment—as a safety valve for anger, the absorption of time that might be spent in antisocial behavior, or as a source of desirable knowledge or attitudes, ideas for imaginative play and general cultural enrichment.

The available evidence is that the frustrated adult or child viewer who would imitate observed aggression is likely to be a person who watches television infrequently, lacks a developed imaginative life, and tends to be impulsive or hyperactive, and that imitation only occurs in situations highly similar to what was depicted.

Many questions can be raised about the generalizability of the experimental research done so far. The studies have generally used very young children, college students, and persons from
the middle class as subjects; often, the alleged aggression has occurred in a play or game-like situation; exposure to the visual stimulus has been brief and has occurred in circumstances atypical of normal viewing; effects demonstrated for the very young may not hold for older persons; there is always the question of the possible unintended influence of the experimenter’s expectations on the behavior of subjects; such inhibiting factors as family attitudes have not been explored; and viewing usually has been solitary and nonsocial in the extreme.

Future research should attempt to use television stimuli approximating broadcast television viewed in circumstances similar to ordinary home viewing; measures of actual rather than simulated or play aggression; and, populations of lower socioeconomic status. Particularly important is research on the impact on subsequent behavior of the highly vivid television, film, and radio news and documentary coverage of violence and appeals for violence.

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**Principal Findings:** In a 1967 Detroit riot, participation was related to age but was not related to whether the participant learned of the riot by word of mouth or from the mass media. When asked “How did you first hear about the riot?” 50 percent of respondents said they heard it from friends or family members. Another 30 percent got the news from radio or television, while 19 percent learned of the riot by seeing it or hearing it for themselves. Young people 15 to 24 were most likely to have participated in the riot, with likelihood of participation decreasing with age.

**Design and Methodology:** The survey was conducted by the Detroit Free Press in the weeks following the Detroit riot in July 1967. A random sample of residents of areas where rioting occurred were interviewed. All respondents and all interviewers were black. Sample size, for that portion of the survey used for this secondary analysis, was 360.

**Theory and Discussion:** By combining answers to two questions, the investigators were able to analyze degree of riot participation. There were no differences for source of news, and a significant effect for age. Thus, the broadcast media may not be responsible for contributing to riots and large-scale disturbances. The investigators point out that the Detroit data are not descriptive only of the relationship between first learning of the riot and riot participation. The possible influence of continued television coverage and riot participation remains to be studied.

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**Principal Findings:** In response to open-ended questions, Scottish school children generally expressed preference for nonmedia sources of gratification over media sources. Only as a means of relieving boredom were the media chosen by significant numbers of children. Comics appear to play an important role as a source of gratification for children, when they are in situations where interaction either does not occur or is unsatisfactory. Television is frequently used by all children, but those with high IQ ratings make even more extensive use of it. Not only do they use it as a means of temporarily withdrawing from interaction and relieving boredom, but they use it as something to talk about more often than other children. It is important to high-IQ children as a means of avoiding problems. Radio is used little overall, but girls are much more likely than boys to use it as a means of withdrawal.

**Design and Methodology:** The study is based on a survey of 592 14-year-old school children in Aberdeen, Scotland, and forms part of a longitudinal study of children’s use of mass media and leisure. The sample consisted of children attending selected primary schools in 1967. The children were interviewed and auxiliary questionnaires administered in the schools. As part of the interview, the children were asked in an open-ended format what they would do in a variety of common situations, such as a lack of meaningful activity or the need to avoid a problem.

**Theory and Discussion:** The author notes that extensive use of a medium does not necessarily mean high dependence upon it. This depends upon why a child is using the medium. He suggests that previous research, using media-specific questions, may exaggerate the importance of the mass media over other sources of gratifications, and concludes: “The media appear to play a useful, though limited, part in the lives of children.”

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**Principal Findings:** In 1951, 1952, and 1953, advertising occupied one out of every five minutes of big-city television time. Drama occupied the most broadcast time, and in these early days of television seemed to be increasing in predominance with the increase in total amount of television programming—from 33 percent of total time in New York in 1951, to 42 percent in 1952, and to 47 percent in 1953. The largest subclass of drama was crime, providing one out of six minutes of all big-city programming in 1953. In one television week in New York, there were 3,421 violent acts and threats in 1953, an increase of 15 percent over the previous year. Entertainment programs accounted for 96 percent of this violence. Hours when children might be expected to view were more violent than the rest of the television week.

Among the characters in television drama, men outnumbered women by a ratio of two to one, and the population was concentrated in "the age brackets of peak sexual attractiveness." Four out of five were white Americans, and males were more predominant among the white Americans, while females were more numerous among the other nationalities. White Americans were heroes more than villains, while the reverse was true for Europeans. Women were generally portrayed as housewives. Largely unrepresented on television were children, the old, and the institutionalized. Villains were far more likely to be employed than were heroes. There was little variation in the way raters scored characters within various categories, indicating that stereotypic portrayals were common.

**Design and Methodology:** One week of television content was coded for all seven stations serving New York in January of 1951, 1952, and 1953. In addition, similar studies were conducted in Los Angeles in 1951 and New Haven in 1952.

**Theory and Discussion:** The 21 categories of programs which were identified could be classified into three groups—entertainment (drama, quiz, sports, etc.), "information" (news, weather, and "orientation" [content aimed at affecting attitudes and values—for example, programs about religion, public issues, and personal relations]). By these definitions, about three-fourths of all television was entertainment, about one-fifth information, and about five percent orientation. The 21 program categories and the broad classes into which they can be grouped, must be considered very crude units of analysis, because they cannot be said with any certainty to relate to the audience needs which television serves.

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Principal Findings: About three-fourths of a sample of preadolescents described violent behavior in cartoons as not violent. All of the preadolescents described violent behavior in newscasts of the Viet Nam war as violent. About two-thirds described violent behavior in Westerns as violent. The most common explanation of those who did not describe behavior in the cartoons and Westerns as violent was that such programs were funny or make-believe.

Design and Methodology: A sample of 50 preadolescents 4-12 years old were interviewed in the Phoenix, Arizona, area during the summer of 1971. Due to the exploratory nature of the study, significance tests and random sampling techniques were not used. Children were selected on the basis of sex and age to obtain even distributions for these variables. The children were interviewed individually in an open-ended manner which allowed each child to interpret the situation in his own way.

They were given a list of four current programs and asked whether they were make-believe or real-life, asked to name their favorite program and to define it as real or make-believe, questioned about the kinds of programs they watched regularly, and why they chose the programs they did. They were then questioned about the concept of violence, and it was ascertained that although they did not use the word “violence,” they did understand the concept. Violence was then described to them as behaving in a way that could hurt someone, and this was further illustrated by giving several examples. Finally, specific programs were identified, and behavioral content in the programs that might be defined as violent were described. After each description, the child was asked whether it was violent and why or why not.

Theory and Discussion: Violent behavior in animated cartoons was described as not violent by 73 percent of children aged 4-8 and 83 percent of children aged 9-12. Violent behavior in adult Westerns was described as violent by 68 percent and 65 percent; and newscasts of the Vietnam war were judged to be violent by 100 percent of both groups. Also, physical violence between live clowns was described as violent by the younger children 47 percent of the time; by the older children, 96 percent of the time.

When asked for the reasons for their responses, children in both groups replied that the cartoon and clown situations were funny and make-believe, and thus not considered violent. When asked if they would engage in similar behavior, most said they would not. Of the younger children who said the cartoon was violent, all emphasized that it was a funny make-believe situation; and when questioned further, said that they saw the isolated act as violent but defined the context as play and, hence, nothing to take seriously. Similar explanations were offered for those who said the clowns were violent. In contrast, all saw the violence in the Western and war scenes as real and ugly. Most of the older children who said the Western was not violent said they did so because the show was not real. Again, they all said they would not engage in any of the acts they saw.

The expectations of the authors were that preadolescents would distinguish between a play world and a nonplay world; that what they define as make-believe television would be associated with play behavior; that preadolescents would prefer make-believe or play-oriented content over nonplay or more serious content; that content defined as play would not be taken seriously; and, that violence on television that is seen within a play or make-believe context will not be taken seriously by the preadolescent viewer. Judging by their responses to the interviews, preadolescents are play-oriented in their responses to television. With respect to violence, the context of the situations seemed to determine the response to it—in play or make-believe situations, violent behavior is not seen as “violent” but rather as funny or enjoyable. In real-life situations, such as newscasts, the violence is seen as very real and ugly.

Principal Findings: First-grade children exposed to a dramatic example of a boy helping a dog on the Lassie series chose to help puppies in distress rather than continue playing a game for self-gain more often than did children shown another sequence from the Lassie series or a program from the family situation comedy, The Brady Bunch.

Design and Methodology: The subjects were 15 boys and 15 girls from first-grade classes in a middle-class, predominantly white suburban neighborhood. Parents’ consent was requested, and subjects were selected randomly from those children for whom consent was given (about 80 percent). Within each age and class, children were assigned randomly to the treatment conditions, which consisted of the three videotaped programs described above.

An experimenter who was blind to the treatment condition administered the dependent measure of helping behavior. Each child was introduced to a game in which he could earn points and win a prize. He was also asked to press a button to get help if he should hear some puppies barking in a nearby room and warned that he might have to press it for a long time before the warning signal was heard. Then, the experimenter said, “Remember, this game is over as soon as I come back—you won’t be able to get any points after that. Try to get as many points as you can because the more points you get, the better your prize will be. You know, if the puppies start barking, you’ll have to choose between helping the puppies by pressing the Help button and getting more points for yourself by pressing the blue button. It’s up to you.” After the experimenter left the room, the child first heard 30 seconds of silence followed by 120 seconds of increasingly frantic barking. The experimenter recorded the latency of helping, and the total seconds of helping was recorded on a timer.

Theory and Discussion: Because one of the control programs featured the same major characters, setting, and general dramatic style as the prosocial Lassie show, it is unlikely that factors other than the specific modeled example influenced helping. Thus, the present results support the social learning view that the effects of television on behavior are mediated by specific modeling cues and the interpretation of these cues by the child, rather than general format and other global considerations. The authors conclude: “The practical implications of the present demonstration are also clear: It is possible to produce television programming that features action and adventure, appeals to child and family audience, and still has a salutary rather than negative social influence on observers.”

Principal Findings: Fourth-grade boys who observed an adult male model yielding to the temptation to view a movie showed significantly more yielding than subjects who saw a resisting model. However, subjects who saw the resisting model, whether he was engaged in a prosocial activity or remained idle, showed no more resistance to temptation than did a control group who saw no film. The subjects’ responses on a moral behavior questionnaire were inconsistently correlated with resistance to temptation.

Design and Methodology: The subjects were 84 fourth-grade boys from two Minneapolis elementary schools. The experimental temptation consisted of assigning the child to do a boring job while a highly attractive movie was shown just outside his line.
of vision. The child was scored as yielding to temptation if he left his job to look at the movie. Before being placed in the tempting situation, the subject was exposed to one of five experimental treatments: a resisting model who performed a reinforced prosocial activity which was incompatible with yielding, a resisting model who performed the same prosocial activity without reinforcement, a resisting model who remained idle, a yielding model, and no model.

**Theory and Discussion:** The author interprets the results as suggesting that resistance to temptation is more strongly influenced by observational learning than by individual differences in guilt or anxiety about deviation. He observes that the yielding model was more effective than the resisting models in eliciting behavior. The inconsistencies observed in correlations between yielding behavior and the attitudinal measure of moral behavior are interpreted as indicating that the situational effects of observing a model eliminate any relation between internalized guilt responses and resistance to temptation.


**Principal Findings:** Third and fourth-grade girls who saw a television portrayal of a girl who won money at a bowling game and correctly verbalized rules about cheating, cheated less when playing the game themselves than did girls exposed to a less successful model. Girls who saw a television portrayal of a girl who cheated, or practiced cheating, themselves cheated more than did girls exposed to models preaching or practicing rule adherence. When asked to repeat the rules governing rewards in the game, children who watched a successful model were more accurate than girls who had watched a low-skill model. Girls who heard the model verbalize the rules were more accurate than subjects who heard a model exhorting cheating.

**Design and Methodology:** Subjects were 60 third- and fourth-grade suburban school girls who were assigned individually to one of eight conditions resulting from a 2 x 2 x 2 design, where the independent variables were: successful vs. less successful model; model did not cheat vs. model cheated; and model preached cheating vs. model preached rule conformity. Subjects saw the model perform in a "bowling game" on a videotaped presentation of 17-30 trials. In the "successful" model condition, the model achieved a specified score on six trials; in the "unsuccessful" model condition, the model achieved this score only three times. In the "model cheated" condition, the model took the reward only when the specified score was made; in the "model did not cheat" condition, the model took rewards more often.

In the remaining condition, the model either verbalized the rules correctly or advocated cheating. Following the viewing of the television portrayals, subjects were allowed to play the game themselves. They were then tested for verbal statements of the rules governing self-reward by being asked to "explain the rules to another child in a separate room through this microphone."

**Theory and Discussion:** The results indicated that rule violations were affected by the model's level of success, of skill, and by the interactions of the model's verbal and behavioral expressions relevant to the rules. The authors conclude that behavioral transgressions of the child increased when the child was presented with either preachers or practitioners of transgression.


**Principal Findings:** In 1960, the typical American adult viewer of television expressed general satisfaction with the medium, did not voice specific unfulfilled desires, and perceived television as primarily concerned with entertainment. His complaints in regard to content centered on the depiction of violence, which might be imitated by children, and the quantity and quality of commercials. His broader reservations reflected the sizable amount of time he spent with television—for he expressed concern that television wasted time, curtailed family activities, was a "lazy" way to spend time, and was not as good for children as alternative activities. Having more education, a higher income, and living in a city were correlated positively with being somewhat less satisfied and more critical of television, watching somewhat less, relying for information more on print media, emphasizing selectivity in viewing more, and believing that there should be more informational and educational programming. However, like the average adult viewer, his own viewing consisted mostly of light entertainment.

**Design and Methodology:** In the spring of 1960, interviews were conducted with two national probability samples of 1,250 persons 18 to 70 years of age by two separate polling organizations, resulting in a final sample of 2,427 adults. The interviews lasted about two hours, and moved from general to more specific topics in regard to television. In addition, identical interviews were conducted with a sample of 300 adults in the New York area for whom three to six months’ television viewing diaries had been collected, so that there would be a set of data in which interview responses could be compared with extensive viewing data.

**Theory and Discussion:** Television has become accommodated into American lives. In 1946, television was found in America about as frequently as newborn triplets. By the end of 1960, 90 percent of households had television and had the set on an average of five to six hours a day. The overall picture is one of general satisfaction. Despite parental concerns about television violence, parents in general are satisfied with television, and the frequency with which benefits are cited over harmful effects is greater among parents than nonparents. However, there are some conflicts and concerns, and these are correlated with higher education, higher income, and being an urban dweller.

Roughly, the mass audience divides into two groups in regard to television, and the factor that most clearly separates them is education. Although education is a continuum, the sample can be conveniently and meaningfully divided into those with and without a college education. The two groups say very different things about television, but are more alike in the way they use television and the content they view, both using it for relaxation and tending mostly to view it as entertainment. However, the more educated lean toward the higher quality programs within a genre, preferring *Gunsmoke,* *Sid Caesar,* and *Play of the Week* to more nondescript offerings of the same type.

The major difference appears to be the ways the two groups feel about television. While the typical viewer emphasized its entertainment value, its physical bringing together of families, and its usefulness as a learning tool, the better-educated nontypical viewer emphasized its power to distract from more worthwhile pursuits, its inhibiting of social interaction by the family, and its luring of children from books and bed. (Ten years later, the study was replicated to permit analysis of trends over time. See Bower, 53.)
Design and Methodology: Subjects were 10 preschool children at the Frank Porter Graham Child Development Center in Chapel Hill, North Carolina. Their mean age was 51 months. The group was mixed racially and socioeconomically, there were equal numbers of boys and girls, and all subjects knew each other before the study began. Experimental and control groups were composed of subjects matched for amount of time spent watching television at home. Experimental sessions of 10 minutes duration were held daily, 5 days a week. During a session the two five-child groups played concurrently in separate identical experimental rooms. Two observers and a timekeeper occupied an observation booth from which they could see the children in both rooms through one-way mirrors.

Experimental rooms contained a number of toys, including, among other things, the standard experimental inflatable plastic Bobo doll, some blocks, puzzles, spoons, guns, toy trucks, and so on. The behavior of the children was coded into four categories of physical aggression: hitting or pushing, kicking, gross manipulative bodily contact, and throwing objects at other children. Subjects were scored in terms of occurrences of these behaviors. After the first ten sessions, in which baseline data were collected, each group viewed a videotaped television program of 10 minutes duration immediately prior to free play. The experimental group was always exposed to programs judged to be aggressive, while the control group always viewed nonaggressive programs. Rates were unaware of conditions and had been told that both groups were viewing a random sequence of aggressive and nonaggressive films. Television materials were selected from Saturday morning children's program offerings, and featured various human and animated cartoon characters, with a preponderance of cartoons. Commercial messages were eliminated.

Theory and Discussion: The authors conclude that the regularity with which subjects in the aggressive treatment group emerged as more aggressive than their matched counterparts suggests that the television treatment influenced the change. They note that it is possible that one or two subjects were influenced directly by the television manipulation and that other subjects began to display more hostility in retaliation, independently of the television stimuli. The fact that some subjects began to increase in aggressive behavior only late in the experiment supports this conclusion. An alternative explanation is that these children simply took longer to be influenced by the manipulation. The authors believe that the conditions of this study may be said to simulate the natural television viewing and play situations of preschool children more closely than the conditions of other studies of this type. Despite these differences, they note, similar effects were found.


Principal Findings: Markedly different results were obtained when the same CBS newscasts covering the 1968 Presidential campaign were analyzed by different persons and methods. Stevenson, et al., using an objective method which cataloged content as favorable, unfavorable or neutral, found Humphrey and Nixon treated almost identically in regard to favorable vs. unfavorable coverage, with both about twice as much favorable as unfavorable attention. However, Stevenson et al. found somewhat more total coverage for Humphrey than for Nixon. Efron, using a method in which subjective elements were more frequent and only favorable and unfavorable content was weighed, found Nixon treated far less favorably than Humphrey. The analysis by Stevenson, et al., does not lead to the conclusion that CBS coverage was biased, although Efron reached such a conclusion in regard to CBS and the other two networks on the basis of her own tabulations.

Design and Methodology: Both studies analyzed the same set of transcripts of CBS news coverage between September 16 and November 4, 1972. In addition, Efron analyzed transcripts for the same period for NBC and ABC. Stevenson, et al., requested transcripts from all three networks, but only CBS complied. Efron evaluated sets of sentences judged to express opinions for favorability or unfavorability toward Nixon, Humphrey, and Wallace. In addition to treatment of candidates, both studies analyzed coverage of principal issues. Data are reported in terms of quantity and proportion of favorable and unfavorable "opinions" and total wordage. Stevenson, et al., report their data in terms of number and proportion of lines in each category. Stevenson, et al., report intercoder agreement of 90 percent. Efron reports no data on coder reliability.

Theory and Discussion: In the most direct replication of Efron, where content related to each of the three candidates was coded clause by clause as favorable, unfavorable, mixed, or neutral, Stevenson, et al., found 24 percent favorable to Humphrey and 23 percent favorable to Nixon; 11 percent unfavorable to Humphrey and 12 percent unfavorable to Nixon; 66 percent neutral for Humphrey and 64 percent neutral for Nixon. Wallace was less well treated—18 percent favorable, 15 percent unfavorable, 73 percent neutral. Efron found, for Humphrey, 53 percent favorable vs. 47 percent unfavorable, and for Nixon, 6 percent favorable vs. 94 percent unfavorable. For Wallace, the Efron score was 46 percent favorable vs. 54 percent unfavorable. Stevenson, et al., attribute the differences to the methodology used by Efron, which had several subjective elements. Among these elements was the lack of specific criteria for favorable or unfavorable, the absence of mutually exclusive categories to cover all content, and the absence of a neutral category.

Stevenson and coauthors state that they pursued their inquiry because of the methodological shortcomings in the Efron analysis. They note that few of the media reviews of The News Twisters detected these methodological shortcomings or even questioned the research techniques. Stevenson, et al., write that, "The similarities in the treatment of Nixon and Humphrey are striking. Whether by design or happenstance, CBS news team did not flagrantly favor one candidate over another during the 1968 campaign." They conclude, "The campaign occupied about one-third of the total news content of the CBS Evening News during the period of the study. Humphrey received somewhat more coverage than Nixon or Wallace. The Humphrey advantage amounted to about three minutes per week more attention than that given Nixon and about four minutes more than that accorded Wallace. There was no evidence of any systematic evaluative bias for or against any of the three candidates. Coverage was remarkably similar."


Principal Findings: Children six to twelve years old said they preferred cartoons, fantasies, situation comedies, and dramas. Boys said they liked cartoons more often than did girls and, for all but the oldest boys, cartoons were a clear favorite over other types of programs. There was a clear age trend with older children preferring more adult programming. Boys frequently said they preferred fantasies; girls, rarely. Situation comedies were girls' clear favorite but were rarely mentioned by boys. Children's programs were high on the "dislike" list, ostensibly because they were "babyish." The children were critical in regard to commercials, although some commercials were described as amusing. The reason they gave was that commercials interfered with their enjoy-
ment in viewing various types of programs, particularly at peaks of suspense or tension.

Programs seen as believable were almost exclusively broadcast of actually occurring events such as sports, documentaries, the news, and programs purported to be reconstructions of real events. Programs which were not believed were almost exclusively fantasy programs.

Nearly two-thirds of the respondents reported they had conflicts with brothers and sisters as a result of competition to control the choice of programs to be watched. Disputes were mainly resolved through arbitration. There were four types of orderly rules commonly used: first come, first served; compromise; voting; and rules in favor of specific family members. In nearly 30 percent of the reported disputes, settlement followed some form of parental intervention, usually on the part of the mother. The children reported that they were largely left to view whatever they wished.

**Design and Methodology:** Interviews were conducted at summer day camps with 82 boys and 49 girls who ranged in age from six to 12. The children were interviewed in small groups of four or five persons in order to provide relaxed, informal atmospheres in which the children could stimulate each other. Group members were all one sex and similar in age. Mothers’ occupations were for the most part professional and managerial. Mean number of television sets in a household was 3.1. Questions were put informally to each of the children in a group, and each child was permitted and encouraged to respond. Interviews were recorded, transcribed, and analyzed.

**Theory and Discussion:** In general, comical and lighthearted programs predominated among the preferred choices. There were far fewer specific programs named as being disliked than there were cited as preferred. In the drama category, “likes” were specific: “dislikes” were generic (i.e., “love movies,” “war movies,” “Westerns”). News and talk shows were disliked types of programs.

Credibility was assessed in four ways: “external verification,” where the children evaluated a plot, personage, or event on the basis of personal experience; “internal verification,” where the children evaluated the credibility of a program or episode by the internal consistency; “validation by authorities,” where the children assessed the veracity on the testimony of some authority; “dramaturgical license,” where the children realized that the events could not have occurred but were accepted as legitimized by the dramaturgical conventions of the productions. There were also “unresolvable cases” where children could not decide whether or not a given television presentation was believable. There was little evidence of “indirect learning,” the process of acquiring norms, values, and role orientations from exposure to media imagery.

In only 30 percent of disputes, the availability of other television sets facilitated settlement; multiple sets use was not the most frequent method of resolution. Parents did not so much guide the viewing of their children as they occasionally interceded to prevent or control their viewing in special circumstances. The first form of parental intervention was to settle disputes. The second form of intervention occurred when parents prevented their children from viewing in order that they perform duties around the household. Last, there was intervention to prevent children from watching programs that were considered undesirable.

The authors suggest that family composition variables (such as number, age, and sex of children) and scarcity of resources (number and type of television sets) affect the frequency of family disputes, and perhaps the types of “political processes” engaged in by the family may be fruitful topics for future research.

**Conclusion:** A simple apparatus for the reinforcement of behavior in children. *Developmental Psychology*, 1969, 1, 763-764.

**Principal Findings:** The opportunity to view cartoons can be used as a reinforcing agent which shapes the behavior of young children.

**Design and Methodology:** By means of a simple switch which regulates the on-off aspect of the television set, the experimenter is able to turn cartoons on (positive reinforcement) or off (punishment) from a position away from the child and the television set, resulting in a more natural, nonlaboratory setting.

**Theory and Discussion:** Television appears to be an extremely rewarding experience for children. Therefore, it can be used as a reinforcing agent. Prior investigations have demonstrated that thumbucking behavior can be controlled in preschool children by withdrawing the display of television cartoons, but the equipment was very costly. The present research has developed an extremely inexpensive means for the same procedure.

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**Principal Conclusions:** Evidence from experiments, surveys, and various other types of studies indicate that there is a causal relationship between viewing violence on television and aggressiveness on the part of children and young people. However, this conclusion can only be said to be "preliminary and tentative." Such an effect of violence viewing, if indeed it occurs, may be limited to children who are "predisposed to be aggressive," and may depend on various circumstances surrounding exposure to the violent television content.

**Theory and Discussion:** The more than 20 studies commissioned specifically for this research program—published separately in five volumes of technical reports totaling 2,330 pages—are interpreted against the backdrop of prior research on the effects of television violence (Baldwin and Lewis, 15; Bechtel, Achelohl, and Akers, 31; Cantor, 59; Chaffe, 66; Chaffe and McLeod, 67; Clark and Blankenburg, 75; Comstock, 94; Domini and Greenberg, 98; Ekman et al., 109; Fischbach, 117; Foulkes, Belvedere, and Bruhaker, 122; Greenberg, Ericson, and Vlahos, 150; Greenberg and Gordon, 151; Greenberg and Gordon, 152; Gurevitch et al., 158; Israel and Robinson, 168; Katzman, 194; Leiter and Roberts, 220; Liebert and Baron, 226; LoSciutti, 230; Lyle and Hoffman, 238; McIntrye and Teeven, 245; McLeod, Atkin, and Chaffe, 246; Murray, 280; Robinson, 315; Robinson, 316; Robinson and Bachman, 317; Ward, et al., 382).

The program resulted from a request by Senator John O. Pastore to the Secretary of Health, Education, and Welfare for the appointment of a special committee to investigate whether violent programs have harmful effects on children. About $1 million in new research was funded. The committee first met in 1965, and the final meeting was in December, 1971.

Much controversy surrounded the program. The broadcasting industry was asked to indicate to social scientists unsuitable for the Committee; and none so named, were asked to serve. Although several were highly qualified scientifically, the result was an exchange of charges about blacklisting. At the same time, two network officials and three persons closely associated with network research were appointed. The result was charges of undue industry influence.
The final report, because of its many qualifications, was falsely reported in the New York Times as indicating no causal relationship between violence viewing and aggressiveness, and this led to considerable imitative interpretation in newspapers and other media who take the Times as authoritative. Within a few weeks, revisionist coverage began, as scientists involved in individual research began to criticize press interpretation and the conclusions of the Committee report.

At the time of this writing, two things stand out. First, a Committee with strong network representation found evidence of a causal relationship between aggressiveness and violence viewing. Hand-wringing qualifications may reveal the Committee's anxiety; they do not affect the basic conclusion. Second, a great deal of scientific interest in the effects of television and new research was stimulated by the program far beyond the specific studies financed. In this respect, the program contributed substantially to social science quite apart from the interpretation given the research conducted within its boundaries by the Committee.

The causal influence of television in any respect is said by the committee to be hard to isolate because it is only one of many possible contributory factors. Earlier studies indicate that the viewing of violence on television can immediately or shortly thereafter result in imitative aggressiveness, and the instigation of nonimitative aggressive behavior. However, the evidence does not indicate a universally adverse effect, or even that a majority of children are affected. Televised violence "may lead to increased aggressive behavior in certain subgroups of children, who might constitute a small portion or a substantial portion of the total population of young television viewers." The findings from all types of studies, "while not wholly consistent or conclusive, do indicate that a modest relationship exists between the viewing of violence and aggressive behavior." Surveys show an association, but do not conclusively permit causal inference; a third variable may be responsible for the association by causing both, and this variable may exist in the present or in prior experience in the individual's life history. The experimental studies permit causal inference, but they are "weak" in regard to generalizing to real-life effects.

Nevertheless, the experimental evidence is "suggestive...in favor of the interpretation that viewing violence on television is conducive to an increase in aggressive behavior, although it must be emphasized that the causal sequence is only likely applicable only to some children by viewing violence...and the much less certain evidence from field studies that extensive violence viewing precedes some long-term manifestations of aggressive behavior. This convergence of the two types of evidence constitutes some preliminary indication of a causal relationship, but a good deal of research remains to be done..."

The field and laboratory studies converge also in another point: the effect may occur only for those predisposed; imitation occurs widely, but the incitement to aggression seems related to predisposition. Second, circumstances are important, such as parental communication about television, the outcome of the observed violence, and whether the violence is perceived as fantasy or reality; generalizations about all violent television content may be misleading. It is recommended that future research should focus on:

1. Television's effects in the context of the effects of other mass media.
2. The effects of mass media in the context of individual developmental history and the totality of environmental influences, particularly those of the home environment. In regard to the relationship between televised violence and aggression, specific topics in need of further attention include: predispositional characteristics of individuals; age differences; effects of labeling, contextual cues, and other program factors; and longitudinal influences of television.
3. The functional and dysfunctional aspects of aggressive behavior in successfully adapting to life's demands.
4. The modeling and imitation of prosocial behavior.
5. The role of environmental factors, including the mass media, in the teaching and learning of values about violence, and the effects of such learning.
6. The symbolic meanings of violent content in mass media fiction, and the function in our social life of such content."

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Principal Findings: Television programs featuring a family group were preferred more by blacks and lower-income teen-agers. There were no racial or income preference differences in regard to programs focusing on single individuals or a team. However, there were marked racial and income differences in regard to variety entertainment programs. Black and lower-income teenagers showed far lower preference for this category of television content. One-fourth of the blacks matched at least one entertainment show as a favorite, compared with 57 percent of the whites. Further analysis also showed an income level difference in this category, with 72 percent of middle-income teenagers naming a show from this category, compared to 44 percent of lower-income youngsters. Actual viewing behavior corroborated the findings by showing that blacks preferred to watch a family-group show (Bonanza) to an entertainment show (The Smothers Brothers Show). Similarly, lower-income children preferred the former to the latter, while middle-income children were equally divided.

Design and Methodology: Questionnaires were administered to eight tenth- and eleventh-grade classes in a Philadelphia high school in May 1968. The high school serves both low-income white and black children. Completed questionnaires were obtained from 206 teenagers. Of these, 60 percent were from white students and 40 percent from blacks—approximately the same racial distribution as the total enrollment of the school. The whites and blacks in the study were similar in age, race, and ability level. On the next day, the same questionnaire was administered to 93 white teenagers attending another high school located in a middle-class residential district of Philadelphia. All respondents were asked, "What are the names of your three most favorite television shows?" Program choices were analyzed in terms of four categories: family focus, action focus, team focus, and entertainment category. Three coders assigned programs named to categories, and intercoder agreement was 92 percent.

Theory and Discussion: The authors compare the results to findings of two previous studies. One finding was common to all. Different kinds of programs appeal to members of different races—both to children and adults. However, when an attempt is made to identify what types of programs are directionally preferred, discrepancies arise. This study supported previous work showing that blacks prefer variety and entertainment shows less than whites. It also found greater preference among blacks for shows which focused on a family, which supports the findings of one of the previous studies but not the other. One major difference between the two studies which found a greater preference among blacks for shows which focused on a family and the study which did not is that the first two used data on children, while the third used data on adults.

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Principal Findings: There was a significant correspondence between the degree of stress resolution in varying film endings and the stress states reported by college students after viewing the film. All subjects saw the first part of the film in which the protagonist underwent extreme stress. Most subjects increased in mood stress after viewing the first part of the film. After watching the varied endings, the sad-ending group increased further in stress level, while stress reduction was most pronounced in the happy-ending group. An indeterminate-ending group and a control non-ending group showed moderate decreases in stress. The stress increase in the sad-ending group was most marked for those who identified most with the protagonist, but the difference was not statistically significant. In the happy-ending group, stress reduction is significantly greater for high identifiers.

Design and Methodology: Subjects were 80 students in an introductory psychology class at the University of Wisconsin. A total of 125 subjects was selected, but the number was reduced by the discarding of those who had previously seen the film, a sequence from The O'Keefe Incident, and the random reduction of cases in order to achieve an equal number in each condition. The stress-building incident depicts the protagonist being falsely accused of rustling cattle and, despite his protests, being dragged to the gallows. Subjects in the sad-ending condition were shown an ending in which, after some delay and further agitation, the hanging proceeds. In the happy-ending sequence, the real rustlers are caught in time to stop the hanging. In the indeterminate ending, the hanging is delayed as the men wait for the sheriff. Before viewing the film, each subject completed a mood inventory. After watching the first part of the film, the schedule was administered again, along with a measure of identification with the protagonist. After viewing the appropriate ending, subjects were again tested for mood change and probed further about their reactions to the film.

Theory and Discussion: The authors interpret the data as supporting the theory that film viewers experience emotions that are similar to those apparently experienced by film characters. However, in all conditions where stress reduction was reported, the reduction was substantially less than the stress increase reported after viewing the stress-inducing portion of the film. This finding tends to support the contention that filmed aggression, even when happily resolved, is instigational rather than cathartic in nature. That is, a residue of viewer stress remains, just as aggressive tendencies remain when the "bad-guy" aggressor is punished or when aggression appears justified. The results also provide weak evidence for the idea that identification with the protagonist is the mechanism through which vicarious emotional experience is accomplished.


Principal Conclusions: Recent research on television and other mass media tends to elaborate and support earlier findings, rather than offering disconfirmations or proceeding in new directions. In regard to television, the pattern of evidence is that it has become the predominant mass medium for children; that portrayals of aggressive acts probably stimulate children's aggressiveness, although the data are far from conclusive; that adults believe television to be more credible as a news source than newspapers; and that television has had a marked impact on politics and public attention to events.

Theory and Discussion: Television has become the predominant mass medium for children, with the time spent on television partly drawn from radio listening and later bedtimes. Fantasy content in the media appears to be especially popular among children with unsatisfactory peer and family relationships. Although one must be cautious about generalizing from laboratory data to real life, the evidence collected in the laboratory suggests that the portrayal of aggressive acts on television causes subsequent aggressive behavior on the part of children and young people, and is especially likely to do so when aggressive acts are portrayed as justified, when the viewer is angry or frustrated, and when there is an available target against whom it would be appropriate to aggress. Of course, one cannot generalize directly from these studies to real life. Nevertheless, they do demonstrate that television violence can cause aggression in at least the circumstances under which the experiment was conducted, and they do amount to empirical evidence rather than conjecture or speculation.

Television appears to have had a large impact on politics and public attention to events. John Kennedy apparently gained from the 1960 debates, and the assassination in Dallas was followed by extraordinarily rapid and wide dissemination of news of the happening and unusual absorption in the media, with use averaging over eight hours a day during the following four days. On the other hand, the broadcast of computerized projections of election winners did not seem to influence the voting decisions of late West Coast voters.

Tannenbaum, P. H., and Zillmann, D. Emotional arousal in the facilitation of aggression through communication. In L. Berkowitz (Ed.), Advances in experimental social psychology, in press.

Principal Conclusions: Mass media, such as television, may increase subsequent aggressiveness on the part of viewers as the consequence of emotionally arousing them, whether or not the arousing content is itself violent. Such an effect is most likely when the audience member has been provoked or angered, and a target is available against whom aggressive behavior might be thought to be relatively legitimate.

Theory and Discussion: In a number of experiments, it has been demonstrated that subsequent aggressiveness will be increased by exposure to emotionally arousing stimuli, such as noise or television programs. Violent programs often result in arousal, but other types of content can also be arousing. For example, it has been demonstrated that nonviolent but forceful television content, such as humor, can increase subsequent aggressiveness.

The interpretation is that level of arousal is a source of aggression subsequent to exposure to television, including violent television. However, factors such as the specific content and similarities to that content in the subsequent situation may also independently increase aggressiveness. Arousal may be thought of as the emotional factor, the latter as cognitive factors which may amplify or reduce the influence of arousal. The situation is complex, since provocation, which increases the likelihood of aggression, possibly by making such behavior seem more salient or appropriate, also creates arousal. In addition, mass media are not commonly perceived by people as a source of any noteworthy degree of emotional arousal, with the result that people may erroneously attribute their arousal to real-life events, and subsequently become even more likely to aggress in real life as a result of exposure to arousing media content.


Principal Conclusions: The role played by mass media in people's lives is such that continuing research on the effects of the mass media is necessary, and such that broadcasters and others concerned with broadcast policy must keep themselves informed about what the evidence from social science indicates about the role of mass media. Future research could profitably focus on mass media as part of a wider social system; mass
media's role in child development; mass media's positive effects; the process by which the mass media are produced; the relationship between programming and the way media are owned, supported, and controlled; and mass media's effects on attitudes and values, despite the extreme methodological problems in this particular area.

**Theory and Discussion:**** After financing a variety of studies and establishing the Centre for Mass Communication Research in 1966 at the University of Leicester since its inauguration in 1963, the Television Research Committee ended its activity as a full committee with this report, which includes summaries of studies sponsored. The Committee concludes that although one must be cautious in accepting generalizations, "we still need to recognize that the media can and do influence values and behavior." Effects said to be most likely to occur where "there is repetition of the message, where emotional reactions are brought into play, where the values presented link with the individual's immediate needs and interests, where there is an uncritical attachment to the medium and where other values have not been supplied through the immediate environment and through social relationships."

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**Principal Findings:** Children who viewed a film portraying a rewarded adult model performed more spontaneous imitative responses than did children who observed a film portraying an unrewarded adult model. Model reward had no effect on performance when the children's imitative behavior was specifically rewarded. Similarly, the interpolation of an irrelevant task after the viewing of the film had little effect on the capability of the children to imitate the model when asked to do so, provided they had seen the model rewarded.

**Design and Methodology:** Subjects were 60 first-, second-, and third-grade children. Subjects were individually shown a film in which an adult model pressed combinations of three buttons. Certain combinations were designated as "critical"—were rewarded in the film in the reward condition by an adult man who praised the model whenever he pressed one of these combinations. The subjects in an immediate recall condition were instructed to reproduce as many of the sequences that they had seen the model perform as they could recall, and were praised whenever they reproduced a "critical" sequence. The specific reward of receiving praise created a circumstance of high incentive for recall. Subjects in an interpolated task condition were then given an irrelevant task to complete. Subjects in a "spontaneous imitation" condition were allowed to press the buttons on the device shown in the film and were observed although they were given no specific instructions as to which buttons to press. The subjects in these latter two conditions were then instructed to try to reproduce as many of the sequences that they had seen the model perform as they could recall, and were praised whenever they reproduced a "critical" sequence. Thus, all subjects eventually performed under conditions in which there was high incentive for recall—some immediately after the film, some after an irrelevant task, and some after the opportunity for spontaneous imitation.

**Theory and Discussion:** The authors conclude that reward to the model increased both spontaneous imitation and recall after an interpolated task when there was a high incentive for recall. They note that reward to the model did not affect high-incentive recall when subjects were tested immediately after observing the model or when subjects had an opportunity to engage in spontaneous imitation before being tested for high-incentive recall. Thus, in many circumstances, model reward does not influence high-incentive recall. However, it does so when a task was interpolated, suggesting that model reward increases motivation to retain observed behavior for later retrieval.

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**Principal Findings:** Among the six- and seven-year olds, the more cognitively differentiated, organized, and articulate youngsters were least likely to show an increase in aggressive behavior after viewing an aggressive film. Five- and six-year-old boys were found to be more aggressive and less cognitively differentiated than seven- and eight-year-old boys.

**Design:** Sand, M. A. Children who viewed an interpolated task condition after the viewing of an aggressive television film, a nonaggressive television film, or no film. After this, a measure of aggression was obtained by asking the subjects to play a game in which they could use a machine to expose a confederate of the experimenter to a noxious noise whenever he made a mistake.

**Theory and Discussion:** The author concludes that the effect of exposure to television violence depends not only on a child's age but on his individual cognitive style. It is suggested that this finding explains in part the conflicting results found in the literature, as most studies have not taken cognitive style and related individual differences into account.

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**Principal Findings:** Children seven to fifteen years of age reported learning more from television about the Vietnam war than from any other source. Children who watched television news regularly knew significantly more facts about the war. Newspaper reading was also associated with greater factual knowledge, but few children read newspapers. Among children who regularly watched television news, newspaper reading increased knowledge about the war. Perceptions of whether television supported withdrawal or victory was related to the child's own opinion. Exposure to television programs with military themes was unrelated to attitudes toward the war.

**Design and Methodology:** Questionnaire data from elementary and junior high school children seven to fifteen years old were analyzed. Altogether, 2,877 children in fourteen public, private, and parochial schools in rural, suburban, and urban New York, New Jersey, and Maryland were surveyed. The sample was designed to include children with various ethnic, socioeconomic, and religious attributes. Questionnaires were administered in school classrooms by the teacher or the investigator.

**Theory and Discussion:** The author concludes that television appears to be a major source of public affairs information for children. Parents appeared to have a strong influence on attitudes, for there was a strong association between the chil-
children's reports of parental attitudes and their own attitudes. Parental views also appeared to affect children's factual knowledge; for knowledge was higher for children reporting vocal anti-war parents and vocal pro-war parents than for those reporting "silent" parents. Altogether, about half the sample of children could remember parents expressing position on the war. Parents also appeared to affect knowledge acquisition among children who were regular television news viewers; those reporting parents with vocal opinions on the war scored higher in factual knowledge.

The author also observes that the various agents of socialization interact, making it difficult to assess the role of any one. Two findings stand out: First, "exposure to the media improves children's knowledge of the Vietnam war but rarely alters their views..." Second, parents who are vocal about their views "...exercise a profound influence on factual understanding as well as opinions of both the Vietnam conflict and war in general." Parents who express strong opinions also supply facts and interpret them.

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Principal Findings: The result was no evidence that voters who were exposed to Election Night broadcasts of voting trends before voting changed their voting plans or switched candidates. Thus, there was no indication that the broadcasting of returns influences voting.

Design and Methodology: Five hundred and seventeen Eastern Time Zone voters and 1,455 Pacific Time Zone voters were interviewed three days before and again immediately after the Presidential election of 1968. The sample was drawn from the Opinion Research Corporation's master national probability sample. The election examined was very close. NBC did not declare Nixon victorious until 7:30 a.m. the day after Election Day. Thus, those who viewed election returns were still in doubt at the time the polls closed.

Theory and Discussion: The study tested the null hypotheses that there were no differences between exposed and unexposed voters in terms of changes in voting turnout plans or candidate-switching, as well as no differences between decided and undecided voters in terms of viewing the broadcasts before voting. In the West, 62 percent had voted before the broadcasts began, and only 6 percent saw the broadcasts before their vote or deciding not to vote, and only 4 percent reported last minute changes in their intention to vote, compared with 7 percent of those in the East. In the East, 6 percent switched candidates at the last minute, the same proportion as among Westerners not exposed to the broadcasts, and among the small group of exposed Westerners, only 7 percent reported switching. There was no significant differences. If there had been significant differences, the results would have suggested possible effects of the broadcasts. However, the lack of significant differences does not prove that the broadcasting of returns had no effect, as it is not possible to prove the null hypothesis.

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Principal Findings: Deliberately provoked college men, who had been exposed to a violent fight sequence from the film Champion administered more electric shocks when they were asked to imagine themselves in the role of the fight victim than when they were asked to mentally assume the role of a judge of the fight, or when they were given no instructions. Half of the subjects were also asked to press a button each time the victim delivered a blow. Within the group who were asked to identify with the victim, the more frequently the subjects pushed the button (presumably thinking "hit" each time), the greater was the number of shocks they later gave.

Design and Methodology: The subjects were 78 male undergraduates enrolled in an introductory psychology class at the University of Wisconsin. Each subject was first deliberately insulted by a peer and then was shown the seven-minute prizewinning excerpt from the film, Champion. In order to manipulate identification, each subject was asked to imagine himself to be either the victim of the fight or a judge watching the fight, or was given no instructions. Half of the subjects were asked to press a button whenever the fight victim hit the loser. The electric shocks were administered to a confederate of the experimenter as part of a bogus experiment on the effects of negative reinforcement, and the number of shocks administered was the primary dependent variable. Validity checks on the effectiveness of manipulations were carried out, and subjects were probed for suspiciousness. A questionnaire probing the subjects' evaluations of the experiment and experimenter was also administered, and the results suggest that identification with the film aggressor had also engendered hostility toward the experiment and experimenter.

Theory and Discussion: The authors conclude: "The screen stimulus is more apt to evoke overt aggression if the viewers imagine themselves to be the aggressive models as they watch their violent actions on the screen... We believe that the identification with the observed aggressor had caused the viewers to react more impulsively to the depicted violence; the aggressive scene was a stimulus evoking the aggressive responses the observers were disposed to make."

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Principal Findings: Large-scale mass media campaigns, utilizing television, radio, newspapers, and magazines, and executed by a major advertising agency, were carried on for six months in four demographically and geographically disparate U.S. cities. The campaigns promoted the use of birth control methods to prevent the birth of unplanned children and included addresses and telephone numbers where individuals could receive help in family planning and contraception. A survey taken before, during, and after the campaigns indicates that mass media advertising increased community awareness significantly but had little effect upon contraceptive use. Television messages appear to have increased awareness most. Radio also caused a noticeable increase, but advertisements in print media did not seem to influence awareness.

Design and Methodology: Between November 1970 and May 1971, an advertising campaign, simulating a $20 million national saturation advertising effort, was carried out in Columbus, Ohio, and Memphis, Tennessee, and a $7 million campaign was conducted in Altoona, Pennsylvania, and Jackson, Mississippi. The campaign, designed by the J. Walter Thompson Agency, was based on the theme, "Stop the Stork" and was aimed at both married couples and unmarried persons. To test the hypothesis that the campaigns would increase community awareness, 100 women were interviewed in each media city and one control city (Mobile, Alabama) each week during the two months prior to the campaign, during the six months of the campaign, and for another month following it. The sample was obtained by stopping women judged to be of child-bearing age as they passed a table located on the sidewalk of a shopping center. Data concerning use of contraceptives was obtained from family
planning clinics and selected drugstores in the media cities and in the control cities of Milwaukee and Mobile.

**Theory and Discussion:** The authors infer that media advertisements can significantly affect awareness of contraceptives and family planning but have little effect on behavior. But the authors also note that it is possible that different ads with a different message and a different media mix might have had a more important effect on contraceptive behavior. They also observe that these results cannot be interpreted to mean that mass media campaigns will be ineffective in increasing contraceptive service usage in countries where contraceptive knowledge is not as advanced as in the United States.

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**Principal Conclusions:** Since 1952, Congress has expressed concern over the effects on children of violent television entertainment. The first hearing was held by a House committee in 1952, and focused on sex and morality as well as violence. The committee concluded that some programming was morally offensive, portrayals of violence and crime were excessive, self-regulation was preferable to government regulation, but Congress had some legislative prerogative, despite the limitations of the First Amendment, because of television’s great potential for harm. At the time its report was issued, only nine months had passed since the industry had adopted a code.

Senate hearings were held on television violence in 1954-55 (Kefauver, 1961-62; Dodd), 1964 (Dodd), 1972 (Pastore), and 1974 (Pastore). The focus throughout has been on the amount of violence on television, industry self-regulation in regard to violence, and evidence about its possible harmful effects, especially in regard to increasing aggressiveness or antisocial behavior on the part of children and young people. In addition, in 1968 the National Commission on the Causes and Prevention of Violence took testimony from expert witnesses on the effects of media violence, and a staff report to the Commission reviewed the scientific evidence and analyzed the behavior of the broadcasting industry in regard to violence (Baker and Ball, 1969). Repeated content analyses have indicated that violence has become common in television entertainment since television itself became common.

At the hearings prior to 1972, broadcasting industry spokesmen generally expressed doubt that there was any sound scientific evidence that television violence increased children’s aggressive behavior or had any unintended antisocial effects. However, they invariably promised that the industry would undertake research which would set the question, and would reduce the quantity of violence on television as a safeguard against doing damage if television violence turned out to be harmful. Up to about 1970, no notable industry steps had been taken in regard to research on the question, and the quantity of violence remained high. At about that time, CBS, NBC, and ABC became involved in research focused on the social impact of television, with emphasis on the possible effects on aggressive, antisocial, and other behavior of children and young people. The 1972 hearings represent a shift. Here, the center of attention was the report of the Surgeon General’s Scientific Advisory Committee on Television and Social Behavior which, on the basis of prior research and $1 million in new research, concluded that there was “... a preliminary and tentative indication of a causal relation between viewing violence on television and aggressive behavior...”. Industry spokesmen acknowledged that the evidence was suggestive of a causal link, and agreed to attempt to reduce the quantity of television violence.

In the 1974 hearings, industry spokesmen reported on the social research undertaken by the industry, and the industry’s efforts to reduce violence. However, objective content analyses indicated that through the 1973-74 season, violence had changed somewhat in character but did not seem to be markedly reduced.

**Theory and Discussion:** In the 1954 hearings, broadcasting industry spokesmen argued that the evidence was inconclusive that children were affected adversely by television violence, but that in recognition of the possibility of such effects, self-regulatory codes and procedures of internal review governed the portrayal of violence. The spokesman for the National Association of Broadcasters (NAB) said his organization would undertake a survey of the impact of television on children. No such survey was undertaken.

In the 1961 hearings, the NAB spokesman said that the survey had not been undertaken because of overlap with a study sponsored by CBS, although that study, when published in 1963, declared that it “provided no direct evidence of the effects of television on children.” Industry spokesmen again argued that evidence on effects was inconclusive, and again indicated that the industry would support research on the question. In 1962, the industry co-sponsored (along with government and academic institutions) the Joint Committee for Research on Television and Children, set up to direct and coordinate industry involvement in research on television’s social impact. In the 1964 hearings, industry spokesmen indicated that they had high hopes for the Committee’s productivity. As one executive later to be chairman of the board of NBC said, “I think that all of us are looking forward to the work of the Joint Committee and count-
ing heavily upon having some definitive work come out of that committee."

Six and a half years later, the Committee had produced only one piece of work—a paper by a psychologist questioning the validity of certain experiments which had demonstrated that subsequent aggression was increased by viewing violent behavior on television—which served as the basis for the testimony of a social scientist employed by one of the networks before the National Commission on the Causes and Prevention of Violence in 1968. Of two other studies funded, one dealt with the effects of repetition and had been abandoned by the investigator, and one was being conducted by Feshbach, a proponent of the hypothesis that violence viewing reduces aggressiveness. (For the Feshbach study, see Feshbach and Singer, 1971; for an attempt at replication, see Wells, 1973—both discussed in 389.)

Other than the Joint Committee, only CBS in the industry actively engaged in social research prior to about 1970, and that research focused on public attitudes toward television. Research on the effects of television was nil at NBC and ABC. (The situation has changed considerably. NBC is currently analyzing the results of a three-and-a-half-year panel study in which data were collected from children, teenagers, and their parents at five points in time. For an early analysis of data see Milavsky and Pekowsky, 1973; and Milavsky, Pekowsky, and Stipp, 1974. CBS has sponsored a large-scale study of the relationship between antisocial behavior by adolescents and television viewing in Britain, field experiments by Milgram, among other studies.)

For examples of CBS social research see Steiner, 353; Bower, 53; and Milgram and Shattuck, 276. ABC has sponsored a number of studies. However, although fairly extensive summaries of procedures and results were submitted at the hearing, reports have not been made publicly available and there has been no orderly dissemination to the scientific community.

The 1972 hearings examined evidence from the Report of the Surgeon General's Scientific Advisory Committee on Television and Social Behavior and the results of the $1 million in research sponsored by the National Institute of Mental Health to provide new evidence for interpretation by that committee. The Committee concluded that the sum of data was "a preliminary and tentative indication" that violence viewing increased aggressiveness. The Surgeon General (Dr. Jesse Steinfield) testified that the evidence indicated a causal relationship. Industry spokesmen acknowledged that violence probably should be restrained. Dr. Albert Siegel (Stanford), a Committee member, suggested an index measuring violent content to monitor broadcasters' performance and warn consumers, especially parents. (In 1973, the National Institute of Mental Health sponsored a three-year Television and Social Behavior Committee at the Social Science Research Council to examine the feasibility of a violence profile.)

At the 1974 hearings, content analyses were introduced which showed that, between the 1967-68 and 1973-74 seasons, violence had continued at a high level and could be said to have declined only in certain aspects, such as the number of killings. (In early 1973, all three networks were implementing stricter codes to reduce or eliminate violence from an evening period intended for family viewing. In addition, in 1974, Congress asked the FCC to develop a policy in regard to violence by the end of 1974. At the time of this writing, the FCC is holding discussions with the networks, and has asked Congress for a delay of several months to formulate policy.)

Such viewers identified with the prejudiced Archie rather than the tolerant Mike, saw Archie as winning, did not perceive Archie as the most ridiculed character, and saw nothing wrong with Archie's use of racial and ethnic slurs. Consistent with the selective perception hypothesis, those most likely to admire Archie were high in prejudice themselves. Contrary to a prediction made by CBS that was based upon the assumption that the program is universally perceived as a satire on bigotry, All in the Family was found to be appealing more to highly prejudiced than to less prejudiced American adolescents. However, a similar relationship was not found among a sample of Canadian adults.

Design and Methodology: Two groups of respondents were employed, American adolescents and Canadian adults from an area where the program is seen weekly. The U.S. sample consisted of 237 students, ranging in age from 14 to 18 years, from a small Midwestern town. The respondents were volunteers. Two-thirds were male, and all were white. The survey was administered as an anonymous written questionnaire. The Canadian sample consisted of 130 adults, randomly selected from voting lists, which represented a 77 percent response rate. Half were interviewed face to face and the other half by telephone.

Theory and Discussion: The authors believe that, on balance, the study supports the charges that "by making Archie a lovable bigot the program is helping to excuse and rationalize their own prejudices." Although the single survey method used is not designed to measure attitude change, the finding that highly prejudiced persons are likely to watch All in the Family more often than less prejudiced people and to identify with and approve of Archie suggests that the program is more likely "reinforcing prejudice and racism than combatting it."


Principal Findings: This reanalysis of four national surveys taken between 1952 and 1964 shows that television has increasingly come to be the source of information most depended upon for public affairs information during national election campaigns. All groups used television regularly for political information, but print media were used for that purpose primarily by upper educational, income, and occupational groups. However, newspapers and magazines were the most popular sources of news about science and health. For science and health information, print users were more knowledgeable than those who depended on television. This was true regardless of sex or level of education. However, the use of print media was associated with greater information about public affairs only among those with a high school education or less.

Design and Methodology: This analysis is based on surveys made in 1952, 1957, 1958, and 1964 by the University of Michigan's Survey Research Center using national probability samples. Questions concerning the source and knowledge of public affairs information were included in all four surveys, providing trend data. Questions about science were asked in 1957, and about health in 1958.

Theory and Discussion: The authors suggest the following model to explain their data: 'From school we emerge with a cognitive map, with an organized life space, and with certain learning skills and habits. More education means more skills and wider interests—in other words, a more complex map. Through the media we chiefly fill in this map. From the parade of events through television, which is the most vivid and dramatic carrier of events, we tend to fill in facts and findings, but to add concepts and understanding we are likely to turn to the slower print media which can somewhat more easily offer perspective and interpretation. This, we can assume, is one reason
why the printed media are more likely to serve as a source of long-term science and health knowledge, and the broadcast media a source of political facts which are useful in an election campaign that calls them forth, and may be forgotten thereafter."

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Wall, W. D. and Simson, W. A. The responses of adolescent groups to certain films. Part II. British Journal of Educational Psychology, 1951, 21, 81-98.

Principal Findings: In regard to movies recently seen, teenagers indicated amusement and satisfaction, a wide range of immediate and more enduring emotional responses, almost no incidents of being frightened, considerable identification with characters, and sufficient recall of specific events to suggest that movies provide material for personal fantasies.

Design and Methodology: The sample consisted of 2,069 male and female adolescents between the ages of 13 and 16 in schools in the English Midlands. Each was asked to name a film recently seen, and then were questioned about it.

Theory and Discussion: The data provide evidence on the role of movies in the social and psychological development of adolescents. The overall reaction of the adolescents to movies was enjoyment and enduring satisfaction. Otherwise, reactions varied highly, depending on the movie. However, there were many instances in which attitudes and desires were described as changed, and numerous reports of various emotional reactions. Many incidents were recalled and were treated as if they had had an emotional impact and were truly memorable; this suggests that such scenes may stimulate continuing personal fancy.

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Principal Findings: Family members tended to act more in a parallel than an interactive fashion when viewing television. Communication tended to be one-way from television to the individual rather than two-way between individuals. Only limited support was provided for the further hypothesis that, as the availability of television decreases, interpersonal communication in the family increases.

Design and Methodology: The sample consisted of 76 Madison, Wisconsin, housewives interviewed in their homes during a five-week period in the spring of 1970. Half of the respondents represented families with a television set in repair, selected at random from lists provided by television repair shops. At the close of the interview, each of these respondents was asked the name and address of another family similar to her own in parental age and education, number and age of children at home, and the number of television sets normally in the home. The named families were considered to be a matching sample with television at hand, and interviews were obtained with the 38 housewives. Demographic comparisons indicated successful matching.

Almost three-fourths of the sample had more than one set, double the national average at the time. Twenty-seven of the 38 families with a missing set owned at least one other, and four of the one-set families obtained replacements, leaving only seven families with no set in the home. The number of families with no television set was so small that no separate numerical analysis for the no-set group was attempted. Thus, the study focused on decreased availability rather than absence of television.

Theory and Discussion: Comparisons of data from families with sets in repair and those in the control group showed no difference between groups on most of the principal variables of the study. The study did not clearly test the hypothesis that when access to television is restricted, interpersonal communication increases, because the small number of families who were without a television set while their regular set was in repair.

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Principal Conclusions: Laboratory experiments demonstrate that observing aggressive behavior, either in real life or on film or television, increases the probability that a child will behave aggressively immediately afterwards. If the observed model is punished, the probability of imitation is decreased; if he is rewarded or not punished, the probability is increased. However, the permanence of effects has not been demonstrated.

Theory and Discussion: Aggressive habits may be developed and maintained through intermittent rewards, and may carry over to situations other than that in which they were originally learned. The effects of punishing aggression are complex. Punishment may suppress an aggressive response, but the punisher may also serve as an aggressive model whose behavior may be imitated. Nevertheless, there is evidence that anticipation of punishment deters aggressive behavior. Earlier hypotheses about displacement of aggression, cathartic effects of vicarious or direct participation in aggression, and the connection between frustration and aggression have been brought into question by recent findings.

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Principal Findings: Kindergarten boys who watched a film in which a boy model was rewarded by his mother for playing with toys that the subjects had been forbidden to play with were most likely to break the experimenter’s prohibition. Conversely, children who saw the model being punished for playing with the toys were most likely to resist temptation when left alone with the toys.

Design and Methodology: The subjects, 38 kindergarten boys, were randomly assigned to viewing the film in which the boy was rewarded, the film in which the boy was punished, or no film at all. After this, the subjects were left alone in a toy-filled room for 15 minutes. Excusing himself, the experimenter told the children to wait for a confederate and asked the children not to play with the toys, as they belonged to some other children. The subjects’ behavior was monitored and recorded.

Theory and Discussion: The authors believe the results demonstrate the potential of empathetic learning for both the inhibition and disinhibition of deviant responses. They explain that the child probably interpreted the model as he was rewarded or punished for playing with the forbidden toys. This intuition may have been facilitated by the use of a same-age, same-sex model, and by the use of a mother as the agent of reinforcement.

**Principal Findings:** Kindergarten-age boys resisted the temptation to play with forbidden toys after viewing a film in which a model was punished for playing with the same toys and after seeing no film. In contrast, boys exposed to a film in which the model was either rewarded or suffered no consequence from playing with the toys readily deviated from the experimenter's prohibition. However, when the experimenter lifted his prohibition on the toys, children who had seen the model punished played with the toys as readily as other children.

**Design and Methodology:** The subjects, 84 kindergarten-age boys, were randomly assigned to one of four groups. Three groups were shown a three-minute film in which the players were a six-year-old boy and his mother. In one version, the boy was rewarded for playing with some toys; in the second, he was punished for doing so; and in the third, he suffered no consequence. The prohibition against using the toys was introduced by an experimenter, who told each child: "You sit here (indicating the chair). Now, these toys have been arranged for someone else, so you'd better not touch them." She then left the room telling the child she would knock upon her return; and the child was alone for fifteen minutes. When she returned, she told the child that he could play with the toys and left the room for another five minutes. The child's play was monitored and recorded by observer behind a one-way mirror.

**Theory and Discussion:** The experimenter's mild prohibition was generally effective; of the no film group, nearly half of the children did not deviate at all. Consequently, the authors conclude that it is a reasonable assumption that the children anticipated the possibility of being punished for breaking the prohibition. Thus, they reason that the finding that children in the no-consequence group deviated as readily as those in the reward group can be attributed to the child's relief that the deviant model was not punished.

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**Principal Findings:** Kindergarten and first grade boys who were punished for deviant responses as they initiated them showed greater subsequent resistance to deviation than those who were punished only after completing the deviant act. Those who watched a film portraying a model punished for deviancy were also more resistant than those who saw a film in which the model was rewarded or suffered no consequences. A combination of early punishment training and exposure to a film of a punished model was most effective in producing inhibition.

**Design and Methodology:** The subjects, 80 kindergarten and first-grade boys, were randomly assigned to one of eight conditions in a $2 \times 4$ factorial design involving two timing-of-punishment conditions and 4 film conditions. In "punishment training" sessions, the subject was seated behind a table and told to pick up the toys he would like to play with, hold them, and think about them. He was also informed that there were certain toys he was not to play with because they belonged to another child. "Say, oh you touch a toy that is for the other boy, I'll tell you. O.K.?” the experimenter said. Then the experimenter presented the child with a series of nine-two toy choices. Each time the subject selected the more attractive toy of the two, the experimenter verbally punished him by saying: "No, that's for the other boy.” In the early-punishment condition, the experimenter administered the punishment as the boy's hand neared the toy. In the late-punishment condition, the boy was punished only after he had held the toy for several seconds. Then the toys were covered with a cloth, and the subjects were shown another table of toys, which the experimenter told the children not to play with. Children in the film conditions were then shown a film featuring a boy and his mother in which the boy was either rewarded, punished, or suffered no consequence after playing with toys identical to the prohibited toys. The experimenter then left the room, promising the child that no one would come in and bother him. The child's behavior was monitored.

**Theory and Discussion:** The authors observe that partly for humanitarian reasons and partly because of the widely accepted view that punishment is an ineffective means of social control, the role of punishment in the socialization of children has seldom been explored in laboratory studies. The present study investigates the effects of timing of punishment and exposure to punished models. The authors interpret the results as suggesting that both directly and vicariously experienced punishment are influential in building resistance to deviant behavior in children.

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**Principal Findings:** A group of male hospital attendants punished errors in a bogus conditioning experiment more severely after viewing a knife fight scene from a movie, *Rebel Without a Cause*, than after viewing an innocuous educational film, *Picture Making by Teenagers*. The results were the same when the subjects were adolescent boys and when they were young employed females. Thus, exposure to a violent sequence from *Rebel Without a Cause* consistently produced an increase in aggressive infliction by subjects in three separate but identical experiments with very different populations of subjects. However, the film did not consistently influence responses to an "aggression-hostility" inventory.

**Design and Methodology:** Three experiments were run. The first used 25 male hospital attendants as subjects; the second, 24 adolescent boys; and the third, 32 young employed females. In each experiment, half of the subjects viewed the violent sequence while the other half watched a film depicting constructive activities. To obtain a measure of punitiveness, the experimenter told the subject that he was collecting data on the effect of punishment on learning and asked his assistants to administer punishment, in the form of electric shocks, to another subject, in reality a confederate of the experimenter. The subject was able to choose among ten intensity levels. A standard "hostility-aggression" inventory was also administered.

**Theory and Discussion:** The experiments tested the hypothesis that viewing film portrayals of aggression results in the increase of aggressive behavior rather than in catharsis and the reduction of aggressive behavior. They differ from previous studies in that the stimulus material was taken from a commercial movie; the testing situation included "real" pain as a consequence of aggression, and the scores of the subjects were nonstudents or adults. It is noteworthy that one set of subjects, those who worked in a psychiatric hospital, played an occupational role oriented toward the inhibition of aggression.

The authors interpret the results as supporting the hypothesis that subjects exposed to violent films increase in behavioral aggression. They believe the findings also suggest that neither sex nor age similarity between observer and model is necessary to produce punitive responses. The failure of the films to produce
consistent differences in hostility-aggression scores, an attitudi-
nal indicator, is discussed in terms of measurement problems.

Walters, R. H., and Willows, D. C. Imitative behavior of dis-
turbed and nondisturbed children following exposure to aggres-

Principal Findings: Disturbed and nondisturbed children both
imitated aggressive human behavior shown on a television
screen, and did not differ in the amount of aggressive imitation,
which was modest. The television portrayal also appeared to
increase subsequent nonaggressive behavior.

Design and Methodology: Subjects were 50 children ranging
in age from about seven to 12. Twenty-four were emotionally
disturbed and institutionalized, and 24 were nondisturbed. Half
of each group saw a four-minute videotape of a woman treating
toys in a hostile and aggressive manner, and half saw a videotape
of the woman treating the toys pleasantly and nonaggres-
sively. The remaining 12 were in a control group which saw a
film of the toys without any human intrusions. After exposure
to the television, the subjects were observed while freely playing
for six minutes in a room containing the toys shown on tele-
vision, and imitative aggressive and nonaggressive responses were
recorded.

Theory and Discussion: Presumably, learning from observa-
tion plays a large part in socialization, and the disturbed chil-

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Principal Findings: DISTURBED AND NONDISTURBED CHILDREN
both imitated aggressive human behavior shown on a television
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which was modest. The television portrayal also appeared to
increase subsequent nonaggressive behavior.

Design and Methodology: SUBJECTS were 50 CHILDREN RANGING
in age from about seven to 12. Twenty-four were emotionally
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of each group saw a four-minute videotape of a woman treating
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sively. The remaining 12 were in a control group which saw a
film of the toys without any human intrusions. After exposure
to the television, the subjects were observed while freely playing
for six minutes in a room containing the toys shown on tele-
vision, and imitative aggressive and nonaggressive responses were
recorded.

Theory and Discussion: Presumably, learning from observa-
tion plays a large part in socialization, and the disturbed chil-

tized items decreased for older children, and such attempts were correlated with perceived influence of commercials and parents' reports of yielding.

Among adolescents, one-third of a large sample did not respond to questions about "liked" and "disliked" commercials, suggesting that commercials were not a salient topic for them; attitudes toward commercials were negative; positive attitudes toward commercials were slightly inversely related to socioeconomic status; among adolescents from middle and upper socioeconomic status families, high television viewing was correlated with positive attitudes toward commercials; intelligence was inversely related to positive attitudes toward commercials; adolescents from homes characterized by lots of talk about consumption were more positive toward commercials; attitudes toward commercials were unrelated to aspirations; and attitudes were not a good predictor either of commercial recall or purchasing behavior.

Design and Methodology: Three surveys and one clinical study were undertaken. In the largest survey, questionnaires were completed by 1,149 white and black junior and senior high students in 1970 in Prince Georges County, Maryland. A second survey covered 134 Boston mothers of children 5-12 years old in 1971; the mothers were asked to record data on their children's television viewing over a 10-day period. In a third study, mail questionnaires were obtained from the same 134 mothers. In the clinical study, interview sessions were held with four groups of five children, one group from each of four grades.

Theory and Discussion: The findings have implications for five important areas, although the exploratory nature of the research means that inferences are tentative: (1) young children's reactions to commercials reflect stages in cognitive development; (2) commercial watching is a complex process; (3) mothers believe that commercials influence children; (4) adolescents have negative attitudes toward commercials, and differences between whites and blacks are slight; and (5) adolescents acquire consumer attitudes and skills from commercials.

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Principal Findings: In three studies of junior and senior high school students and adults, there were three sets of working hypotheses. First, since adults can be expected to hold attitudes consistent with the anti-drug abuse messages, they should counterargue less, and perceive more connections with their self-experience than teenagers. However, since the anti-drug abuse messages contain unpleasant, perhaps threatening information, adults should be particularly sensitive to distraction, due to the high degree of cognitive effort required to counterargue or relate the content to their own experience. Second, many senior high school students can be expected to be opposed to the anti-drug abuse messages, and to possess much information and extensive experience about drug abuse. Therefore, they should counterargue more than other groups, but distraction should disrupt counterargument production. Third, junior high students should have less information about drug abuse and less developed attitudes than older teenagers and parents. Consequently, they should exhibit low levels of counterarguing and perceive fewer connections with their own experience, and distraction should dampen message effects further.

In the first study, conducted in the Palo Alto, California, area, 91 senior high school students and 257 parents were told they were participating in a "television violence-humor project." Subjects viewed an 18-minute videotape of a popular television program, which contained one of three test anti-drug commercials as well as other commercials. Distraction was manipulated by the decibel level of a tape recording of a male-female conversation. One commercial was aimed primarily at parents and offered more detailed information in the form of a booklet. The second was intended to stimulate older adolescents to warn younger siblings about the danger of drug abuse. The third was more amorphous, with "face shots" of celebrities and others who commented on the drug abuse problem, and concluded with an appeal to send for a booklet.

The second study was a similar experiment conducted in Bakersfield, California, with 753 subjects. In this experiment, all subjects were mailed a booklet about drug abuse within a few days after participating, and a subsample of 242 adults was interviewed by phone and asked if they recalled receipt of any booklet, if they read most or all of it, if they found it helpful, or had a drug discussion during the week.

In the field experiment, not fully described, a split-cable television in a West Coast community was used to reach comparable samples. Two anti-drug commercials were presented, one for each channel, over a 32-day period. Over that period of time there were 209 simultaneous showings of the two commercials.

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Principal Findings: Comprehension by children of the nature, motive, and reason for commercials on television increased with age; belief in the truthfulness of commercials declined with age; and belief that commercials display the "best" products or that quality can be inferred from commercials declined with age. Food products were the subject of most attempts to influence parental purchases, and attempts to influence parental purchases declined with age. Brand knowledge increased with age, but despite this, purchase attempts in regard to specific brands also decreased with age. Mothers indicated that "consumer teaching" had less salience, with the typical mother offering only one of the three kinds of goals cited and one of the five...
kinds of teaching methods cited.

Design and Methodology: Data were obtained from about equal-size samples totaling 615 pairs of mothers and children in two cities. There were roughly equal groups in each city of children from kindergarten, third, and sixth grades. The sample were randomly drawn from school lists, with Boston providing a lower socioeconomic sample and Minneapolis a higher socioeconomic sample. Mothers and children were each interviewed for an hour, and questionnaires were completed by the mothers, with another questionnaire left in the home for the father.

Theory and Discussion: The data suggest that young children are most likely to be misled or confused by advertising, although the data could also reflect differences in the ability to report knowledge, rather than knowledge. If the first interpretation is accepted, the data suggest that standards for children's advertising should be age-related. As a whole, the data are consistent with the view that children mature in stages, and that before a given stage is reached certain classes of discrimination and comprehension do not occur.

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Principal Findings: Conformity to network news policies by network staffs appears to be the result of institutional authority and sanctions that are more clear-cut than on newspapers; by feelings of obligation and esteem for superiors; by mobility aspirations; by the absence of conflicting group allegiances; and by the pleasant and satisfying nature of television news gathering activities.

Design and Methodology: To carry out this participant observational study, the author had full access to the newsrooms and personnel of the three major American television networks. The analysis covers all the relevant central decisionmakers—from the president of news down to the wire services editor and writers in the newsrooms. The observation was combined with systematic news viewing.

Theory and Discussion: The question confronted by the author was: How is policy concerning news selection maintained despite the fact that it may conflict with group and professional norms? He notes that opportunities for deviance arise when policy is not clear, when superiors lack information, when the newsman has initiated a story, when he has high professional status, and when the work task is collectively shared.

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Principal Findings: Among persons who relied heavily on television for information, the initial perception by whites of an exchange of gunfire between Detroit police and blacks was maintained and racial polarization in the way the incident was perceived was increased. Among persons who relied more on newspapers or other persons than television, the original perceptions gained from the mass media tended to dissipate. Blacks and whites differed sharply in their perception of the incident both immediately and several months afterward.

Design and Methodology: On March 29, 1969, blacks and police exchanged gunfire in front of the New Bethel Baptist church in Detroit. Several persons were wounded and one policeman was killed. The event engendered heavy news coverage and much controversy. To take advantage of the opportunity to study the role of the mass media in such a situation, questions were added to an on-going survey covering both the black and white communities. Altogether, interviews were conducted over the subsequent three-and-a-half months with 1,130 persons—507 blacks and 623 whites.

Theory and Discussion: The data are interpreted in terms of three types of effects which mass media could have where perceptions may differ among groups: (1) "consensus building," in which viewpoints converge over time; (2) "polarization," in which viewpoints diverge over time; and (3) "extinction," in which initial acceptance of a viewpoint dissipates. Although effects were not uniform for all perceptions, the trend was for reliance on television to be associated with polarization, and reliance on newspapers or other persons to be associated with extinction or consensus building.

The author notes that there had been 20 months of racial tension since the 1967 riots, and argues that the data indicate that the mass media do not reduce such polarization. "Whether because of the unique handling of particular events, the biases and political axe-grinding or portions of the media, or merely the inherent impact of media messages," he writes, "we would argue that racial tension is an area where the mass media play a particularly significant role in shaping the perceptions of individuals. Much of what we have termed word-of-mouth communication is itself likely to be but the mirror of the images broadcast or ideas headlined. This is particularly true in race matters because of the low degree of primary-group ties existing between members of the black and white community."

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Principal Findings: For both high school and college students, involvement with television—as measured by amount of viewing and perceived importance and influence of television—was positively correlated with conventionality in regard to values, attitudes, and behavior.

Design and Methodology: Two separate studies—one in college and one in high school—were conducted in April 1970. Both studies were part of a larger longitudinal research project on the antecedents of problem behavior in youth. The respondents in the college study were 276 freshmen—132 males and 144 females—in the College of Arts and Sciences of a major Western university, 60 percent of those drawn from enrollment lists. The respondents in the high school study were 857 students—297 males and 400 females—enrolled in grades 8 through 12 in six schools in a small western city. They constituted the second-year cohort of the larger longitudinal project, and that first-year cohort had consisted of only 43 percent of those students initially sampled.

Data collected by questionnaire covered amount of exposure to television; perceived importance of television for contributing to personal entertainment and for understanding of the world; and perceived influence of television on social and political thinking. These three measures were combined to form an index of involvement with television. Conventionality was measured in regard to values, attitudes, and behavior. Values included academic achievement and personal independence. Attitudes included tolerance of aggression, criticisms of American society, liberalism-conservatism, and religiosity. Behaviors included general deviance, marijuana use, political activism. The amount of shared variance was sufficiently small to indicate the relative independence of the scales. Validity of the scales was suggested by the expected differences obtained on the measures between the college and high school students and between males and females.

Theory and Discussion: It was hypothesized that the greater involvement with television, the higher the value on academic recognition; the lower the value on independence; the greater
the intolerance of deviance; the lower the social criticism; the less liberal the social opinions; the more negative the attitudes toward drug use; the greater the religiosity; the lower the involvement in marijuana use; and the less the engagement in activist behavior.

When the college males and females were divided into low-, moderate-, and high-involvement groups, values, attitudes and behavior were in the hypothesized directions in 18 of 20 comparisons, and the difference between the scores of the low and high groups were statistically significant in 11 of 20 comparisons. The trends were found to be much stronger for college males than for college females.

The same analyses performed on high school subjects' data provided additional support for the hypotheses. In 17 of 20 comparisons, values, attitudes and behavior were in the hypothesized directions, and the scores of the high versus low-involvement groups were statistically significant in 13 of 20 comparisons. With the high school subjects, the findings for females were almost as strong as for males. In both samples, there were differences between the sexes within each of the three conventionality domains of values, attitudes, and behaviors.

The authors conclude that the study supported the proposition that involvement with television on the part of adolescents is associated with a syndrome of conventionality. However, as the investigators note, the cross-sectional nature of the data precludes the drawing of inferences about any causal influence of television. The investigators also stress the exploratory nature of the study because the hypotheses were not systematically derived from a coherent theory of the roles that television may play in contemporary society. But, they also note, no such theory exists. Finally, they note that the emphasis on conventionality may seem to conflict with studies which argue that television exposure is a source of antisocial or deviant behavior, especially aggression. It is argued that there is no irreconcilable conflict. However, they suggest that emphasis on aggression as a product of exposure may not adequately reflect the more general role that the medium plays among adolescents.


Principal Conclusions: Viewers undoubtedly learn from television portrayals of "forms of aggression or modes of criminal and violent behavior." However, whether what is learned is put to use depends on a variety of factors. There must be the capability to perform the act, sufficient motivation, and recall of what was viewed, which is likely to depend on similarities between the real-life situation and what was viewed. In addition, performance will depend on the restraints present, including the perceived probability of punishment and the values held in regard to violence. The quantity of factors involved reduces the likelihood of any real-life effects.

Much obviously depends on the characteristics of the individual viewer. Much also depends on the environment, which will determine the opportunities for aggression and likelihood of reward or punishment. Much of the evidence suggests that televised violence increases subsequent aggression comes from laboratory experiments, which have focused either on the stimulation of nonimitative aggression or the imitation of observed aggression. In regard to the stimulation of nonimitative aggression, increase of aggressiveness seems to depend on prior frustration and the availability of the frustrator as a target, the depiction of the televised aggression as justified, an associative connection between the television victim and the real-life frustrator, and the aggression called for involves delivering some magnitude of a noxious stimulus. In regard to imitation of observed aggression, imitation seems to depend on the viewed violence being followed by frustration, the behavior being consistent with the sex of the viewer model or the viewer, or the viewed behavior not being punished. The experimental evidence rests on the presence of very special conditions, and in the case of imitation studies, it is plausible to interpret the results as reflecting "novel play" and the lowering of play inhibitions rather than an increase in socially threatening aggression.

Theory and Discussion: The effects of media portrayals of violence are only one area of mass communication research, although one of "persistent controversy." Mass media are one of the "essential characteristics" of modern societies. Effects can be said to result from the mere existence of the media, the special characteristics of a medium, specific kinds of content, specific programs or communications, or specific elements of a program of communication.

Effects can also be classified in regard to the social unit affected (the society, the group, the individual, the time-span involved, and their nature. In regard to the latter, effects may be further discussed in terms of factors affecting public awareness and knowledge; comprehension; emotional arousal; identification with media figures; attitudes; overt behavior such as time allocation; interests in activities; public taste; personal and social values; and family life.

The mass media may also be examined from the perspective of the uses to which they are put and the gratifications derived from them by the consumer. These include information, relaxation, time consumption, social activity, and satisfaction of psychological needs.

All of these many various perspectives bear on any single topic, such as the effects of television and other mass media on politics. When the conversion of votes in a campaign is the sole criterion, mass media appear to have little effect. However, this is too narrow a focus, for the media influence a wide diversity of factors outside vote switching, including public attention and awareness in regard to persons and issues. A campaign, with its heavy flow of "communications and countercommunications" is too short a period for effects to appear, although even within this period mass media can "activate predispositions" and "strengthen 'natural' preferences."


Principal Findings: Among boys of lower socioeconomic status, exposure to a diet of nonviolent television was associated with increased verbal aggression against peers.

Design and Methodology: In both studies, groups of boys in residential schools were exposed either to a diet of violent television or a diet of nonviolent television over a period of several weeks. In both studies, some schools were private schools, representing high socioeconomic backgrounds, and some were boys' homes, representing lower socioeconomic backgrounds. In the Wells study, 567 boys in the seventh through ninth grades in 10 residential schools were exposed to the two diets for seven weeks, with half the boys in each school assigned to each diet. In the Feshbach and Singer study, 625 boys eight to 18 years of age in seven residential schools were similarly exposed for six weeks. In both studies, attrition for various reasons reduced the sample available for analysis by more than 20 percent, although
attrition was greatest in Feshbach and Singer.

The Wells study was undertaken as a replication of Feshbach and Singer, with methodological improvements. It differs from the original field experiment by including more schools, by using a more homogeneous sample in terms of age, by extending the experimental period, by taking pre-experiment measures so that groups could be matched on initial aggressiveness, by obtaining measures of pre-experimental television preferences, by employing professional field staff to train in-school raters, and by including ratings by non-school visitors unaware of experimental assignments. However, the basic design and the use of behavioral ratings as a principal measure remained the same.

Theory and Discussion: Feshbach and Singer reported an association for the boys in boys' schools between exposure to a diet of violent television and lessened aggressiveness toward peers. They interpreted their findings as supporting the hypothesis that violent television stimulates fantasy which can serve as a substitute for aggressive behavior, and thus can aid children in controlling aggression. Wells did not attempt to test this interpretation except as a by-product of replicating the original study in a way that would meet various methodological objections which could be raised. Wells found, for his analogous lower socioeconomic sample, increased verbal aggression against peers associated with the nonviolent diet, as did Feshbach and Singer, and increased physical aggression against peers associated with the violent diet, contrary to Feshbach and Singer. However, both trends were of low magnitude. Wells interprets his findings as indicating that the "control" nonviolent group was actually more comparable to an "experimental" or "treatment" group because the television diet deviated from the ordinary diet, and that the increased verbal aggression could be attributed to the results of frustration at being denied the customary and normative access to preferred violent entertainment.

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Principal Conclusions: Cultural merit of television programming and size of audience seem to be inversely related. One possible explanation is that popular television serves two important psychological needs—to avoid coping with others, and to avoid the expenditure of effort.

Theory and Discussion: Many critics and intellectuals regard popular television programming as trivial and even harmful. Nevertheless, television programs attract huge audiences. Possibly, they have positive psychological utility. By maximizing the immediate gratification of needs and minimizing intellectual effort, the television excuses people from acknowledging others. It offers symbols and images, but not real persons. Thus, television and other mass media cater to a natural reluctance to cope with other people.

Three types of mass media messages are proposed. "Directive" messages come from authority figures, and call for learning and/or behavior change. "Maintenance" messages are everyday communication that requires little effort on the part of the receiver. "Restorative" messages involve crime and violence, freedom from social restraints, and disrespect for authority, and permit escape and impulsive reactions. Television behavior remains stable because directive messages are experienced as maintenance messages, and restorative messages are frequently presented in a maintenance format. Messages intended as directive or maintenance may be transformed into restorative messages, as in the case of speeches, documentaries, and televised news coverage of the civil rights campaign. For black audience members who carry accumulations of resentment, such messages may be perceived in a personal and literal rather than metaphorical sense, and may stimulate antisocial behavior in certain cases.

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Principal Findings: Children from high and low socioeconomic status families differed in the way they talked about television when asked to name their favorite programs. High-status children were more articulate and gave greater attention to the plot or story line. Low-status children gave more attention to isolated incidents, which appeared to be the high points in the plots. A great diversity of programs were named as favorites, with 105 mentions of programs occurring, representing 53 different programs. There was also a great diversity between and within racial, sexual and socioeconomic subgroups as for the sample as a whole.

Design and Methodology: Language samples totaling some 24,000 words were obtained from 40 fifth- and sixth-grade children selected for equal representation of high and low socioeconomic status. Within each status, blacks and whites were balanced, and within each racial category, males and females. The data were collected in Detroit in 1966 as part of a larger linguistic field study. The language samples were portions of an interview conducted to elicit continuous speech on a variety of topics, one of which was, "What are your favorite TV programs?"

Data are reported in terms of frequencies of particular types of responses, and no statistical analyses are reported.

Theory and Discussion: The samples on the television topic consistently revealed major social class differences. For example, high-status children used a mean of 401 words as compared to 183 words for low-status children on the television topic. With low-status children, more interview probes were used and were directed at getting the child to respond in a narrative fashion. Grammatical comparison showed less syntactic elaboration, more grammatical fragments, and more of a tendency to speak in the first person in the low-status sample. The author interprets the findings in terms of a sociolinguistic theory that argues that lower-status children have a "restricted" verbal or linguistic code while high-status children have an "elaborate code."

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Principal Findings: In the 56 primetime dramatic programs dealing with drug use in 1970-71 and 1971-72, law enforcement was emphasized over treatment, although a sizable minority focused on treatment, and treatment was uniformly treated as an effective, appropriate response to drug use; drug use was uniformly portrayed as socially and personally undesirable; and law enforcement was portrayed as successful.

Design and Methodology: All dramatic entertainment programs which had significant drug use content broadcast during the 39-week season (September-May) in 1970-71 and 1971-72 were analyzed. The total sample was 56 programs; coding was done by pairs of coders.

Theory and Discussion: In April 1970, President Nixon asked the networks to cooperate in meeting the drug problem. Over the following two years, the average was one drug story every nine days. However, there were twice as many drug stories in 1970-71 as in 1971-72, perhaps reflecting the exhaustion of good drug-related story ideas. Users were portrayed as fairly young (under 20, or 20-30), students or housewives (58 of 38 instances where occupation could be classified), and as dysfunctional abusers (54 out of 50 instances) rather than heavy users.
(12 instances), recreational-social users (11 instances), or experimenters (3 instances). Locales of use tended to be urban. Effects were uniformly portrayed as negative. Treatment was portrayed as desirable, and treatment personnel as effective. There were four times as many law enforcement as treatment-oriented programs (36 vs. 10), possibly because the former lends itself better to the construction of dramatic episodes.

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Wolf, T. M. A developmental investigation of televised modeled verbalizations on resistance to deviation. Developmental Psychology, 1972, 6, 537.
Principal Findings: Five-, seven-, and nine-year-old boys who viewed a televised portrayal of a peer who advocated disregard of the rule subsequently played more with a forbidden toy than boys who viewed a portrayal of a peer whose message supported the experimenter's prohibition. For all three age groups, simple, direct statements of proposed future behavior were more effective in producing deviancy from the prohibition than were statements with elaborate justifications.

Design and Methodology: A rule not to play with one of two available toys was imposed by the experimenter, and the 72 subjects were then exposed to a televised portrayal of a peer who either advocated conformity or deviation from the rule. A 2 x 2 x 3 factorial design was used, reflecting type of verbalization (supportive or deviant), level of verbalization (direct or elaborated), and age (5, 7, or 9). A control condition was used for each age.

Theory and Discussion: The author suggests that the results can be attributed to the clarity of information conveyed to the subjects. The author suggests that the relative ineffectiveness of the elaborate deviant verbalization could be due to the negative character of the justifications, or to the fact that children are not accustomed to a peer providing justifications.

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Principal Findings: First- and second-grade boys who viewed televised portrayals of deviant peer models deviated more quickly and for a longer period of time than children exposed to models who displayed deviant behavior. Children exposed to conforming verbal models deviated for a shorter period of time than subjects exposed to models who displayed no verbal behavior. Comparisons between children exposed to conforming behavioral models and those exposed to deviant model behavior indicated that significantly more attractive ratings were given to conforming than to deviating models. Finally, more subjects in conditions where behavior and verbalizations were inconsistent forgot the rule governing behavior than did subjects in other conditions.

Design and Methodology: Subjects were 135 first- and second-grade boys attending three Kitchener-Waterloo, Ontario, public schools. The model was an 8-year-old boy not acquainted with any of the subjects. A 3 x 3 factorial design with modeled behavior (conforming model, no model, and deviant model) and modeled verbalization (conforming model, no model, and deviant model) was used. Each cell had 15 subjects. Subjects were tested in a laboratory divided into an experimental and an observation room by a wall with a one-way mirror. Two toys were used in the experiment, a helicopter and a car. The helicopter was the forbidden toy in all conditions. Videotapes of the models were presented on a monitor. Subjects were brought to the experimental room and "allowed" to watch a television sequence of the model and the experimenter. In all sequences, the experimenter told the model not to play with the helicopter. After viewing, the experimenter seated the subject at the table on which the toys were placed, and left the room for five minutes, while the subject's behavior was recorded. Each subject was then asked for his feelings toward the peer model.

Theory and Discussion: The author interprets the deviant model conditions as having a disinhibiting effect on the subjects. It is suggested that deviant behavior may elicit the subject's attention, thus facilitating the coding of the modeled information for possible future use. Unanswered questions include whether or not children of different ages are differentially sensitive to different levels of modeled verbalization, and at what age children respond adversely to inconsistent or hypocritical models.

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Principal Findings: The playing with forbidden toys of second- and third-grade boys was inhibited subsequent to exposure to a conforming peer and disinhibited by exposure to a deviant peer, relative to a peer model condition. The magnitude of the effect depended on the mode of communication, with live behavioral and televised behavioral models most effective, and live verbal models least effective. Finally, the effects of the deviant peer were more stable over time than the effects of the conforming peer.

Design and Methodology: Subjects were 70 second- and third-grade boys attending a Waterloo, Ontario, public school. A 3 x 2 factorial design, with mode of presentation (live behavioral, televised behavioral, or live verbal) and type of modeled behavior (conforming or deviant), was employed. In addition, there was a seventh control condition with no model. The experimenter imposed a rule against playing with a particular toy. A conforming model was one who adhered to the rule and only played with a nonforbidden toy, while a deviant model disregarded the rule. The experiment was conducted in a mobile laboratory divided into an experimental and an observation room by a one-way mirror. Subjects were individually brought to the experimental room where they were exposed either to one of the models or to no model. In the behavioral conditions, the model was an eight-year-old boy not acquainted with the subjects. The model was introduced and allowed to play while the subject watched. In the television condition, the experimenter left the room after suggesting that the subject could watch another child playing on the television. In all conditions, the experimenter then left the subject alone for ten minutes of observed play. One month later, the same subjects were brought back to the laboratory for another ten minutes of observed play with the same toys as before.

Theory and Discussion: The author concludes that the effectiveness of both conforming and deviant models depended on a considerable extent on the mode of communication. Exposure to live behavioral and televised behavioral conditions were more effective both in terms of the magnitude of the immediate effects and in terms of the persistence of these effects. These results are consistent with other findings, which suggest that more salient and credible information can be conveyed via live behavioral models relative to verbally-presented symbolic models. The differences in effectiveness of the three modes of presentation for both conforming and deviant models are consistent with the initial follow-up test. Perhaps the initial effectiveness can be explained by the fact that deviant models revealed the distinctive features of the forbidden toy through actual manipulation or verbal description, while the conforming model only described or manipulated the acceptable toy. The results of this study indicate that
it was the deviant model who instilled a relatively stable tendency to transgress, while the conforming models elicited only transient conformity.

**Principal Conclusions:** Mass communication may be analyzed in terms of the functions it serves in society, which include surveillance of the environment, interpretation and prescription in regard to events, the transmission of culture, and entertainment or diversion. Nevertheless, mass media systems differ between societies. There is undeniable mass consumption of the media, but since media's impact depends to a great degree on various factors other than the communication itself, there is no such thing as an audience influenced directly by the media, a "mass audience."

**Theory and Discussion:** The mass media audience is "large, heterogeneous, and anonymous"; the mass communication experience is "public, rapid, and transient"; and the mass communicator is an organization. Such a system performs several functions for a society. It surveys the environment, collecting and distributing information about events. It interprets events, and suggests courses of action. It is an institution, like the school, which continues across generations in transmitting values and norms of behavior. It also provides relief through entertainment. Some functions are "manifest," or intended, others are "latent," or unintended. The impact of mass communication often depends on factors other than the message itself, including the extent to which it is disseminated through personal communication, the support the message receives from people with whom the receiver interacts, and the personality of the receiver.

**Principal Findings:** Nine-year-old children who viewed a simulated television newscast in which delayed gratification was advocated by word, demonstrated by deed, or both, themselves displayed greater tendencies to delay gratification than children who viewed a simulated newscast without such content. The differences were present immediately after viewing and remained four weeks later, although at a reduced level. The effect was greatest when there was both demonstration by deed and advocacy by word of delayed gratification.

**Design and Methodology:** Subjects were 56 third-grade children in New Zealand. Delay of gratification behavior was measured four weeks before the experiment, immediately afterwards, and four weeks afterwards. The behavioral measure consisted of 14 choices between receiving a reward immediately or a larger reward seven days later. In each pair, the rewards—candy, fruit, money, etc.—differed only in that the delayed reward was greater in quantity. Rewards were actually distributed.

All subjects were exposed to a simulated television newscast of an experiment in progress. Control subjects saw only the opening neutral one-minute sequence in which a female was being introduced to an experiment. Verbal advocacy subjects saw the opening sequence and a one-minute sequence in which the female offered a series of arguments in favor of delayed gratification. Demonstration-by-deed subjects saw the opening sequence and a one-minute sequence in which the female made choices in favor of delayed gratification. Word and deed subjects saw both the advocacy and choice-making sequences.

**Theory and Discussion:** The author interprets the data as demonstrating that exposure to short televised films increased voluntary delay of gratification. He also interprets the greater effect in the condition where verbal and behavior modeling were combined as indicating an additive effect of the two different kinds of modeling.

**Principal Findings:** Enjoyment of a novel film experience was inversely related to dogmatism. Viewers high in dogmatism indicated they were displeased by the film because of its novelty, lack of structure, and requirement for synthesis.

**Design and Methodology:** Subjects were 88 undergraduates; from 515 dogmatism scores provided by introductory psychology students, the 44 highest and 44 lowest were asked to serve as subjects in an experiment on esthetic preferences. Each group was further divided to create "very high" and "high" dogmatism subjects, and "very low" and "low" dogmatism subjects. All subjects were shown a Canadian film, *Begone Dull Care*, featuring the music of the Oscar Peterson trio and various abstract patterns whose movements were coordinated with the soundtrack. The dependent measures were taken immediately after the film, and included an enjoyment scale, and a 12-item questionnaire measuring various specific reactions.

**Theory and Discussion:** "Tension-inducing artistic experience is ... based on ambiguity tolerance and a need for self-actualization ..." note the authors. Thus, they hypothesize that enjoyment and reactions to the film will be related to dogmatism (a "relatively closed cognitive state"). The findings are interpreted as consistent with this expectation.

**Principal Findings:** Male college students who saw an erotic film administered more intense electric shocks to another person than did those who saw a violent film, and male college students who saw a violent film administered more intense shocks than did those who saw a bland neutral film. In each case, the person who was the target of the shocks was a person who had previously administered shocks to the subjects.

**Design and Methodology:** Subjects were 63 male undergraduates at the University of Wisconsin who were recruited and paid for their participation. Aggressive behavior, the dependent variable, was defined as the intensity of electric shocks delivered to a "tormentor," a confederate of the experimenter. Each subject was told that the experiment was to deal with the effects of electric shock punishment on learning and that he had been randomly assigned to play the part of the "teacher" while another subject would play the part of the "learner." To introduce the procedure, the "learner" then gave the subject a series of shocks in response to the subject's responses to a number of opinion questions. Each subject was then shown one of three film clips: erotic, aggressive, or neutral. After viewing the appropriate film, the subject was given the opportunity to administer electric shocks to the "learner."

**Theory and Discussion:** The results are said to suggest that aggressive behavior can be instigated mainly as a function of the excitatory potential of a message rather than its content.

The author advances a model of excitation transfer, which is based on the assumption that "salient elements of excitation"
decay very slowly and that the interception of excitation is nonspecific. That is, communication-produced excitation may serve to intensify or energize postexposure emotional states. The specific findings could be predicted from the excitation transfer formulation; they could not have been made from content-specific rationales.

The author notes that psychoanalytic theorists might challenge the operationalization of excitation in erotic terms, as sexual cues can be latently aggressive, but observes that in the experiment the "deception of gentle caressing and kissing" had more instigational power toward aggression than did portrayals of aggression.

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**Principal Findings:** When male college students were only mildly provoked, exposure to neutral or violent films did not result in increases or reductions in interpersonal aggression. When male college students were strongly provoked, the neutral film reduced aggression to a significant degree, while aggression of those who saw the violent film, although now lower, was not significantly affected. Physiological measures for those strongly provoked followed the same trend as aggression.

**Design and Methodology:** Subjects were 72 male undergraduates at Indiana University randomly assigned to conditions. First, all subjects delivered shocks to a confederate of the experiment in a bogus learning experiment. The level of shocks delivered formed a baseline measure of aggression. Then all subjects received shocks from a confederate of the experimenter under the guise of a learning experiment. Those in a "mild provocation" condition received two shocks; those in a "strong provocation" condition received eight shocks. In the "neutral" film condition, subjects saw a clip from Marco Polo's Travels. In the "violent" film condition, subjects saw a clip from The Wild Bunch in which dozens of people are killed. In a control condition, subjects saw no film. The dependent measure of aggression was the level of shocks delivered to the experimenter's confederate in the guise of a learning experiment. The data analysis was based on changes from the baseline measure of aggression, so that each subject could be said to serve as his own "control." In addition, before and after the films, blood pressure was taken as a physiological measure of excitation.

**Theory and Discussion:** The authors interpret their data as inconsistent both with a catharsis position, which would hold that exposure to television violence stimulates aggression. They argue that while the difference between those who saw a violent and a neutral film is in the direction of greater aggressiveness on the part of those who saw the violent film, the correct interpretation is not that the violent content stimulated aggression. Instead, they argue that the better interpretation is that the neutral content reduced aggression, while the violent material can sustain the level of physiological excitation elicited by being provoked.

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**Principal Findings:** College students who viewed a violent film sequence with a happy ending subsequently delivered a lower level of electric shocks to a person who had previously provoked the subject than college students who viewed the violent sequence without a happy ending. In a pretest, the decline of physiological measures of emotional arousal was associated with viewing the violent sequence with a happy ending.

**Design and Methodology:** Subjects were 40 male undergraduates assigned randomly to conditions. The violent sequence was the six-minute fight from Body and Soul, starring John Garfield. The star undergoes moral resurrection during the fight and defeats his opponent. Later, he displays heroism toward his oppressors, rejects a socialite, and is reunited with his sweetheart. Together, they happily walk away. The happy ending sequence consisted of this original version. The nonhappy ending sequence contained the same fight scene, but neutral introductory footage of equal length was substituted for the 1.2-minute happy ending.

Subjects were first provoked by a confederate of the experimenter who gave them electric shocks under the guise of participating in a learning experiment. The shock level was made to appear more than necessary. After viewing one or the other of the films, the subjects had the opportunity of delivering a shock which could vary in intensity from one to ten to the confederate every time he failed in twelve learning trials. The dependent variable was the mean intensity of shocks delivered over the twelve trials. In a pretest, twelve male subjects were studied and blood pressure and heart rate were found to decline during exposure to the happy ending sequence.

**Theory and Discussion:** The author interprets the results as indicating that the happy ending relaxed tensions and initiated the decay of arousal, thereby reducing the facilitatory effects of aggressive communication on subsequent aggressiveness. The happy ending confounds conflict resolution, an outcome satisfactory to the protagonist, and similarity between the value orientations of protagonist and subject. Conceivably, conflict resolution alone would have the same effect by reducing tension. Minimum reduction should occur after the "no resolution, no closure" endings in many current films. It is also conceivable that similarity in value orientation between viewer and protagonist would not be necessary, or that a satisfied villain might also lower tension. In any case, he concludes, the happy ending with its combination of elements is a pacifying effect.

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**Principal Findings:** Male college students who were exposed to either a violent or an aggressive film and then to a noninvoking, nonaggressive film did not differ appreciably in the delivery of noxious noise to another person from those who had first seen a neutral film. However, male college students who viewed an erotic film before seeing the noninvoking film delivered a higher level of noxious noise than any other group. Physiological indices of excitation were associated with the delivery of noxious noise, considered to be a measure of overt aggressiveness. In each case, the target for the delivery of noxious noise was a person who previously had delivered noxious noise to the subjects.

**Design and Methodology:** Subjects were 60 male undergraduates at Indiana University, Bloomington, who were recruited and randomly assigned to experimental conditions. Each subject played the part of the "teamed aggressor" in a bogus learning experiment. During the first part of the experiment, the subject was provoked by a confederate of the experimenter who administered noxious noises to him. This "tormentor" was the person who was to play the role of the "learner" in the bogus experiment. Then each subject saw one of four films: a neutral film, a clip from Marco Polo's Travels, an aggressive film, the fight
sequence from *Champion*, a violent film, and *The Wild Bunch*; or an erotic film, which depicted a couple engaging in sexual foreplay and intercourse but which was devoid of wild passion which could have been interpreted as aggression. Subsequently, all subjects viewed a noninvolving film, a clip from *Rivera*, an educational film. After the viewing session, subjects were given an opportunity to administer noxious noises to the previously tormenting “learner.” The intensity and duration of these noises, along with the latency of response, were the dependent aggression variables. Measures of heart rate and systolic and diastolic blood pressure were taken before treatments, after provocation, after exposure to communication, and after retaliation.

**Theory and Discussion.** The authors conclude: “Since the excitatory differentiation after exposure to communication coincided with the differentiation obtained in measured aggressiveness, the finding unequivocally supports the excitation-transfer model.” They explain that the brief exposure to noninvolving materials apparently accelerated excitatory decay among those who had seen violent or aggressive films. Thus, there was little difference between these groups and those who had seen a neutral film. However, the stimulation produced by the erotic film was not removed by the intervening noninvolving film. According to excitation-transfer theory, it is the level of excitation produced by a communication, and not its aggressive content, that is important to the instigation of aggressive behavior.

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**Principal Findings:** More violence was found in animated cartoons shown by two networks which were dramatic than in those which were comic. However, “Bugs Bunny”-type cartoons were not less violent than monster cartoons. There were 252 violent incidents in the 64 cartoons, or about four per cartoon. The amount of time devoted to these incidents was small—only about six percent of total cartoon time.

**Design and Methodology.** Frequency and duration of violent episodes were measured in the animated cartoons shown during one week on the Tulsa outlets of two networks in 1968. Violence was defined as “any act, or an attempt at such an act, by which one party inflicted pain or bodily harm, rendered unconscious, forcibly restrained, killed, or destroyed another party, either to prevent that party from engaging in an act or out of malice.”

The total sample was 84 cartoons.

**Theory and Discussion.** In terms of violence, no pattern emerged in a comparison of “Bugs Bunny”-type and monster cartoons, although some of the former were the most violent in the sample. The only interpretable differences occurred between comic (or slapstick) cartoons and dramatic (or adventure) cartoons. The author notes that the data are not consistent with the wistfulness occasionally heard for the days when “Bugs Bunny”-type cartoons were prevalent.
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