Violence Profile 1967 Through 1988-89: Enduring Patterns

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The Violence Profile

The Violence Profile includes the Violence Index (frequency and rate of violent representations in network television drama), and several measures of the consequences of exposure to them. The Violence Index has been compiled annually since 1967. The Violence Profile has been published periodically since 1972. The last publication, "Television's Mean World: Violence Profile 14 - 15" covered the years from 1967 through 1985. This report extends the Violence Profile from 1967 through the 1988-89 season.

We have defined violence in a simple and straightforward way throughout the study as any overt act or threat to hurt or kill a person. We included violence that occurs in a realistic and serious context as well as violence that occurs in a fantasy or humorous context. Idle threats, verbal abuse, or gestures without credible violent consequences are not included.

The Violence Profile is a part of the Cultural Indicators project conducted by George Gerbner and Larry Gross, both at The Annenberg School for Communication, University of Pennsylvania; Michael Morgan, University of Massachusetts at Amherst; and Nancy Signorielli, University of Delaware.

Cultural Indicators is a data bank and research project that relates recurrent features of the world of network television drama to viewer conceptions about the real world. The research began in 1967-68 with a study for the National Commission on the Causes and Prevention of Violence. It continued under the sponsorship of the Surgeon General's Scientific Advisory Committee on Television and Social Behavior, the National

Institute of Mental Health, The White House Office of Telecommunications Policy, the American Medical Association, the Administration on Aging, the National Science Foundation, the W. Alton Jones and other foundations.

Although violence-related findings have been disseminated most widely, the research was broadly based from the beginning to include many aspects of life presented in television drama. Reports have focused on television's contributions to conceptions of aging; women and minorities; sex-role stereotypes; occupations; political orientation; death and dying; school achievement and aspirations; health-related issues such as safety, nutrition, and medicine; science and scientists; family life; religion; criminal trials, adoption, and other issues. We have also extended the project to comparative studies of television content and effects in several countries.

Highlights of the Findings

The most striking aspect of the findings is the remarkable stability in violent (as in most other) representations. Individual programs change but the overall structure of dramatic representations endures over time, reflecting network television's stable and still robust institutional position in American society. Conclusions based on our previous report are equally valid for the most recent period.

This update reveals that the percent of prime-time programs using violence remains more than 7 out of 10, as it has been for the entire 22-year period of this project. The rate of violent acts in prime time likewise remains between 5 and 6 per hour. About half of all prime time dramatic characters are involved in violence and about 10 percent in killing, as they have been since 1967. The composite Violence Index reflecting all these figures fell slightly below its 22-year average in 1986, but matched or topped it in 1987 and 1988-89. The Index for 8-9 p.m. was slightly lower and for 9 to 11 p.m. slightly higher than the overall prime time Index.

Children's weekend daytime programming remains saturated with violence. In each of the past three seasons children were entertained with more than 25 acts of (mostly "humorous") violence per hour committed by more than 7 out of 10 characters in 9 out of 10 programs. The Index for these years was at or above the 22-year average.

The three major networks use violence as a dramatic staple with a few variations and fluctuations from year-to-year. In 1986 ABC was above its own average. In all three recent seasons CBS was above its 22 year average. In two of the three most recent seasons NBC was below its 22 year average. The three networks' rates ranged from just under 4 to 7 violent acts per prime time hour.

On each of the three networks children's weekend-daytime programs continue to be 3 to 6 times more violent than the programs broadcast in prime time, with considerable fluctuation in the three most recent samples. During that period, ABC's children's programs Violence Index was considerably above its 22 year average. CBS in the last three seasons was under its 22 year total. NBC's Violence Index for children's programs remained slightly above its 22-year average.

What effect, if any did deregulation have on television violence? We can answer that question by comparing programs broadcast before and after 1980. The most significant difference seems to be the dismantling of codes pertaining to violence during children's programming. The rate for weekend daytime children's programs was 18.6 violent acts per hour before 1980 and 26.4 acts per hour after 1980.

What are some consequences of exposure to television's violent world? Studies have revealed that such exposure does occasionally incite viewers to violence and often desensitizes. But for most viewers, our studies have shown that television's mean and dangerous world cultivates a sense of relative insecurity, vulnerability, and mistrust, and -- despite its supposedly "entertaining" nature -- alienation and gloom.

Methodology

Message System Analysis

Violence is a complex social relationship that hurts or kills or threatens to do so. Its purpose is usually to force unwanted behavior on a person or group, to dominate, to terrorize. Symbolic violence is a demonstration of power that may have the same functions but painlessly and even entertainingly. It shows who can get away with what against whom. It also holds other important potential lessons. If the frequency and role of violence in the world of television have anything to do with assumptions about the real world (as most studies show that they do), they may well cultivate one's

conceptions about the risks of violence in the world (including one's own neighborhood), one's chances of encountering and falling victim to violence, one's feelings about the degrees of insecurity, mistrust, and anxiety that seems to be warranted and prudent, and other aspects of personal and group relationships. These and other potential consequences of exposure to television violence are central to our research.

Therefore, we have not reduced our observation of violence to a single type of context by presuming that only imitative aggression is important and only "serious" and "realistic" mayhem has serious consequences. We define violence in a simple and straightforward way that makes no prior assumptions about effects but, on the contrary, permits research on the cultivation of any potential lesson of broad societal significance. Our measures are thus based on the reliable observation of clear-cut, unambiguous, and overt episodes of physical violence -- hurting or killing or the threat of hurting and/or killing in any context. Idle threats, verbal abuse, or gestures without credible violent consequences are not coded as violence.

The many potential lessons inherent in the social relationships and demonstration of power depicted in violence, and the many modes of communication through which these can be conveyed, make it necessary to record any act of violence that fits the definition, regardless of conventional notions about types of violence that may have "serious" effects. We include violence that occurs in a realistic and serious or fantasy or humorous context. "Accidental" violence and "acts of nature" are recorded because they are always purposeful in fiction, claim victims, and demonstrate power. Dramatic action is never accidental or "natural." There is also considerable research evidence that humor and fantasy are effective forms in which to convey serious lessons (Bandura et al, 1967; Ellis & Sekura, 1972; Lovas, 1961). In fact, we have found in previous research that lessons other than imitative aggression tend to be the most widely shared and as easily cultivated by "humorous" as by "serious" television mayhem. Fantasy, comic, "natural" and "accidental" violence thus convey potentially significant lessons. Eliminating them from the analysis would be a major conceptual error.

The Violence Profile combines the results of both message system and cultivation analysis. The Violence Index is a multidimensional set of indicators of violent action in samples of television programs. It is based upon the analysis of week-long samples of prime-time and weekend-daytime (children's) network dramatic programming broadcast each fall from 1967 through the 1988-1989 television season. Our methodological

studies have found the solid week sample of network programming as representative of a season's programming as larger randomly drawn samples, and reasonably stable form year to year, at least in basic dimensions employed in our analysis (Eleey, 1969). Moreover, analyses of variance conducted on violence-related content data collected over seven consecutive weeks of fall 1976 prime-time dramatic programming revealed no significant differences by week for dependent measures such as the number of violent actions, the duration of violence, and the significance of violence. There were significant main-effects for program-related variables including network, type of program, time of broadcast, new or continued programs and so on; but there were no significant interactions with week of broadcast (Signorielli, Gross, & Morgan, 1982).

The week-long samples of programming are recorded and the tapes are screened and coded by trained analysts using an extensive instrument of analysis. The instrument requires the reliable observation by independent coders of many aspects of the programs and characters in the sample, including violent actions (see Gerbner et al, 1978 for more information about specific definitions). The coded observations are submitted to an extensive reliability analysis (Krippendorff, 1980). Only those items meeting acceptable standards of reliability (alpha = .60 or above) are analyzed and reported.

The Violence Index combines three sets of observations in order to provide a single indicator sensitive to a range of multidimensional program characteristics. These observations measure the extent to which violence occurs at all in the samples, the rate of violence per program and per hour, and the involvement of major characters in violence --either as a character who commits violence (hurts or kills others), a character who is victimized (hurt of killed), or both.[1] The measures are combined into composite indicators of violence and a Violence Index to facilitate comparisons over time and across programming hours and networks. The measures meet the statistical and empirical requirements of an Index: uni-dimensionality and internal homogeneity (Signorielli, et al, 1982). The separate measures and indicators that compose the Index are included in the tables so that they may be examined separately. The findings since 1967 are reported in Tables 1-11 and illustrated on Figures 1-4. The results include new data for the 1986-87, 1987-88, and the 1988-89 seasons and comprise the Violence Index portion of this report.

Cultivation Analysis

Cultivation Analysis attempts to ascertain what it means for most Americans to spend between one-fifth and one-sixth of their waking hours each day with television. In its simplest form, Cultivation Analysis tries to ascertain if those who spend more time watching television are more likely to perceive the real world in ways that reflect the most common and repetitive messages and lessons of the television world, compared with people who watch less television but are otherwise comparable in important demographic characteristics. (See Morgan & Signorielli (1990) for a more detailed discussion of the theoretical and methodological underpinnings of Cultivation Analysis.)

Cultivation Analysis begins with message system (content) analysis. Findings from the systematic analyses of television's content are then used to formulate questions about people's conceptions of social reality. Using standard techniques of survey methodology, the questions are posed to samples (national probability, regional, convenience) of children, adolescents, or adults. Secondary analysis of large scale national surveys (for example, the National Opinion Research Center's General Social Surveys) have often been used when they include questions that relate to identifiable aspects of the television world as well as television viewing.

Television viewing is usually assessed by asking how much time the respondent watches television on an average day, and respondents in each sample are divided into those who watch more television, those who watch a moderate amount, and those who watch the least. What is important is the basic difference in viewing levels; not the actual or specific amount of viewing.

We also find that the observable empirical evidence of cultivation is likely to be modest in terms of its absolute size. Even light viewers may be watching a fair amount of television each week and in any case live in the same cultural environment as heavy viewers; what they do not get through television can be acquired indirectly from others who do watch more. Consequently the cards are stacked against finding evidence of cultivation.

Accordingly we should not dismiss what appear to be small effects because small effects may have profound consequences. For example, a single percentage point difference in ratings is worth many millions of dollars in advertising revenue. A range of 3 percent of 15 percent margins (typical of most differences between light and heavy viewers) in a large and otherwise stable

field often signals a landslide, a market takeover, or an epidemic, and it certainly tips the scale of any closely balanced choice or decision.

The Cultivation Analyses reported here (in Tables 12-14) use data collected in two national surveys: The National Opinion Research Center's General Social Surveys and the Institute of Social Research's Monitoring the Future Survey for 1985. Questions from both of these surveys were used to calculate scores on three indices: the Mean World Index and two Indices of Alienation and Gloom. Two types of analyses were conducted. First, correlation and partial correlation procedures were used to examine the relationship between television viewing and scores on these Indices. Second, respondents in the surveys were divided into two groups -- those who had high scores and those who had low scores on either the Mean World or the Alienation and Gloom Indices. They were also classified into light (under 2 hours each day), medium (2 to 4 hours per day), and heavy (over 4 hours each day) television viewing. Cross tabulations of these Indices with the reported daily television exposure, independently controlling for control variables (sex, age, race, education, etc.) were conducted. Respondents were compared in terms of the Cultivation Differential (CD) -- the percent of heavy viewers minus the percent of light viewers who give a specific response. The degree of the relationship, within each subgroup, was measured using the gamma statistic, with significance level indicated by tau-b or tau-c.

Findings

What Viewers See

Our ongoing analyses of network dramatic programming from 1967 through the 1988-89 season show that the world of network dramatic television is remarkable stable from year to year in regard to the presentation of themes, characterizations, action, and fate. The individual programs and characters may change but the overall images remain the same. This update reveals that overall levels of violence in the early evening (8 to 9 pm EST) hour returned in 1986 and 1988 to the relatively lower level of violence we saw in the middle 1970s with the short lived concept of an early evening "family hour" of viewing. For these two years, however, violence in the late evening (9 to 11 pm EST) was at the higher levels and above the overall average with an Index of 174 in 1986 and an Index of 188 in 1988. By comparison, the Index in 1987 was below the 22 year average.

Violence in children's weekend-daytime programming during 1986, 1987, and 1988 was about average. The Index was 1 point above the 22 year average (233) in 1986; 10 points above the average in 1987; and 1 point below the average in 1988. Children's weekend daytime programs have always been saturated with violence (mostly non-lethal and often humorous). The rate of violent incidents in children's programs has been typically more than three times the rate in prime time and the overall 22 year average is 22 acts per hour. In the 1986, 1987 and 1988 seasons the rate of violent incidents per hour in children's programs was above average; in each of these three seasons, children were entertained with 25 violent incidents per hour.

The Violence Indices for the networks' prime-time programs are also quite similar overall with some variation and fluctuation from year-to-year. The 22 year total for ABC prime time programs is 156; the 22 year total for CBS is 151; and the corresponding figure for NBC is 170. The Indices for the three networks in the three most recent samples shows wide variation. One sample (1986) from ABC was considerably below this network's average; each of the three most recent samples for CBS were above this network's 22 year total; and two of the three most recent samples for NBC programming were below NBC's 22 year average. In prime time the rate of violent incidents per hour has ranged from just under 4 to 7, with a 22 year total of 5 acts per hour. Figures for each of the networks reflect similar rates of violence.

On each of the three networks children's weekend-daytime programs continue to be considerable more violent than the programs broadcast on prime time. These hours of programming tend to be saturated with violence because the shows tend to consist of two or three short cartoons, each with 6 or more acts of violence. Consequently the Violence Indices for these programs usually are average about 230 points. Each network has a 22 year total Violence Index of around 230 points, with considerable fluctuation in the three most recent samples. For example, in 1986, 1987, and 1988 ABC's children's programs were considerably above ABC's 22 year average; in 1986 their Index was 261; in 1987 it was 258; and in 1988 it was 270. CBS in the last three seasons had two Indices that were under their 22 year total (in 1986 the Index was 192 and in 1988 it was 191). Finally, NBC's Violence Index for children's programs remained the most consistent; it was 248 in 1986, 234 in 1987, and 234 in 1988.

One of the concerns today is trying to assess the impact of deregulation on programming. Has deregulation made any kind of difference in programming? We can start to examine this issue by

looking at programming broadcast before 1980 and comparing it with programming broadcast after this date. In this 22 year sample we thus have 13 samples broadcast before 1980 and 9 broadcast after 1980. Table 15 presents the data relating to the Violence Index and its components for eight groups of programs, before deregulation (1967-1979) and after deregulation (1980-1988).

Overall, the Violence Index shows some change in these two time periods with the Index increasing or staying the same in all but two cases (NBC and early evening programming). The smallest increase was in prime time programs and the largest differences were for children's programs (20 points) and CBS programs (14 points). There were some statistically significant differences between these two time periods for some of the individual components of the Index. For example, the rate of violent incidents per hour for children's programs was 18.6 acts per hour before 1980 and 26.4 acts per hour after 1980 ($t=4.01$; $p<.001$). Similarly in children's programs there was a significant difference in the rate of violent actions per individual program before 1980 and after 1980 ($t=-3.52$;$p<.001$). There were also significant differences for CBS programming in the rate per program ($t=-2.49$; $p<001$) and the prevalence of violence ($t=-2.01$; $p<.001$).

The Social Role of Violence

Television did not invent violence. It just put it on the assembly line and into every home. Only television reaches virtually all homes with the same pattern of images and messages. Unlike other media, television is used relatively non-selectively. It is a ritual, a common symbolic environment into which children are born and whose inescapable messages help shape and maintain common conceptions of life, society, and the world.

Video mayhem pervades the typical American home, in which the television set is on for an average of seven hours each day. Cable seems only to increase the penetration of its patterns into everyday life (Morgan & Rothschild, 1983). For the past 22 years, at least, adults and children have been entertained by about 16 violent acts, including two murders, in each evening's prime time programming. In addition, our children are exposed to more than 20 acts of violence during each hour of television on Saturday and Sunday mornings. We have been immersed in a tide of violent representations that is historically unprecedented. Through an era of deregulation, corporate shakeups, and increased

competition confronting the networks in recent years, this tide shows little sign of receding.

Even more significant than the sheer amount of televised violence is its role in the world of television and in the lives of viewers. The conventional media definition reducing that role as only or primarily related to aggression and potential threats to law and order tends to focus attention on only one concern, and to distract it from many much more pervasive potential consequences.

Violence is a complex social scenario. By demonstrating power in systematic ways, it tends to confirm and cultivate a certain distribution of power in the symbolic and real worlds. A theory of the dynamics and mechanisms of that demonstration and cultivation is the most important outcome of our research.

Victimization is an integral part of the scenario of violence. The lessons of victimization are fear, intimidation, vulnerability. Such contributions as television violence might make to the instigation of occasional violence that threatens the social order (the systematic violence that enforces it seems to be of no great concern) may be but the price paid (along with other negative consequences) for the broader functions of pacification and social control.

The theory can be summed up as follows. While the convergence of research indicates that exposure to violence does occasionally incite and often desensitize, our findings show that, for most viewers, television's mean and dangerous world tends to cultivate a sense of relative danger, mistrust, dependence, and -- despite its supposedly "entertaining" nature -- alienation and gloom.

The Demonstration of Power

Humans threaten to hurt or kill, and actually do so, mostly to scare, terrorize, humiliate, and dominate others. Symbolic violence carries the same message. It is the quickest dramatic demonstration of who can get away with what against whom, and who should submit to whom.

One way to study violence as a scenario of social relationships and power is to calculate a ratio of violents to victims in different groups. Dividing victims by violents in each group yields a "risk ratio" of relative strengths and vulnerabilities. It shows the calculus of risks in violent

encounters: each group's relative chances of ending up victims rather than victors.

For every 10 male characters in major roles on prime time network television who commit violence, there are 11 who fall victim to it. But for every 10 female perpetrators of violence in major roles, there are 13 victims; and among women who are minor characters the victimization ratio increases with about 16 victims for every 10 perpetrators. Overall, women in just about every social role, are more likely to be hurt or killed than to hurt or kill other characters. Young women and old women are the two groups of women in major roles who are most likely to be victimized: for every 10 of these women who commit violence, 14 are victimized. The next groups of women in major roles who are most likely to be victimized are the children and adolescents, minorities, those who are either married or women specifically characterized as not married, and those who are categorized as "good." In this case, for every 10 women who commit violence, 13 are victimized.

For the most part, victimization predominates on television with most men just slightly more likely to be hurt or killed than to hurt or kill others. There are a few dramatic roles where the men are more likely to commit violence than to suffer violence: old men and "bad" men. Similarly, although women are somewhat more likely than the men in similar roles to be victimized than to commit violence there are also two groups of women -- "bad" women and formerly married women -- who are more likely to hurt or kill others than be hurt or killed themselves.

What Viewers Learn About Violence and the World

We have consistently found that women, young and old people, and some minorities rank as the most vulnerable to victimization on television. We have also found that symbolic victimization on television and real world fear among women and minorities, even if contrary to the facts, are highly related (Morgan, 1983). Viewers who see that members of their own group have a higher calculus of risks than those of other groups seem to develop a greater sense of apprehension and mistrust in the real world.

Heavy viewers are more likely than comparable groups of light viewers to express the feeling of living in a self-reinforcing cycle of a mean and gloomy world. Our earlier analyses of large national probability surveys (reported in detail in several articles cited in the Bibliography) indicate how the cycle works. We looked at the relationships between

television viewing and (1) overestimating chances of involvement in violence, (2) claiming that women are more likely to be victims of crime, (3) saying that neighborhoods are only somewhat safe or not safe at all, (4) responding that fear of crime is a very serious problem, and (5) saying that crime is rising. Combined into an Index of Perceptions of Danger (Gerbner er al, 1980b), the results show that most heavy viewers in every education, age, income, gender, newspaper reading, and neighborhood group express a greater sense of apprehension than do light viewers in the same groups. (Other results show that heavy viewers are also more likely to have bought new locks, watchdogs, and guns "for protection.")

Recent analyses of data from the National Opinion Research Center's (NORC) General Social Surveys fielded between 1980 and 1986 continue to support and expand earlier findings (Signorielli, 1990). In one analysis three items from the 1980, 1983, and 1986 NORC General Social Surveys were combined to form an index of interpersonal mistrust (alpha = .67) called the Mean World Index. It measures the degree to which respondents (1) agree that most people are just looking out for themselves, (2) that you can't be too careful in dealing with people, and (3) that most people would take advantage of you if they got a chance. We find that television viewing is significantly associated with the tendency to agree with these items ($r=.14, p<.001$). While simultaneous controls for sex, age, income, race, subjective social class, and political views reduce its strength, the relationship remains statistically significant (partial $r=.06, p<.001$). The year-by-year analyses show similar patterns, with only one seventh-order partial correlation (the 1986 General Social Survey) failing to reach statistical significance.

Even more revealing than this small overall correlation is the relationship between television viewing and expressing interpersonal mistrust for specific groups of the population. As found in previous analyses, the relationship is strongest for respondents who have had some college education -- those who are also least likely to express interpersonal mistrust. (The correlation between education and the Mean World Index is -.25, $p< 001$.) The relationship also holds up, under simultaneous controls, for whites and both low- and high income respondents. Among nonwhites, who tend to score higher on the Mean World Index ($r=.15, p<.001$), the significance of the relationship disappears under simultaneous controls, although the correlation is only slightly smaller than it is for white respondents.

The data show sizable group differences and illustrate the dynamics of what we call "mainstreaming" -- the tendency for

viewing to blur distinctions between groups and bring them closer into television's cultural mainstream. Viewing may also leave some groups relatively unaffected while making others extremely responsive to the television image.

Heavy viewers (those who watch four or more hours each day) in almost every group are significantly more likely to express greater interpersonal mistrust than light viewers (those who watch under 2 hours each day) in the same demographic groups. These data also illustrate the mainstreaming implications of viewing. For example, combining data from the 1980, 1983, and 1986 General Social Surveys, heavy and light viewers who have not been to college are equally likely to agree with the items in the Mean World Index: 53% of both the heavy and light viewers agree with two or three of these items. Among those who have had some exposure to college however, television viewing makes a considerable difference: 28% of the light viewers compared to 43% of the heavy viewers in this subgroup have a high score on this index. There is thus a 25-percentage-point difference between these two subgroups of light viewers but only a 10-point spread between these two subgroups of heavy viewers.

We also find that non-whites are so likely to express interpersonal mistrust that television viewing adds little or nothing to that perception: 71% of the light viewers and 76% of the heavy viewers have high scores on this index. Whites, on the other hand, are a little more likely to agree with the items in the Mean World Index if they are heavy viewers of television. Overall, low income respondents are considerably more likely than the more affluent respondents to have high scores on the Mean World Index. Moreover, light and heavy viewing low income respondents are about equally likely to express interpersonal mistrust. Among high and medium income respondents, however, the heavy viewers are more likely to express interpersonal mistrust than the light viewers. Thus, the more affluent heavy viewers share the perception of a "Mean World" with lower income respondents.

Similar patterns are found for each of the three years included in this analysis. Mainstreaming is especially consistent when examining subjective social class, education, and income subgroups. It is also interesting to note that in many cases the overall scores on the Mean World Index decreased between 1980 and 1986. The differences between light and heavy viewers (Cultivation Differentials) have remained relatively stable over time. So, while most groups show less mistrust over time (for whatever reason), television seems to work to counteract that trend.

There were similar, but weaker, patterns in the relationship between amount of viewing and expressing sentiments of gloom and alienation. Alienation and gloom were measured in the 1980, 1982, and 1985 NORC General Social Surveys by three of Srole's (1956) anomie items -- (1) the lot of the average man is getting worse, (2) it is hardly fair to bring a child into the world, and (3) most public officials are not interested in the lot of the average man. Combining data from these three surveys into an Index of Alienation and Gloom (alpha = .56), revealed a significant relationship between television viewing and agreeing with these items ($r=.11$, $p<.001$) that withstood simultaneous controls for sex, age, income, race, education, subjective social class, and political orientation, but was substantially reduced (partial $r=.03$, $p<.05$). The year-by-year analyses also revealed similar patterns, although in the 1982 General Social Survey the relationship was not statistically significant when simultaneously controlled for the above mentioned demographic variables. When the relationship between television viewing and endorsing statements of alienation is examined within education and income subgroups, the relationship persists for those respondents who, as a group, are more likely to express alienation -- those who have not had any exposure to college and those with low income. These relationships, though slight, withstand the implementation of a large number of controls, either singly or simultaneously.

This analysis also reveals that heavy viewers in most of the subgroups are much more likely to express feelings of gloom and alienation than the light viewers in these subgroups. Moreover, as was true with the Mean World Index, even though respondents were likely to express less gloom in 1985 than they did in 1980, the differences between heavy and light viewers (the Cultivation Differentials) remained stable, indicating that the relationship between viewing and expressing these sentiments is somewhat stable.

Again, there are a number of examples of mainstreaming. For example, light viewing men are somewhat less likely to express feelings of gloom than light viewing women, while about the same percent of men and women who are heavy viewers have a high score on this Index. Similarly, among the subjective social class subgroups the heavy viewers are more homogeneous in their likelihood to have high scores on this Index while the percent of light viewers in these subgroups who endorse these statements is more similar. Among low- medium-, and high- income groups the light viewers are more dispersed while the heavy viewers are more similar in their likelihood to endorse these statements. We also find that the patterns exhibited for the education and subjective social class subgroups are quite similar to those found for the

Mean World Index. In short, heavy viewers in these demographic subgroups seem to be more homogeneous and more likely to express gloom and alienation than their light viewing counterparts.

Finally, data collected on a number of questions relating to alienation asked in the 1985 Monitoring the Future Survey also support these findings. A multistage nationwide sample of high school seniors were asked to rate on a 5-point scale how much they agreed or disagreed with the following statements: (1) I feel that I can do very little to change the way the world is today; (2) it does little good to clean up air and water pollution because this society will not last long enough for it to matter; (3) when I think about all the terrible things that have been happening, it is hard for me to hold out much hope for the world; (4) I often wonder if there is any real purpose to my life in light of the world situation; (5) My guess is that this country will be caught up in a major world upheaval in the next 10 years; and (6) Nuclear or biological annihilation will probably be the fate of all mankind, within my lifetime.

The Index of Alienation (alpha = .72), made up of these items, showed a positive, statistically significant relationship ($r=.094$, $p<.001$) with television viewing: more television viewing was related to answers reflecting alienation and gloom. This relationship remained statistically significant when individually controlling for sex, political orientation, race, grades, and parent education but was not statistically significant when simultaneously controlling for these variables. But, as has been seen in previous studies (see, for example, Gerbner et al., 1980), the lack of an overall relationship does not mean that the relationship does not exist in specific subgroups of respondents. Specifically, there was a statistically significant relationship between expressing a greater degree of alienation and watching television that remained statistically significant under conditions of simultaneous controls for nonwhites ($r=.142$, $p<.05$), students whose parents had not been to college ($r=.072, p<.05$), and students who expressed a liberal orientation ($r=.089, p<.05$). Finally, in most subgroups the heavy viewers were more likely to express alienation and gloom than the light viewers

These group differences, and those previously reported for the Index of Perceptions of Danger, illustrate the interplay of television with demographic and real world factors. In most subgroups, those who watch more television tend to express a heightened sense of living in a mean world of danger and mistrust and alienation and gloom. Morgan (1984) also found them feeling more lonely, bored, and depressed. The cultivation of such

anxieties is most pronounced in groups whose light viewers are the least likely to be mistrustful and apprehensive.

This unequal sense of danger, vulnerability and general malaise cultivated by what is called "entertainment" invites not only aggression but also exploitation and repression. Fearful people are more dependent, more easily manipulated and controlled, more susceptible to deceptively simple, strong, tough measures and hard-line postures -- both political and religious. They may accept and even welcome repression if it promises to relieve their insecurities and other anxieties. That is the deeper problem of violence-laden television.

NOTES

1. These data sets are called prevalence, rate, and role, respectively. Prevalence (%P) is the percent of programs in a particular sample containing any violence. Rate expresses the frequency of violent actions in units of programming and in units of time. The number of violent acts divided by the total number of programs gives the rate per program (R/P) while the rate per hour (R/H) is the number of violent actions divided by the number of program hours in the sample. The latter measures the saturation of violence in time, and compensates for the difference in rates between a long program unit, such as a movie, and a short one, such as a cartoon.

Role is defined as the portrayal of characters as violents (committing violence) or victims (subjected to violence) or both, and yields two measures. They are the percent of violents, victims, or both (%V) and the percent involved in killing, either as killers or as killed, or both (%K). The Index is the sum of these five measures with the rates weighted by a factor of two.

The Violence Index is represented as:

$$VI = \%P + 2(R/P) + 2(R/H) + \%V + \%K.$$

Of course, as noted above, only as the meaning and purpose of the Index is to provide a convenient summary of several measures to facilitate comparisons over time, across networks, etc. The components are always reported separately to permit assessment of the individual measures.

BIBLIOGRAPHY

Bandura, A., Ross, D., & Ross, D. (1967). Transmission of aggression through imitation of aggressive models. Journal of Abnormal and Social Psychology, 63, 575-582.

Bryant, J., Carveth, R. A., & Brown, D. (1981). Television's influence on social reality. Journal of Communication, 31(1), 106-119.

Eleey, M. (1969). Variations in generalizability resulting from sampling characteristics of content data: A case study. M.A. Thesis, The Annenberg School of Communications, University of Pennsylvania, Philadelphia.

Ellis, G. T. & Sekura, F., III. (1972). The effect of aggressive cartoons on the behavior of first grade children. Journal of Psychology, 81, 7-43.

Gerbner, G. (1969). Dimensions of violence in television drama. In R. K. Baker & S. J. Ball (Eds.), Violence in the media (pp. 311-340). Staff Report to the National Commission on the Causes and Prevention of Violence. Washington, DC: Government Printing Office.

Gerbner, G. & Gross, L. (1976). Living with television: The violence profile. Journal of Communication, 26(2), 173-199.

Gerbner, G., Gross, L., Jackson-Beeck, M., Jeffries-Fox, S. & Signorielli, N. (1978). Cultural indicators: Violence profile no. 9. Journal of Communication, 28(3), 176-207.

Gerbner, G., Gross, L., Morgan, M. & Signorielli, N. (1980a). Aging with television: Images on television and conceptions of social reality. Journal of Communication, 31(1), 37-47.

Gerbner, G., Gross, L., Morgan, M. & Signorielli, N. (1982). Charting the mainstream: Television's contributions to political orientations. Journal of Communication, 32(2), 100-127.

Gerbner, G., Gross, L., Morgan, M. & Signorielli, N. (1986). Living with television: The dynamics of the cultivation process. In J. Bryant & D. Zillmann (Eds.), Perspectives on media effects, (pp. 17-40). Hillsdale, NJ: Lawrence Erlbaum Associates.

Gerbner, G., Gross, L., Morgan, M. & Signorielli, N. (1984). Political correlates of television viewing. Public Opinion Quarterly, 48(1), 283-300.

Gerbner, G., Gross, L., Morgan, M. & Signorielli, N. (1980b). The "mainstreaming" of America: Violence profile no. 11. Journal of Communication, 30(3), 10-29.

Gerbner, G., Gross, L., Signorielli, N., Morgan, M., & Jackson-Beeck, M. (1979). The demonstration of power: Violence profile no. 10. Journal of Communication, 29(3), 177-196.

Gross, L. (1984). The cultivation of intolerance: Television, blacks, and gays. In G. Melischek, C. E. Rosengren, & J. Stappers (Eds.) Cultural indicators: An international symposium. Vienna: Austrian Academy of Sciences.

Hawkins, R. P. & Pingree, S. (1982). Television's influence on social reality. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), Television and behavior: Ten years of scientific progress and implications for the 80's, Vol. 2, Technical Reports. Washington, DC: Government Printing Office.

Krippendorff, K. (1980). Content analysis. Beverly Hills, CA: Sage Publications.

Lovas, O. I. (1961). Effects of exposure to symbolic aggression on aggressive behavior. Child Development, 32, 37-44.

Morgan, M. (1984). Heavy television viewing and perceived quality of life. Journalism Quarterly, 61(3), 499-504.

Morgan, M. (1982). Television and adolescents' sex-role stereotypes: A longitudinal study. Journal of Personality and Social Psychology, 43(5), 947-955.

Morgan, M. (1983). Symbolic victimization and real-world fear. Human Communication Research, 9(2), 146-157.

Morgan, M. & Rothschild, N. (1983). Impact of the new television technology: Cable TV, peers, and sex-role cultivation in the electronic environment. Youth and Society, 15(1), 33-50.

Morgan, M. & Signorielli, N. (1990). Cultivation analysis: Conceptualization and methodology. In N. Signorielli & M. Morgan (Eds.), Cultivation analysis: New directions in media effects research (pp. 13-33). Newbury Park, CA: Sage Publications.

Pingree, S. & Hawkins, R. P. (1980). U.S. programs on Australian television: The cultivation effect. Journal of Communication, 31(1), 97-105.

Rosenberg, M. (1957). Occupations and values. Glencoe, IL: Free Press.

Signorielli, N. (1989). Teenagers, television and political orientations. Paper presented at the Conference on Culture and Communication, Temple University, Philadelphia, PA.

Signorielli, N. (1989). Television and conceptions about sex roles: Maintaining conventionality and the status quo. Sex Roles, 21(5/6), 337-356.

Signorielli, N. (1990). Television's mean and dangerous world: A continuation of the cultural indicators perspective. In N. Signorielli & M. Morgan (Eds.), Cultivation analysis: New directions in media effects research (pp. 85-105). Newbury Park, CA: Sage Publications.

Signorielli, N., Gross, L., & Morgan, M. (1982). Violence in television programs: Ten years later. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), Television and behavior: Ten years of scientific progress and implications for the 80's, Vol. 2, Technical Reports (pp. 154-174). Washington, DC: Government Printing Office.

Srole, L. (1956). Social integration and certain correlaries: An exploratory study. American Sociological Review, 21, 709-712.

Weiman, G. (1984). Images of life in America: The impact of American T.V. in Israel. International Journal of Intercultural Relations, 8, 185-197.

FIGURE 1: VIOLENCE INDEX IN PRIME-TIME AND WEEKEND-DAYTIME (CHILDREN'S) PROGRAMMING (1967-1988)

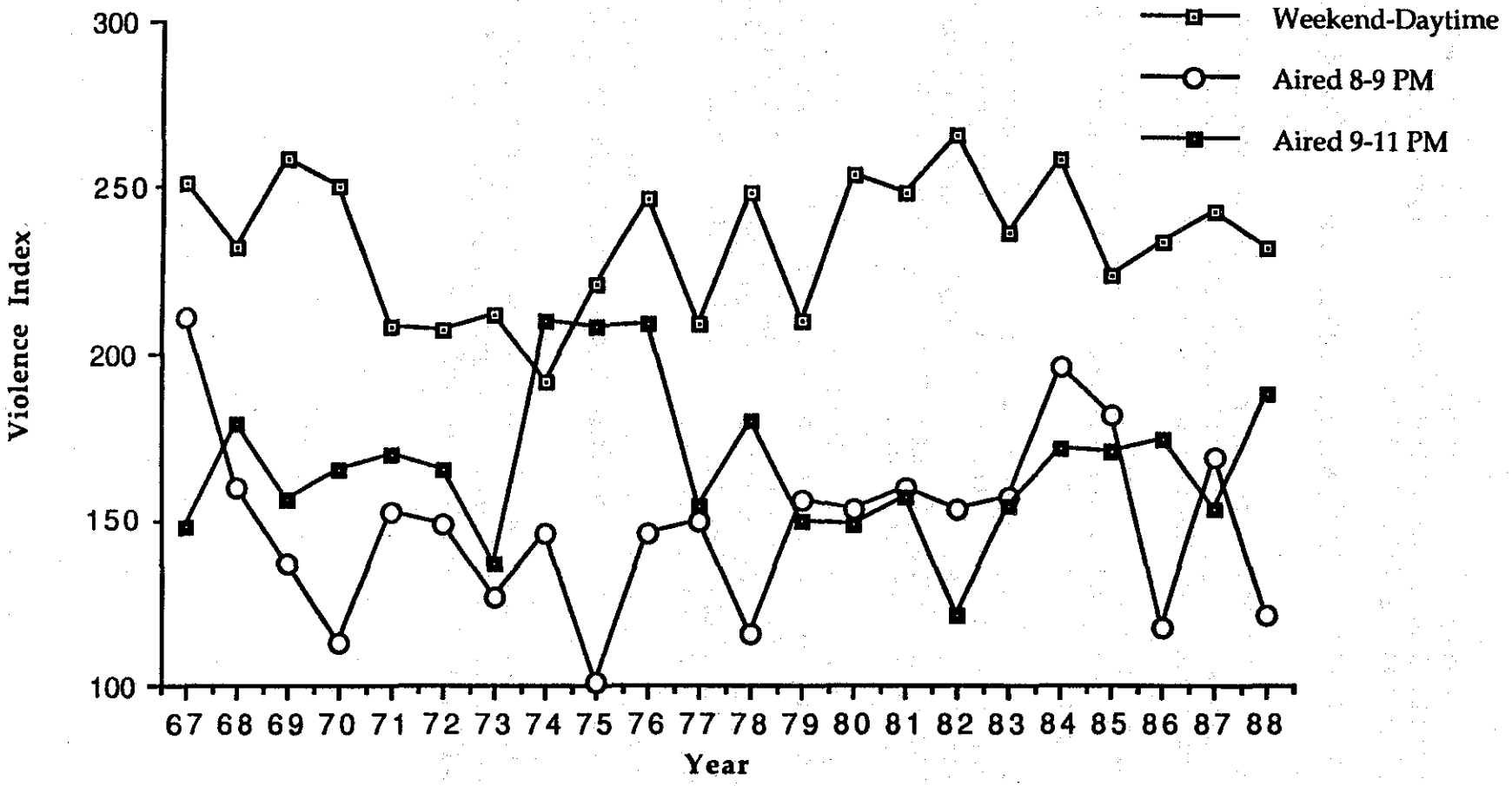

FIGURE 2: RATE OF VIOLENT ACTIONS PER HOUR FOR CHILDREN'S AND PRIME-TIME PROGRAMMING (1967-1988)

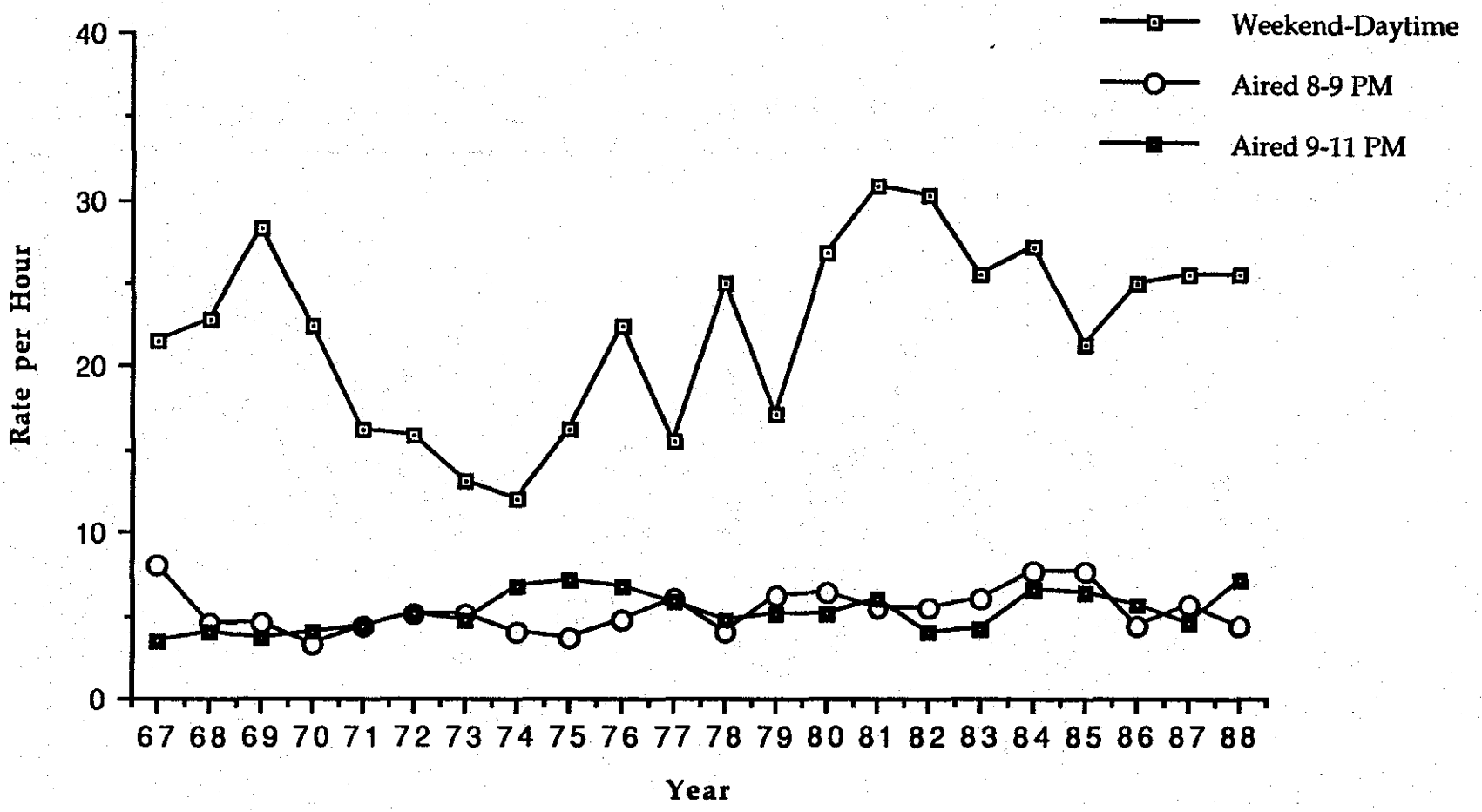

FIGURE 3: RATE OF VIOLENT ACTIONS PER HOUR FOR PRIME-TIME PROGRAMMING BY NETWORK (1967-1988)

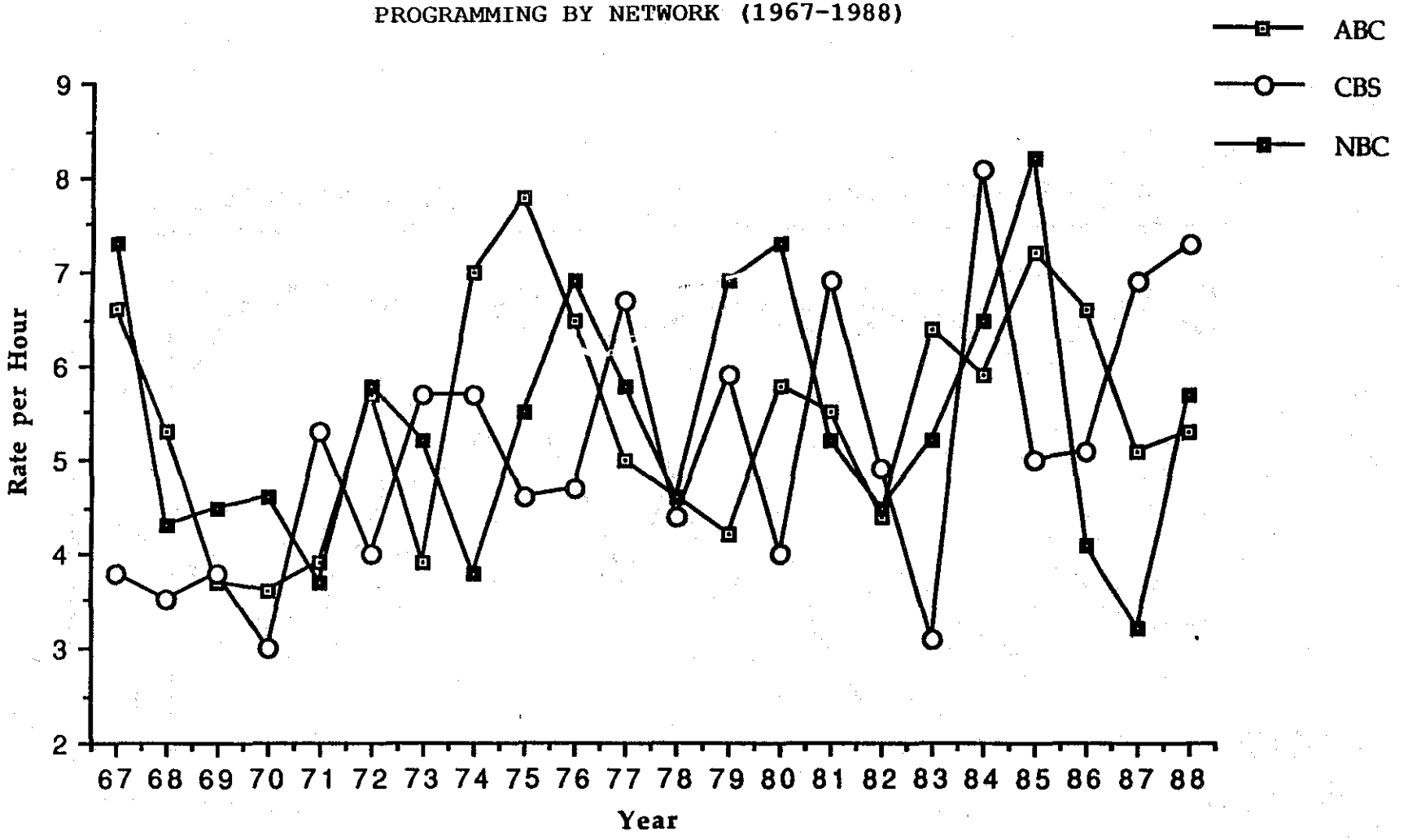

FIGURE 4: RATE OF VIOLENT ACTIONS PER HOUR FOR WEEKEND DAYTIME PROGRAMMING BY NETWORK

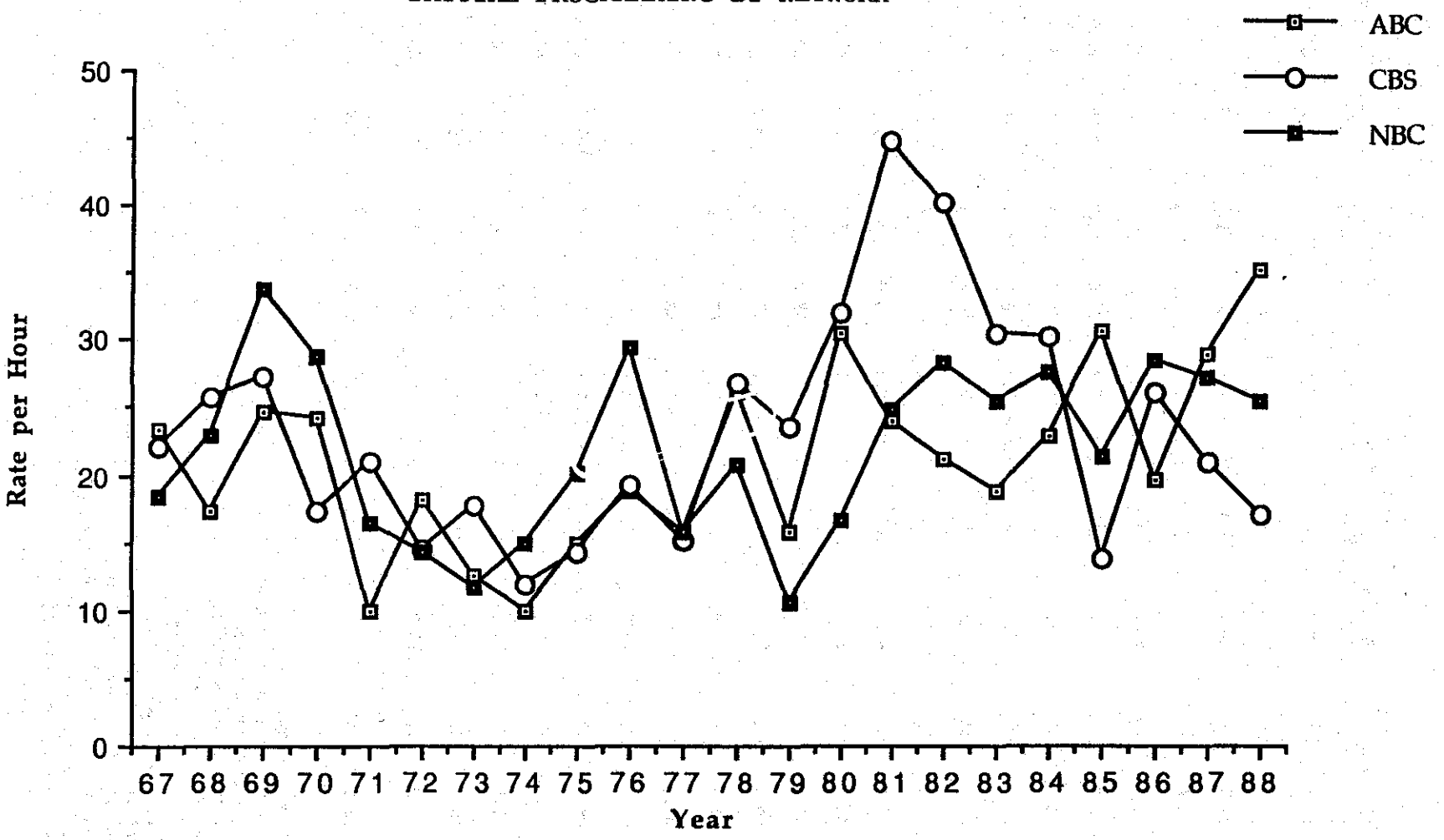

TABLE 1: PRIME-TIME PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	64	55.0	178	75.0	327	5.1	5.9	67.4	20.2	97.0	87.6	184.6
1968	57	51.0	162	75.4	222	3.9	4.3	61.1	14.2	91.8	75.3	167.1
1969	64	57.7	218	70.3	232	3.6	4.0	50.5	8.3	85.5	58.8	144.3
1970	61	54.0	132	62.3	202	3.3	3.7	47.7	11.4	76.3	59.1	135.4
1971	62	55.2	169	75.8	239	3.8	4.3	55.0	14.2	92.0	69.2	161.2
1972	60	56.5	217	71.7	294	4.9	5.2	53.0	12.9	91.9	65.9	157.8
1973	62	56.5	214	59.7	277	4.5	4.9	41.1	12.1	78.5	53.2	131.7
1974	58	60.0	224	77.6	328	5.6	5.5	58.5	20.5	99.8	79.0	178.8
1975	66	61.0	238	69.7	361	5.5	5.9	54.2	13.4	92.5	67.6	160.1
1976	61	58.5	172	80.3	342	5.6	6.0	67.4	12.2	103.5	79.6	183.1
1977	68	62.4	210	66.2	371	5.5	5.9	53.8	9.0	89.0	62.8	151.8
1978	63	63.0	191	74.6	285	4.5	4.5	52.9	7.9	92.6	60.8	153.4
1979	64	60.7	218	70.3	344	5.4	5.7	53.7	6.9	92.4	60.6	153.0
1980	64	59.2	229	73.4	336	5.2	5.7	50.7	4.8	95.2	55.5	150.7
1981	65	57.8	216	80.0	343	5.3	5.9	50.0	5.6	102.4	55.6	158.0
1982	77	60.6	247	63.6	278	3.6	4.6	48.2	6.5	80.0	54.7	134.7
1983	63	58.8	195	73.0	280	4.4	4.8	53.3	9.7	91.4	63.0	154.4
1984	65	60.0	221	78.5	415	6.4	6.9	63.3	12.7	105.1	76.0	181.1
1985	67	61.5	217	79.1	421	6.3	6.8	58.5	11.1	105.3	69.6	174.9
1986	67	61.5	178	71.6	318	4.7	5.2	47.2	12.9	91.4	60.1	151.5
1987	75	63.3	188	74.7	323	4.3	5.1	58.0	7.4	93.5	65.4	158.9
1988	77	66.0	195	74.0	406	5.3	6.2	53.3	10.3	97.0	63.6	160.6
TOTAL	1430	1298.2	4429	72.5	6944	4.9	5.3	54.3	11.0	92.9	65.3	158.2

LEGEND:
- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 2: PROGRAMS AIRED 8 TO 9 P.M. EST

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	38	30.0	103	78.9	240	6.3	8.0	75.7	28.2	107.5	103.9	211.4
1968	36	27.0	102	75.0	123	3.4	4.5	56.9	12.7	90.8	69.6	160.4
1969	38	27.2	130	63.2	122	3.2	4.5	49.2	9.2	78.6	58.4	137.0
1970	35	26.0	76	57.1	86	2.5	3.3	40.8	3.9	68.7	44.7	113.4
1971	28	25.0	78	75.0	110	3.9	4.4	50.0	10.3	91.6	60.3	151.9
1972	27	23.5	98	74.1	122	4.5	5.2	50.0	5.1	93.5	55.1	148.6
1973	32	29.0	110	56.3	147	4.6	5.1	40.9	10.0	75.7	50.9	126.6
1974	29	27.0	109	69.0	108	3.7	4.0	45.0	16.5	84.4	61.5	145.9
1975	31	21.5	105	51.6	77	2.5	3.6	36.2	1.0	63.8	37.2	101.0
1976	25	20.0	69	72.0	94	3.8	4.7	55.1	1.4	89.0	56.5	145.5
1977	32	26.0	87	65.6	156	4.9	6.0	57.5	4.6	87.4	62.1	149.5
1978	27	20.5	79	59.3	82	3.0	4.0	39.2	3.8	73.3	43.0	116.3
1979	31	27.7	96	71.0	174	5.6	6.3	53.1	8.3	94.8	61.5	156.2
1980	29	24.7	105	72.4	157	5.4	6.4	52.4	4.8	96.0	57.2	153.2
1981	26	18.0	76	80.8	99	3.8	5.5	57.9	2.6	99.4	60.5	159.9
1982	35	21.4	96	71.4	115	3.3	5.4	58.3	6.1	88.8	64.6	153.4
1983	25	19.0	69	72.0	114	4.6	6.0	56.5	7.2	93.2	63.7	156.9
1984	28	22.0	83	82.1	168	6.0	7.6	74.7	12.0	109.3	86.7	196.0
1985	28	21.5	81	78.6	163	5.8	7.6	66.7	9.9	105.4	76.6	182.0
1986	29	21.0	64	58.6	90	3.1	4.3	39.1	4.7	73.4	43.8	117.2
1987	36	27.5	76	69.4	158	4.4	5.7	71.1	7.9	89.6	79.0	168.6
1988	35	22.5	72	60.0	97	2.8	4.3	40.3	6.9	74.2	47.2	121.4
TOTAL	680	528.0	1964	68.5	2802	4.1	5.3	52.9	8.5	87.3	61.4	148.7

LEGEND:
- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 3: PROGRAMS AIRED 9 TO 11 P.M. EST

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	26	25.0	75	69.2	87	3.3	3.5	56.0	9.3	82.8	65.3	148.1
1968	21	24.0	60	76.2	99	4.7	4.1	68.3	16.7	93.8	85.0	178.8
1969	26	30.5	88	80.8	110	4.2	3.6	52.3	6.8	96.4	59.1	155.5
1970	26	28.0	56	69.2	116	4.5	4.1	57.1	21.4	86.4	78.5	164.9
1971	34	30.2	91	76.5	129	3.8	4.3	59.3	17.6	92.7	76.9	169.6
1972	33	33.0	119	69.7	172	5.2	5.2	55.5	19.3	90.5	74.8	165.3
1973	30	27.5	104	63.3	130	4.3	4.7	41.3	14.4	81.3	55.7	137.0
1974	29	33.0	115	86.2	220	7.6	6.7	71.3	24.3	114.8	95.6	210.4
1975	35	39.5	133	85.7	284	8.1	7.2	68.4	23.3	116.3	91.7	208.0
1976	36	36.5	103	86.1	248	6.9	6.8	75.7	19.4	113.5	95.1	208.6
1977	36	36.4	123	66.7	215	5.9	5.9	51.2	12.2	90.3	63.4	153.7
1978	36	42.5	112	86.1	203	5.6	4.8	62.5	10.7	106.9	73.2	180.1
1979	33	33.0	122	69.7	170	5.2	5.2	54.1	5.7	90.3	59.8	150.1
1980	35	34.5	124	74.3	179	5.1	5.2	49.2	4.8	94.9	54.0	148.9
1981	39	39.7	140	79.5	244	6.2	6.1	45.7	7.1	104.1	52.8	156.9
1982	42	39.2	151	57.1	163	3.9	4.1	41.7	6.6	73.1	48.3	121.4
1983	38	39.7	126	73.7	166	4.4	4.2	51.6	11.1	90.9	62.7	153.6
1984	37	38.0	138	75.7	247	6.7	6.5	56.5	13.0	102.1	69.5	171.6
1985	39	40.0	136	79.5	258	6.6	6.4	53.7	11.8	105.5	65.5	171.0
1986	38	40.5	114	81.6	228	6.0	5.6	51.8	17.5	104.8	69.3	174.1
1987	39	35.8	112	79.5	165	4.2	4.6	49.1	7.1	97.1	56.2	153.3
1988	42	43.5	123	85.7	309	7.4	7.1	61.0	12.2	114.7	73.2	187.9
TOTAL	750	770.3	2465	76.1	4142	5.5	5.4	55.5	12.9	97.9	68.4	166.3

LEGEND:

- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 4: WEEKEND-DAYTIME (CHILDREN'S) PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	32	7.0	62	93.8	151	4.7	21.6	90.3	14.5	146.4	104.8	251.2
1968	30	7.5	53	93.3	172	5.7	22.9	77.4	3.8	150.5	81.2	231.7
1969	57	14.0	159	98.2	398	6.9	28.4	88.1	1.9	168.8	90.0	258.8
1970	50	13.2	64	96.0	296	5.9	22.4	93.8	3.1	152.6	96.9	249.5
1971	41	15.0	83	87.8	244	5.9	16.3	74.7	1.2	132.2	75.9	208.1
1972	40	15.5	83	90.0	245	6.1	15.8	72.3	1.2	133.8	73.5	207.3
1973	37	18.7	145	94.5	247	6.7	13.2	77.2	0.7	134.4	77.9	212.3
1974	38	16.0	122	92.1	194	5.1	12.1	64.8	0.8	126.5	65.6	192.1
1975	45	16.3	126	91.1	265	5.9	16.3	84.9	0.8	135.5	85.7	221.2
1976	49	15.1	118	100.0	338	6.9	22.4	85.6	2.5	158.6	88.1	246.7
1977	53	16.5	145	90.6	258	4.9	15.6	77.2	0.0	131.6	77.2	208.8
1978	48	14.3	107	97.9	358	7.4	25.0	86.0	0.0	162.7	86.0	248.7
1979	62	16.5	163	91.9	284	4.6	17.2	74.8	0.0	135.4	74.8	210.3
1980	66	15.1	165	97.0	407	6.2	26.9	89.7	1.2	163.2	90.9	254.1
1981	69	13.5	186	91.3	418	6.1	30.9	83.9	0.0	165.3	83.9	249.2
1982	44	10.1	120	97.7	306	6.9	30.3	93.3	0.8	172.1	94.1	266.2
1983	54	13.7	142	92.6	350	6.5	25.5	80.3	0.0	156.6	80.3	236.9
1984	55	14.8	146	98.2	404	7.3	27.3	89.7	2.1	167.4	91.8	259.2
1985	53	15.3	149	92.5	326	6.1	21.3	75.8	0.7	147.3	76.5	223.8
1986	38	11.6	98	92.1	291	7.7	25.1	72.4	4.1	157.7	76.5	234.2
1987	36	13.3	85	100.0	339	9.4	25.5	72.9	0.0	169.8	72.9	242.7
1988	31	10.5	76	87.1	268	8.6	25.5	76.3	0.0	155.3	76.3	231.6
TOTAL	1028	303.6	2597	94.1	6559	6.4	21.6	81.2	1.3	150.1	82.5	232.6

LEGEND:

- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 5: ABC PRIME-TIME PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	22	19.0	63	81.8	125	5.7	6.6	77.8	27.0	106.4	104.8	211.2
1968	18	16.0	52	88.9	85	4.7	5.3	69.2	15.4	108.9	84.6	193.5
1969	21	18.5	75	57.1	69	3.3	3.7	42.7	9.3	71.1	52.0	123.1
1970	21	16.5	48	52.4	59	2.8	3.6	43.8	6.3	65.2	50.1	115.3
1971	22	18.2	66	63.6	71	3.2	3.9	43.9	7.6	77.8	51.5	129.3
1972	21	18.5	82	66.7	105	5.0	5.7	53.7	18.3	88.1	72.0	160.1
1973	23	19.5	80	47.8	76	3.3	3.9	33.8	5.0	62.2	38.8	101.0
1974	17	19.0	67	94.1	133	7.8	7.0	71.6	26.9	123.7	98.5	222.2
1975	20	19.0	75	75.0	148	7.4	7.8	66.7	9.3	105.4	76.0	181.4
1976	19	17.0	60	89.5	110	5.8	6.5	75.0	6.7	114.1	81.7	195.8
1977	21	18.0	66	66.7	90	4.3	5.0	47.0	0.0	85.3	47.0	132.3
1978	24	20.5	65	83.3	94	3.9	4.6	60.0	4.6	100.3	64.6	164.9
1979	23	19.0	81	60.9	80	3.5	4.2	38.3	1.2	76.2	39.5	115.8
1980	24	19.9	96	66.7	115	4.8	5.8	46.9	3.1	87.9	50.0	137.9
1981	24	18.2	75	83.3	101	4.2	5.5	50.7	4.0	102.7	54.7	157.4
1982	22	19.2	79	63.6	84	3.8	4.4	54.4	7.6	80.0	62.0	142.0
1983	18	16.7	64	83.3	108	6.0	6.4	51.6	14.1	108.1	65.7	173.8
1984	18	18.0	60	83.3	107	5.9	5.9	56.7	8.3	106.9	65.0	171.9
1985	20	20.0	68	80.0	145	7.2	7.2	58.8	11.8	108.8	70.6	179.4
1986	20	17.0	55	75.0	113	5.6	6.6	49.1	14.5	99.4	113.6	113.0
1987	23	18.0	51	65.2	92	4.0	5.1	56.9	3.9	83.4	60.8	144.2
1988	25	19.0	70	80.0	100	4.0	5.3	45.7	5.7	98.6	51.4	150.0
TOTAL	466	404.9	1498	72.5	2210	4.7	5.5	53.6	9.3	92.9	62.9	155.8

LEGEND:

- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 6: ABC WEEKEND-DAYTIME (CHILDREN'S) PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	13	3.0	23	100.0	70	5.4	23.3	95.7	8.7	157.4	104.4	261.8
1968	4	1.5	11	100.0	26	6.5	17.3	54.5	0.0	147.6	54.5	202.1
1969	18	4.0	52	100.0	99	5.5	24.7	78.8	0.0	160.4	78.8	239.2
1970	20	4.7	28	95.0	114	5.7	24.2	85.7	0.0	154.8	85.7	240.5
1971	9	4.2	22	88.9	42	4.7	10.0	54.5	4.5	118.3	59.0	177.3
1972	12	5.5	22	91.7	100	8.3	18.2	59.1	0.0	144.7	59.1	203.8
1973	13	6.8	46	92.3	85	6.5	12.5	76.1	2.2	130.3	78.3	208.6
1974	13	5.5	41	84.6	55	4.2	10.0	46.3	0.0	113.0	46.3	159.3
1975	18	5.3	48	83.3	79	4.4	14.9	79.2	0.0	121.9	79.2	201.1
1976	13	4.2	37	100.0	79	6.1	18.8	78.4	8.1	149.8	86.5	236.3
1977	16	5.4	48	93.8	86	5.4	15.9	79.2	0.0	136.4	79.2	215.6
1978	11	4.0	27	100.0	105	9.5	26.2	81.5	0.0	171.4	81.5	252.9
1979	11	4.5	32	90.9	71	6.5	15.8	87.5	0.0	135.4	87.5	222.9
1980	19	4.3	51	100.0	132	6.9	30.5	98.0	0.0	174.8	98.0	272.8
1981	17	3.8	48	88.2	92	5.4	24.0	89.6	0.0	147.0	89.6	236.6
1982	10	2.2	23	90.0	48	4.8	21.3	73.9	0.0	142.2	73.9	216.1
1983	11	3.9	34	100.0	73	6.6	18.8	78.5	0.0	150.8	73.5	224.3
1984	10	4.0	37	100.0	92	9.2	23.0	97.3	8.1	136.8	105.4	242.2
1985	20	4.5	47	100.0	138	6.9	30.7	87.2	0.0	175.2	87.2	262.4
1986	11	4.0	30	100.0	79	7.2	19.8	93.3	13.3	154.0	106.6	260.6
1987	8	2.8	20	100.0	81	10.1	28.9	80.0	0.0	178.0	80.0	258.0
1988	10	3.0	26	90.0	106	10.6	35.3	88.5	0.0	181.8	88.5	270.3
TOTAL	287	91.1	753	94.8	1852	6.5	20.3	80.5	1.9	148.4	82.4	230.8

LEGEND:
- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 7: CBS PRIME-TIME PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	22	17.5	54	54.5	67	3.0	3.8	40.7	11.1	68.1	51.8	119.9
1968	22	17.0	59	63.6	60	2.7	3.5	49.2	10.2	76.0	59.4	135.4
1969	23	18.0	76	69.6	68	2.9	3.8	44.7	7.9	83.0	52.6	135.6
1970	23	18.5	46	56.5	56	2.4	3.0	45.7	10.9	67.3	56.6	123.9
1971	21	19.5	52	76.2	104	4.9	5.3	67.3	25.0	96.6	92.3	188.9
1972	21	18.0	71	57.1	72	3.4	4.0	36.6	8.5	71.9	45.1	117.0
1973	21	19.0	75	66.7	108	5.1	5.7	45.3	18.7	88.3	64.0	152.3
1974	22	20.0	80	63.6	115	5.2	5.7	47.5	20.0	85.4	65.7	152.9
1975	25	19.5	82	52.0	89	3.6	4.6	41.5	13.4	68.4	54.9	123.3
1976	24	18.0	61	70.8	84	3.5	4.7	54.1	8.2	87.2	62.3	149.5
1977	31	25.9	91	61.3	173	5.6	6.7	49.5	12.1	85.9	61.6	147.5
1978	22	20.2	65	68.2	89	4.0	4.4	44.6	6.2	85.0	50.8	135.8
1979	24	22.0	73	79.2	129	5.4	5.9	64.4	6.8	101.6	71.2	172.9
1980	22	20.2	78	68.2	82	3.7	4.0	44.9	5.1	83.6	50.0	133.6
1981	24	21.5	80	79.2	148	6.2	6.9	50.0	1.2	105.4	51.2	156.6
1982	33	21.9	95	63.6	107	3.2	4.9	45.3	3.2	79.8	48.5	128.3
1983	22	22.0	63	63.6	68	3.1	3.1	57.1	11.1	76.0	68.2	144.2
1984	23	21.0	82	82.6	171	7.4	8.1	67.1	15.9	113.6	83.0	196.6
1985	22	20.0	74	77.3	100	4.5	5.0	58.1	10.8	96.3	68.9	165.2
1986	21	23.0	58	85.7	117	5.6	5.1	60.3	20.7	107.1	81.0	188.1
1987	26	22.8	68	88.5	158	6.1	6.9	69.1	11.8	114.5	80.9	195.4
1988	25	24.0	61	68.0	175	7.0	7.3	57.4	6.6	96.6	64.0	160.6
TOTAL	519	449.6	1544	68.8	2340	4.5	5.2	51.6	10.9	88.2	62.5	150.7

LEGEND:
- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 8: CBS WEEKEND-DAYTIME (CHILDREN'S) PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	10	2.0	19	90.0	44	4.4	22.0	89.5	21.1	142.8	110.6	253.4
1968	13	3.0	20	100.0	77	5.9	25.7	90.0	5.0	163.2	95.0	258.2
1969	21	6.0	59	95.2	164	7.8	27.3	91.5	3.4	165.4	94.9	260.3
1970	18	5.5	17	94.4	96	5.3	17.4	100.0	0.0	139.8	100.0	239.8
1971	16	5.0	29	81.3	105	6.6	21.0	79.3	0.0	136.5	79.3	215.8
1972	20	6.5	37	85.0	95	4.7	14.6	81.1	0.0	123.6	81.1	204.7
1973	8	4.1	32	100.0	73	9.1	17.8	84.4	0.0	153.8	84.4	238.2
1974	12	6.0	44	100.0	72	6.0	12.0	79.5	2.3	140.0	81.8	221.8
1975	15	6.0	41	93.3	85	5.7	14.2	82.9	2.4	133.1	85.3	218.4
1976	17	6.0	40	100.0	115	6.8	19.2	87.5	0.0	152.0	87.5	167.0
1977	21	6.3	52	85.7	95	4.5	15.1	80.8	0.0	124.9	80.8	205.7
1978	26	6.5	57	100.0	174	6.7	26.8	86.0	0.0	167.0	86.0	253.0
1979	32	6.5	79	93.8	155	4.8	23.7	73.4	0.0	166.9	73.4	224.2
1980	29	6.2	71	96.6	200	6.9	32.0	93.0	1.4	150.8	94.4	268.8
1981	26	4.2	65	92.3	191	7.3	44.9	87.7	0.0	174.4	87.7	284.4
1982	16	3.0	43	100.0	121	7.6	40.3	97.7	0.0	196.7	97.7	293.5
1983	26	5.2	61	88.5	160	6.1	30.5	73.8	0.0	195.8	73.8	235.5
1984	30	6.0	72	96.7	182	6.1	30.3	90.3	0.0	161.7	90.3	259.8
1985	17	5.8	48	82.4	81	4.8	13.9	68.8	2.1	169.5	70.9	190.7
1986	12	3.3	30	75.0	86	7.2	26.1	50.0	0.0	141.6	50.0	191.6
1987	12	4.5	28	100.0	94	7.8	20.9	85.7	0.0	157.4	85.7	243.1
1988	10	3.5	20	80.0	60	6.0	17.1	65.0	0.0	126.2	65.0	191.2
TOTAL	407	111.3	964	92.6	2525	6.2	22.7	82.9	1.1	150.4	84.0	234.4

LEGEND:
- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 9: NBC PRIME-TIME PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	20	18.5	61	90.0	135	6.7	7.3	80.3	21.3	118.0	101.6	219.6
1968	17	18.0	51	76.5	77	4.5	4.3	66.7	17.6	94.1	84.3	178.4
1969	20	21.2	67	85.0	95	4.7	4.5	65.7	7.5	103.4	73.2	176.6
1970	17	19.0	38	82.4	87	5.1	4.6	55.3	18.4	101.8	73.7	175.5
1971	19	17.5	51	89.5	64	3.4	3.7	56.9	11.8	103.7	68.7	172.4
1972	18	20.0	64	94.4	117	6.5	5.8	70.3	10.9	119.0	81.2	200.2
1973	18	18.0	59	66.7	93	5.2	5.2	45.8	13.6	87.5	59.4	146.9
1974	19	21.0	77	78.9	80	4.2	3.8	58.4	15.6	94.9	74.0	168.9
1975	21	22.5	81	85.7	124	5.9	5.5	55.6	17.3	108.5	72.9	181.4
1976	18	21.5	51	83.3	148	8.2	6.9	74.5	23.5	113.5	98.0	211.5
1977	16	18.5	53	75.0	108	6.7	5.8	69.8	15.1	100.0	84.9	184.9
1978	17	22.2	61	70.6	102	6.0	4.6	54.1	13.1	91.8	67.2	159.0
1979	17	19.7	64	70.6	135	7.9	6.9	60.9	14.1	100.2	75.0	175.2
1980	18	19.0	55	88.9	139	7.7	7.3	65.4	7.3	118.9	72.7	191.6
1981	17	18.0	61	76.5	94	5.5	5.2	49.2	13.1	97.9	62.3	160.2
1982	22	19.5	73	63.6	87	3.9	4.5	45.2	9.6	80.4	54.8	135.2
1983	23	20.0	68	73.9	104	4.5	5.2	51.5	4.4	93.3	55.9	149.2
1984	24	21.0	79	70.8	137	5.7	6.5	64.6	12.7	95.2	77.3	172.5
1985	25	21.5	75	80.0	176	7.0	8.2	58.7	10.7	110.4	69.4	179.8
1986	26	21.5	65	57.7	88	3.4	4.1	33.8	4.6	72.7	38.4	110.8
1987	26	22.5	69	69.2	73	2.8	3.2	47.8	5.8	81.2	53.6	134.8
1988	27	23.0	64	74.1	131	4.9	5.7	57.8	18.8	95.3	76.6	171.9
TOTAL	445	443.7	1387	76.9	2394	5.4	5.4	58.2	12.8	98.5	71.0	169.5

LEGEND:
- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 10: NBC WEEKEND-DAYTIME (CHILDREN'S) PROGRAMS

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
1967	9	2.0	20	88.9	37	4.1	18.5	85.0	15.0	134.1	100.0	234.1
1968	13	3.0	22	84.6	69	5.3	23.0	77.3	4.5	141.2	81.8	223.0
1969	18	4.0	48	100.0	135	7.5	33.7	93.8	2.1	182.4	95.9	278.3
1970	12	3.0	19	100.0	86	7.2	28.7	100.0	10.5	171.8	110.5	282.3
1971	16	5.9	32	93.8	97	6.1	16.4	84.4	0.0	138.8	84.4	223.2
1972	8	3.5	24	100.0	50	6.2	14.3	70.8	4.2	141.0	75.0	216.0
1973	16	7.7	67	93.8	89	5.6	11.6	74.6	0.0	128.2	74.6	202.8
1974	13	4.5	37	92.3	67	5.1	14.9	67.6	0.0	132.3	67.6	199.9
1975	12	5.0	37	100.0	101	8.4	20.2	94.6	0.0	157.2	94.6	51.8
1976	19	4.9	41	100.0	144	7.6	29.4	90.2	0.0	174.0	90.2	264.2
1977	16	4.9	45	93.8	77	4.8	15.7	71.1	0.0	134.8	71.1	205.9
1978	11	3.8	23	90.9	79	7.2	20.8	91.3	0.0	146.9	91.3	238.2
1979	19	5.5	52	89.5	58	3.1	10.5	69.2	0.0	116.7	69.2	185.9
1980	18	4.5	43	94.4	75	4.2	16.7	74.4	2.3	136.2	76.7	212.9
1981	26	5.4	73	92.3	135	5.2	24.9	76.7	0.0	152.5	78.7	229.2
1982	18	4.8	54	100.0	137	7.6	28.5	98.1	1.9	172.0	100.0	272.0
1983	17	4.6	47	94.1	117	6.9	25.5	93.6	0.0	158.9	93.6	252.5
1984	15	4.7	37	100.0	130	8.7	27.7	81.1	0.0	172.8	81.1	253.9
1985	16	5.0	54	93.8	107	6.7	21.4	72.2	0.0	150.0	72.2	222.2
1986	15	4.4	38	100.0	126	8.4	28.6	73.7	0.0	174.0	73.7	247.7
1987	16	6.0	37	100.0	164	10.2	27.3	59.5	0.0	175.0	59.5	234.5
1988	11	4.0	30	90.9	102	9.3	25.5	73.3	0.0	160.5	73.3	233.8
TOTAL	334	101.2	880	95.2	2182	6.5	21.6	80.0	1.1	151.4	81.1	232.5

LEGEND:
- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 11: PROGRAMMING BROADCAST BEFORE AND AFTER DEREGULATION (1980)

	SAMPLES			PREVALENCE	RATES			ROLES		INDICATORS		
	Pgms	Hrs	Chars	%P	NVA	R/P	R/H	%V	%K	PS	CS	VI
All Pgms												
Before	1392	935.3	3973	80.7	7274	5.2	7.8	63.9	8.6	106.7	72.5	179.2
After	1066	666.6	3053	82.6	6229	5.8	9.3	64.7	5.8	112.8	70.5	183.3
Prime-Time												
Before	810	749.6	2543	71.4	3824	4.7	5.1	54.9	12.5	91.0	67.4	158.4
After	620	548.6	1886	74.0	3120	5.0	5.7	53.6	8.9	95.4	62.5	157.9
7-9 pm												
Before	409	330.4	1242	66.7	1641	4.0	5.0	50.0	9.3	83.7	59.3	143.0
After	271	197.5	722	71.2	1161	4.3	5.9	57.9	6.9	91.6	64.8	156.4
9-11 pm												
Before	401	419.2	1301	76.1	2183	5.4	5.2	59.5	15.5	97.3	75.0	172.3
After	349	351.1	1164	76.2	1959	5.6	5.6	50.9	10.1	98.6	61.0	159.6
Daytime												
Before	582	185.7	1340	93.8	3450	5.9	18.6	80.0	1.7	142.8	81.5	224.5
After	446	117.9	1167	94.4	3109	7.0	26.4	82.7	0.9	161.2	83.6	244.8
ABC												
Before	443	297.3	1317	79.5	2256	5.1	7.6	61.4	7.5	104.9	68.9	173.8
After	310	198.8	934	83.2	1806	5.8	9.1	64.2	5.9	113.0	70.1	183.1
CBS												
Before	530	322.6	1411	77.0	2564	4.8	7.9	61.4	8.3	102.4	69.7	172.1
After	396	238.4	1097	82.3	2301	5.8	9.7	66.5	5.7	113.3	72.2	185.5
NBC												
Before	419	315.4	1245	86.9	2454	5.9	7.8	69.4	10.1	114.3	79.5	193.8
After	360	229.4	1022	82.2	2122	5.9	9.3	63.3	6.0	112.6	69.3	181.9

LEGEND:

- Pgms: Number of programs
- Hrs: Number of program hours analyzed
- Chars: Number of leading characters
- %P: Percent of programs with violence
- NVA: Number of violent acts
- R/P: Rate of violence per program
- R/H: Rate of violence per hour
- %V: Percent of major characters involved in violence
- %K: Percent of major characters involved in killing
- PS: Program Score; PS = (%P) + 2(R/P) + 2(R/H)
- CS: Character Score; CS = (%V) + (%K)
- VI: Violence Index; VI = PS + CS

TABLE 12:

SUMMARY OF CULTIVATION ANALYSIS FOR MEAN WORLD INDEX

	1980, 1983, 1986			1980			1983			1986		
	%L	CD	Gamma	%L	CD	Gamma	%L	CD	Gamma	%L	CD	Gamma
Overall	40	11	.145***	44	8	.115*	37	11	.150***	35	14	.166***
Sex												
Men	41	14	.178***	46	12	.140*	37	15	.193**	37	17	.209**
Women	39	9	.126**	41	8	.109	37	8	.125*	34	12	.140*
Age												
Under 30	46	18	.234***	59	9	.129	42	17	.218*	30	32	.363***
30 to 54	36	15	.183***	37	13	.160*	35	12	.152*	32	21	.255***
55 and older	42	- 1	.005	40	2	.024	36	4	.073	46	-10	-.108
Education												
No College	53	0	.018	58	- 4	-.030	45	5	.080	50	1	.018
Some College	28	15	.174**	29	19	.212*	29	13	.144	23	16	.214*
Race												
White	37	9	.125***	40	8	.104*	34	10	.130**	32	11	.134**
Non White	71	5	.046	73	4	.071	67	5	-.003	70	3	.053
Income												
Under $10,000	57	4	.077	62	- 4	-.005	49	5	.078	54	8	.109
$10,000 to $20,000	42	11	.133*	42	9	.097	44	3	.057	33	15	.154
Over $20,000	32	10	.113*	34	13	.144	26	18	.232**	30	12	.151
Political Orientation												
Conservative	34	18	.221***	38	16	.201*	40	7	.094	26	26	.335***
Moderate	43	24	.071	47	1	.045	41	13	.193	39	4	.030
Liberal	43	13	.171**	47	10	.126	40	21	.265*	39	14	.178
Subjective Social Class												
Lower-Working	51	5	.061	59	0	.023	47	7	.087	45	9	.089
Middle-Upper	31	13	.180***	31	12	.163*	35	17	.194*	28	15	.206**

* p<.05 ** p<.01 *** p<.001

%L is the percent of light viewers (under two hours each day).
CD (cultivation differential) is the percent of heavy viewers (4 or more hours each day) minus the percent of light viewers within each demographic subgroup.

Data Source: The 1980, 1983, and 1986 NORC General Social Surveys

TABLE 13:

SUMMARY OF CULTIVATION ANALYSIS FOR INDEX OF ALLIENATION AND GLOOM

	1980, 1982, 1985			1980			1982			1985		
	XL	CD	Gamma	XL	CD	Gamma	XL	CD	Gamma	XL	CD	Gamma
Overall	53	12	.163***	57	18	.249***	55	9	.117*	44	12	.160***
Sex												
Men	48	17	.201***	51	30	.392***	56	3	.065	41	15	.178**
Women	56	9	.131***	64	8	.111	55	11	.158**	47	9	.147*
Age												
Under 30	53	10	.142**	56	19	.275**	59	3	.045	40	12	.151
30 to 54	51	18	.212***	55	24	.324***	52	18	.209**	46	12	.141*
55 and older	56	8	.118*	66	7	.139	58	5	.081	42	15	.158*
Education												
No College	66	3	.062	70	6	.102	67	1	.024	58	4	.089
Some College	41	11	.108*	45	27	.262***	44	6	.060	33	5	.059
Race												
White	51	13	.157***	56	19	.257***	54	8	.113**	43	10	.137**
Non White	57	6	.101	72	4	.060	73	- 1	.017	54	17	.226
Income												
Under $10,000	67	4	.059	70	10	.153	73	- 3	-.023	58	7	.091
$10,000 to $20,000	59	8	.123*	65	13	.215*	55	10	.132	53	3	.040
Over $20,000	43	14	.161***	42	26	.326***	49	3	.048	37	15	.171**
Political Orientation												
Conservative	49	12	.154***	59	18	.241**	50	24	.056	37	16	.200**
Moderate	53	13	.167***	60	15	.210**	52	16	.203**	47	8	.115
Liberal	56	11	.157**	55	17	.235*	64	7	.104	46	12	.162
Subjective Social Class												
Lower-Working	62	7	.098**	70	9	.154*	60	8	.070	55	27	.092
Middle-Upper	45	15	.197***	47	24	.298***	51	11	.146*	35	14	.191**

* p<.05 ** p<.01 *** p<.001

XL is the percent of light viewers (under two hours each day).
CD (cultivation differential) is the percent of heavy viewers (4 or more hours each day) minus the percent of light viewers within each demographic subgroup.

Data Source: The 1980, 1982, and 1985 NORC General Social Surveys

Table 14

Cultivation Analysis:
Index of Alienation and Gloom for High School Students
(% saying more alienated)

	N	Total	Light	Medium	Heavy	CD	Gamma
Overall	2708	49.5	47.1	47.7	56.6	9.5	.105***
Controlling for:							
Race							
White	2102	46.5	45.5	45.4	51.0	5.5	.052
Non-White	337	61.1	50.9	58.7	66.3	15.4	.197*
Sex							
Male	1247	49.2	47.2	47.0	56.3	9.1	.096*
Female	1408	49.4	46.5	48.1	56.7	10.2	.117**
Political Orientation							
Conservative	512	43.4	41.1	41.2	51.9	10.8	.112
Moderate	859	46.9	44.4	48.1	50.0	5.6	.076
Liberal	505	45.3	39.9	43.4	58.6	18.7	.211**
Parent Education							
No College	987	56.9	56.6	52.8	63.2	6.3	.081
One College	735	46.3	46.9	44.0	49.7	2.8	.013
Both College	805	41.4	38.2	42.3	49.6	11.4	.129*
Self-Report Grades							
"A"	556	37.4	34.9	38.9	41.3	6.4	.089
"B"	1420	49.2	48.5	45.5	56.5	8.0	.078*
"C"	694	60.1	56.9	60.6	63.4	6.5	.087
"D"	19	42.1	42.9	33.3	50.0	7.1	.085

*p<.05 **p<.01 ***p<.001

CD (cultivation differential is the percent of heavy viewers (4 or more hours each day) minus the percent of light viewers within each demographic subgroup.

Data Source: The 1985 Monitoring the Future Survey, Institute for Social Research, University of Michigan