

## Growing Up With Television

### *The Demonstration of Power: Violence Profile No. 10*

by George Gerbner, Larry Gross, Nancy Signorielli, Michael Morgan, and Marilyn Jackson-Beeck

*Annual progress report sums up findings suggesting that fear and inequity may be television's most pervasive lessons; 1978 Index shows violence up in children's hours.*

"Then," asked Socrates in Plato's *Republic*, "shall we simply allow our children to listen to any stories that anyone happens to make up, and so receive into their minds ideas often the very opposite of those we shall think they ought to have when they grow up?"

Plato was probably not the first to articulate a concern over the effects of story-telling on young minds; he certainly was not the last. Parents have always been understandably wary of those who wish to entertain or educate their children.

Traditionally, the only acceptable extra-familial storytellers were those certified by religious institutions. With the growth of educational institutions, also originally religious, a new group of storytellers interceded between children and the world.

The emergence of mass media fundamentally altered the picture. Children were increasingly open to influences which parents, priests, and teachers could not monitor or control. Beginning with the widespread availability of printed materials for the literate, enlarged by the availability of movies and radio, and culminating with the omnipresence of television, the opportunities for children

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to directly consume mass-produced stories have rivaled traditional methods of instruction about the world. Plato's ancient question reverberates vividly for parents as they confront today's storyteller.

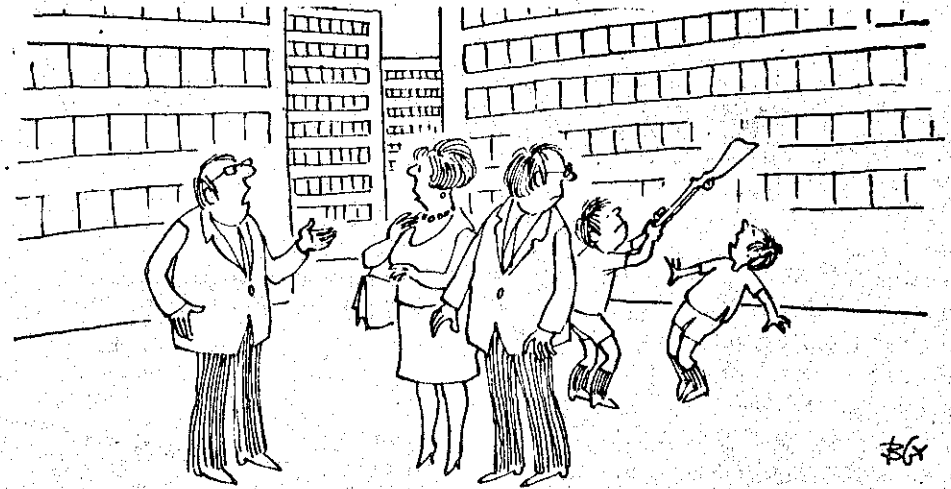
The televised stories that generate the most concern seem to be those that contain scenes of violence. Why should this be? Even when committed in the name of law and order, acts of physical aggression are suspected of inciting impressionable viewers to commit similar acts. This is, as we shall see later, an invariable reaction of "established classes"—adults in this case—when members of "subservient classes"—children, here—are exposed to mass-mediated stories.

Another reason for concern about TV violence is the frequency of aggressive acts depicted in television drama, particularly in programs aimed specifically at children. It has often been noted that by the time the average American child graduates from high school, he or she will have seen more than 13,000 violent deaths on television. Given the sheer amount of children's potential exposure to televised violence, we worry that children will become jaded, desensitized, and inured to violence not only on television but in real life as well.

In the thirty years that we have lived with television, public concern with the medium's predilection for violence has been reflected in at least eight separate congressional hearings, a special report to the National Commission on the Causes and Prevention of Violence in 1969, and a massive study of television and social behavior commissioned by the Surgeon General. These hearings and reports have focused largely on the prevalence and effects of televised violence and culminated in a five-volume report issued in 1972 (2). In the years since 1972, the flow of research and debate has continued. While scientific caution requires us to proceed carefully, some conclusions can be drawn from the wealth of data and evidence that has been accumulated.

First, violence is a frequent and consistent feature of television drama. In our research violence is defined as the overt expression of physical force, with or without a weapon, against self or other, compelling action against one's will on pain of being hurt or killed, or actually hurting or killing. Using this definition we have been analyzing a sample of prime-time and weekend morning network dramatic television programs annually since 1967-68 and have found that, on the average, 8 out of every 10 programs and 6 out of every 10 major characters are involved in violence. The average rate of episodes of violence has been 7½ per hour, and in weekend daytime children's programs, violent episodes average almost 18 per hour.

Second, there appears to be a justifiable fear that viewing televised violence will make people, children in particular, somewhat more likely to commit acts of violence themselves. At the time of the Surgeon General's report in 1972, about 50 experimental studies indicated that viewing violence increases the likelihood of children engaging in violent behavior, at least in the short-term context of the laboratory. Although the experimental findings are not always generalizable to real-life situations in which many other behavioral factors, e.g., reprisal, are included, the impact of these experimental studies was strengthened by survey research which found positive correlations between everyday vi-



**"Of course it makes a big difference whether they learned that from some heroic John Wayne movie or a cheap crime program."**

olence viewing and aggression among adolescents in real life (1). Moreover, these relationships were not accounted for by other factors—socioeconomic status, sex, school achievement—which often prove quite helpful in explaining adolescent behavior. Our own research (4) also has found that young viewers who watch a lot of television are more likely to agree that it is "almost always all right" to hit someone "if you are mad at them for a good reason."

Yet, if the most consistent effect of viewing television violence were that it incited real acts of violence, we would not need elaborate research studies; the average sibling, parent, and teacher would be reeling from the blows of television-stimulated aggression. Clearly this is not the case. Imitative aggression among children may be frequent but it is relatively low-level. Widely publicized cases of serious violence which seem to be influenced by television programs or movies are rare. At any rate, spectacular cases of individual violence threatening the social order (unlike those enforcing it) have always been "blamed" on some corrupter of youth, from Socrates through pulps, comics, and movies, to television. Are there no other grounds for concern?

*In order to answer this question, we must begin with a fuller understanding of the total phenomenon of television.*

All societies have ways of explaining the world to themselves and to their children. Socially constructed "reality" gives a coherent picture of what exists, what is important, how things are related, and what is right. The constant culti-

vation of such "realities" is the task of rituals and mythologies. They legitimize actions along lines which are conventionally acceptable and functional.

Television is the mainstream of that cultural process (see 3.4). It is an agency of the established order and as such serves primarily to maintain, stabilize, and reinforce—not subvert—conventional values, beliefs, and behaviors. The goal of the greatest audience appeal at the least cost demands that these messages follow conventional social morality.

Two further assumptions underlie our research, called Cultural Indicators. One is that commercial television, unlike other media, presents an organically composed total world of interrelated stories (both drama and news) produced to the same set of market specifications. Second, television audiences (unlike those for other media) view largely non-selectively and by the clock rather than by the program. Television viewing is a ritual, almost like religion, except that it is attended to more regularly.

Most regular viewers are immersed in a vivid and illuminating world of television (mostly drama) which has certain repetitive and pervasive patterns. One feature is that men outnumber women three to one. Thus much of the action revolves around questions of social order and of power, on the streets, in the professions, and in the home.

Violence plays a key role in television's portrayal of the social order. It is the simplest and cheapest dramatic means to demonstrate who wins in the game of life and the rules by which the game is played. It tells us who are the aggressors and who are the victims. It demonstrates who has the power and who must acquiesce to that power. It tells us who should be feared—and by that achieves the goal of real-life violence. The few incidents of real-life violence it incites only serve to reinforce this fear. In the portrayal of violence there is a relationship between the roles of the violent and the victim. Both roles are there to be learned by the viewers. In generating among the many a fear of the power of the few, television violence may achieve its greatest effect.

We have addressed this hypothesis in the Cultural Indicators project by analyzing the world of television drama, including measures of violence, and by determining the extent to which exposure to this *symbolic* world cultivates conceptions about the *real* world among viewers. Our Violence Profile No. 10 focusing on the 1978-79 season continues to report what we have found.

*Violence in weekend children's and late evening programming on all three networks rose to near record levels in the fall of 1978.*

The 1978 sample was composed of one week of prime-time dramatic programming and one weekend of daytime (children's) dramatic programming (8 a.m. to 2 p.m.) for all three networks. This yielded 111 programs and 298 major characters for analysis. The levels of violence were measured by determining the prevalence and rate of violent actions and characterizations. To compute the Violence Index we sum five measures: percent of programs containing any

violence, twice the rate of violent incidents per program, twice the rate of violent incidents per hour, the percent of characters involved in any violence, and the percent of characters involved in killing. A summary of the components of the annual Violence Index for the years 1967-1978 is presented in Table 1.

The 1978 Violence Index (see Table 2) shows an increase over the 1977 Index for weekend children's and late evening (9-11 p.m. EST) programming, although a decrease was shown in the prevalence and rate of violence in the former "family hour" (8-9 p.m. EST) programs (see Figure 1). This overall in-

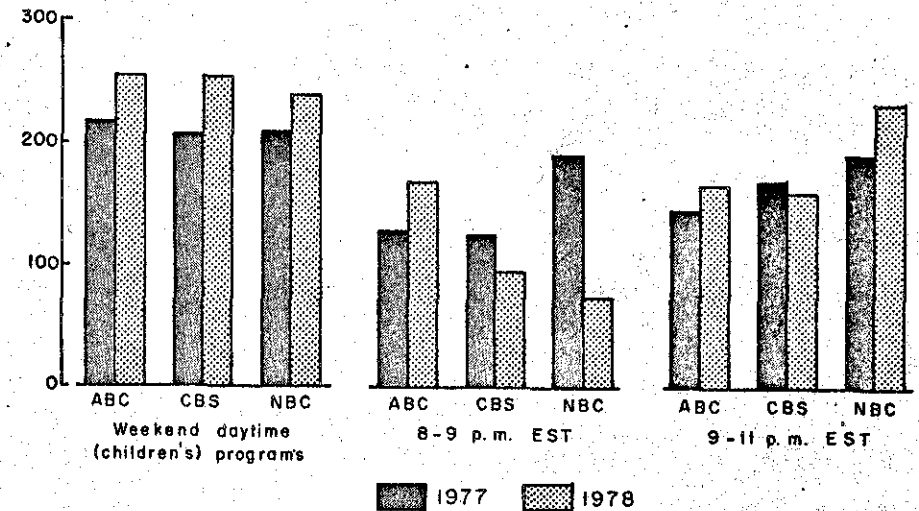


Figure 1: Changes in Violence Index by network and program time, 1977-1978

crease comes after declines in the level of violence registered for the 1977-78 season and network declarations and assurances of further reductions, especially during children's programming hours.<sup>1</sup>

The overall level of weekend (children's) programming containing violence climbed to 97.9 percent. The rate of violent incidents in children's programs zoomed from 15.6 per hour in 1977 to a near record level of 25.0 per hour in 1978 (more than five times the prime-time rate). The index for new children's programs jumped 52 points over last year's index for new children's shows, the largest increase in any category. Continuing children's programs became more violent by 31 points. By contrast, continuing prime-time programs increased in violence by only 3 points.

<sup>1</sup> For example, Frederick S. Pierce, President of ABC Television, told the National Education Association convention in the spring of 1978 that "we have set some specific goals and standards for children's programming. A critical one has been the elimination of interpersonal violence." In the fall of 1978, all measures of violence in ABC children's programming were significantly higher than the year before. The ABC weekend daytime rate of violent incidents per hour, for example, jumped from 16.0 in 1977 to 26.3 in 1978. The ABC Violence Index for weekend daytime programming in 1978 was its highest since our study started in 1967-68 (see Tables 2 and 3).

**Table 1: Violence Index components (1967-1978)**

	67-68 <sup>1</sup>	69-70 <sup>1</sup>	71-72 <sup>1</sup>	1973	74-75 <sup>2</sup>	75-76 <sup>2</sup>	1976	1977 <sup>3</sup>	1978 <sup>4</sup>	Total 67-78
<b>All Programs</b> N =	183	232	203	99	192	226	110	192	111	1548
<b>% Programs w/violence</b>	81.4	80.6	79.8	72.7	80.7	77.4	89.1	75.5	84.7	79.9
Rate per program	4.8	4.9	5.0	5.3	5.4	5.2	6.2	5.0	5.8	5.2
Rate per hour	7.2	8.1	7.2	7.0	6.9	7.7	9.5	6.7	8.3	7.5
<b>% Characters involved in violence</b>	69.5	65.1	58.8	55.7	64.6	64.2	74.8	60.9	64.8	64.0
<b>Violence Index</b>	190	178	174	160	183	177	204	166	183	178
<b>Weekend-Daytime</b> N =	62	107	81	37	77	92	49	53	48	606
<b>% Programs w/violence</b>	93.5	97.2	88.9	94.6	93.5	90.2	100.0	90.6	97.9	93.7
Rate per program	5.2	6.5	6.0	6.7	5.1	5.1	6.9	4.9	7.5	5.9
Rate per hour	22.3	25.5	16.0	13.2	12.2	14.2	22.4	15.6	25.0	17.7
<b>% Characters involved in violence</b>	84.3	89.7	73.5	77.2	71.7	81.1	85.6	77.2	86.0	80.3
<b>Violence Index</b>	242	253	208	212	201	211	247	209	249	223
<b>Prime-Time</b> N =	121	125	122	62	115	134	61	139	63	942
<b>% Programs w/violence</b>	75.2	66.4	73.8	59.7	72.2	68.7	80.3	69.8	74.6	71.0
Rate per program	4.5	3.5	4.4	4.5	5.6	5.3	5.6	5.0	4.5	4.8
Rate per hour	5.2	3.9	4.8	4.9	5.4	6.0	6.1	5.5	4.5	5.1
<b>% Characters involved in violence</b>	64.4	49.4	53.9	41.1	60.5	55.0	67.4	55.5	52.9	55.7
<b>Violence Index</b>	176	140	159	132	174	160	183	154	153	159
<b>8-9 P.M., EST</b> N =	74	73	55	32	54	61	25	65	27	466
<b>% Programs w/violence</b>	77.0	60.3	74.5	56.3	63.0	52.5	72.0	66.2	59.3	65.0
Rate per program	4.9	2.8	4.2	4.6	3.6	2.7	3.8	4.2	3.0	3.8
Rate per hour	6.4	3.9	4.8	5.1	3.9	4.1	4.7	5.3	4.0	4.7
<b>% Characters involved in violence</b>	66.3	46.1	50.0	40.9	46.2	37.0	55.1	53.2	39.2	49.0
<b>Violence Index</b>	186	127	150	126	138	104	145	140	116	139
<b>9-11 P.M., EST</b> N =	47	52	67	30	61	73	36	74	36	476
<b>% Programs w/violence</b>	72.3	75.0	73.1	63.3	80.3	82.2	86.1	73.0	86.1	76.9
Rate per program	4.0	4.3	4.5	4.3	7.4	7.6	6.9	5.8	5.6	5.7
Rate per hour	3.8	3.9	4.8	4.7	6.6	6.9	6.8	5.7	4.8	5.4
<b>% Characters involved in violence</b>	61.5	54.2	57.1	41.3	72.8	68.4	75.7	57.1	62.5	61.8
<b>Violence Index</b>	162	158	167	137	205	203	209	165	180	178

<sup>1</sup> These figures are based upon two samples collected in the fall of each of these years.

<sup>2</sup> These figures are based upon two samples -- one from the fall and one from the spring.

<sup>3</sup> The Fall 1977 sample consists of two weeks of prime-time and one weekend of daytime network dramatic programs. A total of 192 programs and 585 major characters were analyzed.

<sup>4</sup> The Fall 1978 sample consists of one week of prime-time and one weekend of daytime network dramatic programming. A total of 111 programs and 298 major characters were analyzed.

**Table 2: Violence Index components for 1977 and 1978 by network**

	All Networks		ABC		CBS		NBC	
	1977 <sup>1</sup>	1978 <sup>2</sup>	1977 <sup>1</sup>	1978 <sup>2</sup>	1977 <sup>1</sup>	1978 <sup>2</sup>	1977 <sup>1</sup>	1978 <sup>2</sup>
<b>All Programs</b> N =	192	111	59	35	80	48	53	28
<b>% Programs w/violence</b>	75.5	84.7	74.6	88.6	70.0	85.4	84.9	78.6
Rate per program	5.0	5.8	4.3	5.7	5.0	5.5	5.7	6.5
Rate per hour	6.7	8.3	6.0	8.1	7.4	9.8	6.4	6.9
<b>% Characters involved in violence</b>	60.9	64.8	55.8	66.3	58.0	63.9	70.7	64.3
<b>Violence Index</b>	166	183	154	186	159	183	190	179
<b>Weekend-Daytime</b> N =	53	48	16	11	21	26	16	11
<b>% Programs w/violence</b>	90.6	97.9	93.8	100.0	85.7	100.0	93.8	90.9
Rate per program	4.9	7.5	5.4	9.5	4.5	6.7	4.8	7.2
Rate per hour	15.6	25.0	16.0	26.3	15.2	26.8	15.7	20.6
<b>% Characters involved in violence</b>	77.2	86.0	79.2	81.5	80.8	86.0	71.1	91.3
<b>Violence Index</b>	209	249	216	253	206	253	206	238
<b>Prime-Time</b> N =	139	63	43	24	59	22	37	17
<b>% Programs w/violence</b>	69.8	74.6	67.4	83.3	64.4	68.2	81.1	70.6
Rate per program	5.0	4.5	3.9	3.9	5.2	4.0	6.1	6.0
Rate per hour	5.5	4.5	4.5	4.6	6.4	4.4	5.3	4.6
<b>% Characters involved in violence</b>	55.5	52.9	48.3	60.0	51.2	44.6	70.6	54.1
<b>Violence Index</b>	154	153	136	165	146	136	188	159
<b>8-9 P.M., EST</b> N =	65	27	21	12	27	8	17	7
<b>% Programs w/violence</b>	66.2	59.3	66.7	83.3	55.6	50.0	82.4	28.6
Rate per program	4.2	3.0	3.1	2.3	4.0	2.0	5.8	5.6
Rate per hour	5.3	4.0	4.5	3.4	5.9	2.9	5.4	5.6
<b>% Characters involved in violence</b>	53.2	39.2	44.3	62.1	46.2	33.3	76.6	20.7
<b>Violence Index</b>	140	116	126	167	123	93	188	72
<b>9-11 P.M., EST</b> N =	74	36	22	12	32	14	20	10
<b>% Programs w/violence</b>	73.0	86.1	68.2	83.3	71.9	78.6	80.0	100.0
Rate per program	5.8	5.6	4.6	5.6	6.2	5.2	6.3	6.3
Rate per hour	5.7	4.8	4.6	5.4	6.8	4.9	5.3	4.1
<b>% Characters involved in violence</b>	57.1	62.5	51.1	58.3	55.3	50.0	66.7	84.4
<b>Violence Index</b>	165	180	143	164	166	158	188	230

<sup>1</sup> The Fall 1977 sample consists of two weeks of prime-time and one weekend of daytime network dramatic programs. A total of 192 programs and 585 major characters were analyzed.

<sup>2</sup> The Fall 1978 sample consists of one week of prime-time and one weekend of daytime network dramatic programs. A total of 111 programs and 298 major characters were analyzed.

Breaking down the figures by networks, both ABC and CBS boosted the violence saturation of children's programs to 26.3 and 26.8 incidents per hour, respectively—a record high for both networks. NBC's rate went up to 20.6, its fourth highest level. Major characters involved in violence in children's programs climbed from nearly eight to almost nine out of ten. Figure 2 compares the components of the Violence Index for 1977 and 1978.

*Violence measures for weekend daytime (children's) programs*

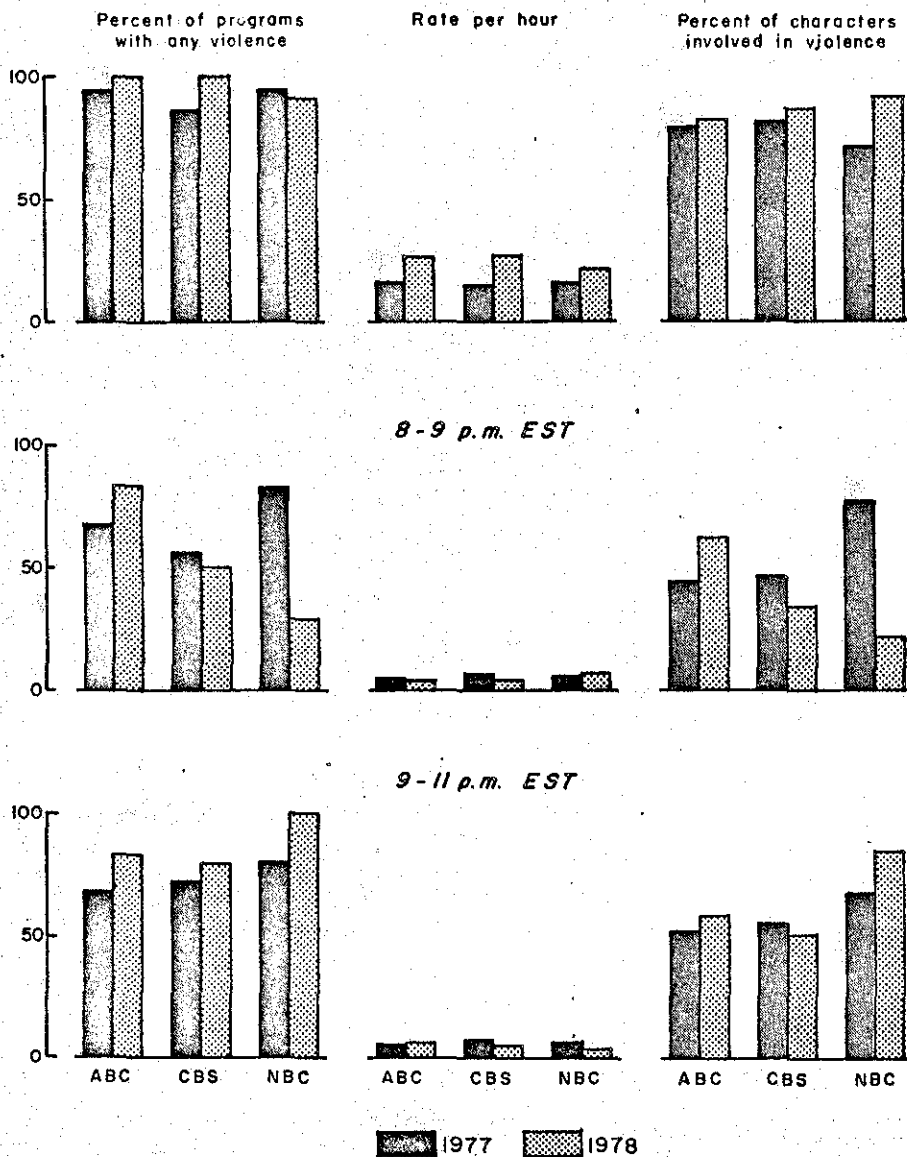


Figure 2: Changes in Violence Index components by network and program time, 1977-1978

A summary of long-term trends can be seen in Table 3. The late evening increase in violence was due primarily to NBC's increase in violent programming, followed by ABC, but not CBS. However, NBC also led in reducing early evening prime-time violence to its lowest level on record. Unlike the other networks, ABC increased its violent programming in the former "family hour," as well as the late evening and weekend daytime hours. Figures 3 and 4 present long-term trends for children's and prime-time programming overall and by network.

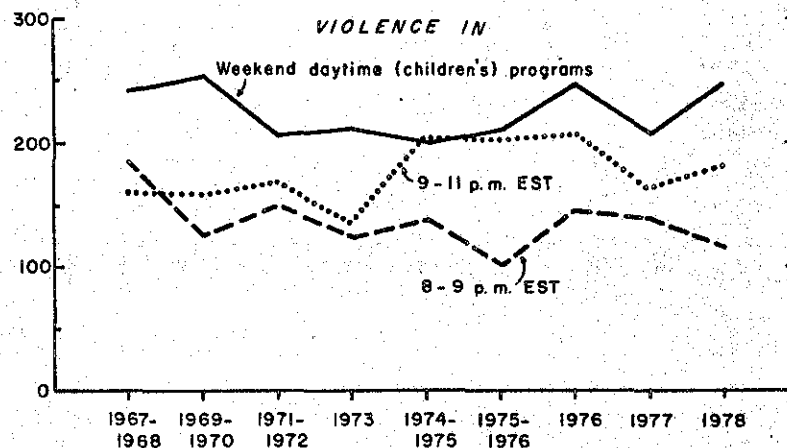


Figure 3: Violence index in children's and prime-time programming, 1967-1978

The portrayal of violence on television drama also continues to demonstrate a pattern of unequal relative risks among characters of different age, sex, and social groups. Over the past ten years our research has shown that certain groups of dramatic characters consistently were victimized more often than they committed a violent act. As can be seen in Table 4, these include women of all ages, but especially young adult and elderly women, as well as young boys, non-whites, foreigners, and both members of the lower and upper (but not middle) classes. In 1978, the relative risks of female victimization further increased. In 1977 there were 1.05 male and 1.13 female victims for every male or female violent. In 1978, the male ratio of risk rose to 1.21 but the female ratio rose to 2.14. Female victimization increased the most for weekend children's programming, rising from 1.09 in 1977 to 2.80 in 1978.

Having established that violence has continued to be an integral part of dramatic programming, what can we say about the viewers' perceptions of social reality? Our findings continue to show stable associations between patterns of TV content and conceptions of social reality held by heavy viewers. The current analyses are based on data collected from two samples of adolescents, one from a public school in suburban/rural New Jersey (N = 447) and one from a New York City school (N = 140). Students filled out questionnaires which offered two

Table 3: Summary of Violence Index (1967-1978)

	67-68 <sup>1</sup>	69-70 <sup>1</sup>	71-72 <sup>1</sup>	1973	74-75 <sup>2</sup>	75-76 <sup>2</sup>	1976	1977 <sup>3</sup>	1978 <sup>4</sup>	Change 1977 to 1978
All Programs	190	178	174	160	183	177	204	166	183	+17
Prime-Time	176	140	159	132	174	160	183	154	153	-1
Weekend-Morning	242	253	208	212	202	211	247	209	249	+40
8-9 P.M. EST Programs	186	127	150	126	138	104	145	140	116	-24
9-11 P.M. EST Programs	162	158	167	137	205	203	209	165	180	+15
Cartoons	246	254	224	218	207	228	273	228	252	+24
TV Plays	173	137	140	122	157	149	185	137	137	0
Movies	211	198	226	186	258	252	220	265	248	-17
Comic Tone Programs	144	183	144	149	171	162	227	151	203	+52
Prime-Time	108	72	76	43	54	70	133	99	119	+20
Weekend-Daytime	222	265	202	225	226	229	270	241	274	+33
Serious Tone Programs	-	187	208	197	211	206	216	203	192	-11
Prime-Time	-	187	210	200	217	211	214	209	183	-26
Weekend-Daytime	-	207	167	178	168	183	228	181	230	+49
Continued Programs	182	173	175	159	183	181	197	174	190	+16
Prime-Time	171	149	155	135	170	168	180	166	169	+3
Weekend-Daytime	231	251	217	222	209	207	244	215	246	+31
New Programs	201	188	172	163	181	168	216	154	165	+11
Prime-Time	184	119	166	124	188	145	192	134	112	-22
Weekend-Daytime	253	256	192	202	169	221	250	203	255	+52
Action Programs	236	226	220	212	224	213	231	214	207	-7
Prime-Time	237	221	223	213	237	220	234	219	185	-34
Weekend-Daytime	256	254	225	218	201	206	230	209	239	+30
ABC Programs	210	162	159	138	188	186	207	154	186	+32
CBS Programs	159	173	170	174	173	153	182	159	183	+24
NBC Programs	204	204	195	172	189	194	224	190	179	-11
Prime-Time Programs										
ABC	203	119	146	101	196	180	196	136	165	+29
CBS	128	129	150	152	152	122	150	146	136	-10
NBC	201	176	187	147	178	182	212	188	159	-29
8-9 P.M. EST Programs										
ABC	200	105	140	120	181	129	197	126	167	+41
CBS	157	123	132	127	112	46	102	123	93	-30
NBC	201	161	175	136	119	133	139	188	72	-116
9-11 P.M. EST Programs										
ABC	209	146	150	79	210	222	196	143	164	+21
CBS	92	137	161	174	167	171	175	166	158	+8
NBC	201	196	200	161	224	222	282	188	230	+42
Action Programs										
ABC	241	223	225	196	232	211	251	208	230	+22
CBS	234	238	230	238	235	224	206	231	192	-39
NBC	235	221	209	211	209	207	234	204	202	-2
Weekend-Daytime Programs										
ABC	242	239	192	208	178	200	237	216	253	+37
CBS	257	250	210	238	213	210	239	206	253	+47
NBC	229	278	220	202	213	227	264	206	238	+32
Cartoon Programs										
ABC	242	239	226	208	178	202	239	217	253	+36
CBS	257	252	219	238	219	240	263	243	260	+17
NBC	237	280	231	215	233	258	333	219	238	+19

<sup>1</sup> These figures are based upon two samples collected in the fall of each of these years.

<sup>2</sup> These figures are based upon two samples -- one from the fall and one from the spring.

<sup>3</sup> The Fall 1977 sample consists of two weeks of prime-time and one weekend-morning of network dramatic programs.

<sup>4</sup> The Fall 1978 sample consists of one week of prime-time and one weekend of daytime network dramatic programming. A total of 111 programs and 298 major characters were analyzed.

Table 4: Risk ratios<sup>1</sup> for major characters in all programs (1969-1978)

	All characters			Male characters			Female characters			
	Involved in violence	Violent- victim ratio	Killer- killed ratio	Involved in violence	Violent- victim ratio	Killer- killed ratio	Involved in violence	Violent- victim ratio	Killer- killed ratio	
All characters	3949	63.3	-1.20	2938	68.4	-1.18	956	46.1	-1.34	+1.20
<u>Social age</u>										
Children-adolescents	415	60.5	-1.60	297	65.0	-1.69	116	49.1	-1.33	0.00
Young adults	813	64.5	-1.36	539	69.6	-1.23	270	53.7	-1.82	+1.33
Settled adults	2212	59.8	-1.12	1698	65.7	-1.12	513	40.0	-1.12	+1.60
Elderly	106	47.2	-1.15	80	50.0	+1.07	26	38.5	-3.33	-0.00
<u>Marital status</u>										
Not married	1873	65.6	-1.23	1374	69.7	-1.18	491	53.8	-1.44	+1.30
Married	987	45.5	-1.27	626	52.9	-1.27	361	32.7	-1.25	+1.11
<u>Class</u>										
Clearly upper	269	59.5	-1.38	182	67.6	-1.26	87	42.5	-2.00	+1.25
Mixed	3549	63.4	-1.19	2650	68.3	-1.17	844	46.3	-1.29	+1.20
Clearly lower	131	69.5	-1.25	106	73.6	-1.20	25	52.0	-1.71	1.00
<u>Race</u>										
White	3087	60.1	-1.19	2235	65.1	-1.16	852	46.9	-1.31	+1.26
Other	360	55.0	-1.33	280	61.1	-1.27	77	31.2	-1.83	0.00
<u>Character type</u>										
"Good"	2304	58.4	-1.29	1659	63.7	-1.24	622	43.2	-1.51	-1.60
Mixed	1093	61.4	-1.22	807	65.8	-1.21	262	44.7	-1.31	+1.50
"Bad"	550	88.0	1.00	471	89.4	-1.01	71	77.5	+1.15	+1.67
<u>Nationality</u>										
U.S.	3100	58.1	-1.20	2263	63.2	-1.16	827	43.9	-1.38	+1.18
Other	264	73.5	-1.31	203	80.8	-1.29	61	49.2	-1.47	+2.00

<sup>1</sup> Risk ratios are obtained by dividing the more numerous of these two roles by the less numerous within each group. A plus sign indicates that there are more victims or killers than victims or killers or killed and a minus sign indicates that there are more victims or killed than victims or killers. A ratio of 0.00 means that there were no victims or killers or victims or killed. A +0.00 ratio means that there were some victims or killers but no victims or killers; a -0.00 ratio means that there were victims or killed but no victims or killers.

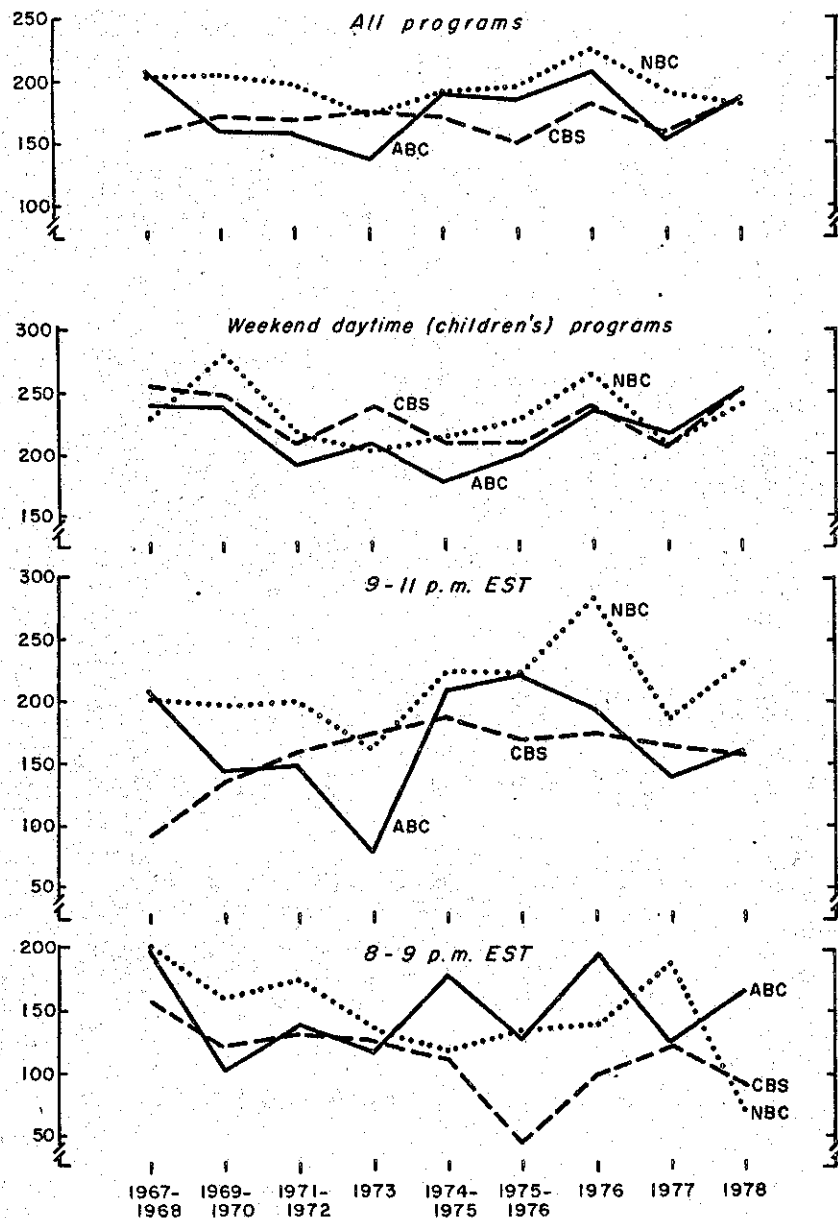


Figure 4: Violence Index by network and program time, 1967-1978

answers to each question, one answer based on facts or statistics (or some other view of reality), and one "television answer," which expresses the "facts" as depicted on TV. Information on viewing habits and demographic variables was also requested and is summarized in Figure 5.

Tables 5-8 summarize the results<sup>2</sup> in four areas of investigation—chances of involvement in violence, fear of walking alone at night, perceived activities of

<sup>2</sup> The full analysis, including all tables summarized in this article, is presented in (5).

	New Jersey school children		New York school children	
<u>Date</u>	Dec. 76; May 77		June 77	
<u>Location</u>	Rural/suburban New Jersey		New York City	
<u>Sampling</u>	Student population of a public middle school		Population of 10 to 17 year olds at a New York private school	
<u>Number of respondents</u>	447		140	
<u>Collecting organization</u>	Cultural Indicators		Cultural Indicators	
<u>Method of collection</u>	Self-administered questionnaire		Self-administered questionnaire	
<u>Demographic characteristics</u>		%		%
<u>Sex</u>	boys	45.9	boys	51.4
	girls	54.1	girls	48.6
<u>Grade in school</u>	seventh	47.7	5-8	51.4
	eighth	52.3	9-12	49.6
<u>Age</u>	$\bar{X} = 13.09$		$\bar{X} = 14.1$	
<u>Perceived ethnicity</u>	American	76.4	American	69.1
	Italian	7.2	Italian	0.7
	Black, Afro	0.8	Black, Afro	8.8
	Jewish	4.1	Jewish	6.6
	German	1.3	German	1.5
	Irish	1.5	Irish	0.7
	Other	8.7	Other	12.6
<u>Parents' education</u>	Neither went to college	42.0	Neither went to college	10.8
	Father or both went to college	58.0	Father or both went to college	89.2
<u>TV viewing light</u>	up to 4 hrs/day	43.6	2 hrs/day or less	51.5
<u>heavy</u>	4 hrs & up/day	56.4	Over 2 hrs/day	49.5
<u>Newspaper reading</u>	almost never	15.0	almost never	14.3
	once in a while	46.1	once in a while	46.4
	almost daily	38.9	almost daily	39.3

Figure 5: Adolescent data bases used in cultivation analysis

the police, and mistrust. Three measures are provided for each question—the percent of light viewers who give the answer that reflects the television world (the "television answer"), the Cultivation Differential or CD (percent of heavy viewers minus the percent of light viewers giving the "television answer")

within a comparison group), and the gamma coefficient (with the statistical significance indicated by asterisks).<sup>3</sup>

The percent of heavy viewers who responded in terms of the television world can be determined by adding the Cultivation Differential to the percent of light viewers. For example, in Table 5 we see that 62 percent of the light viewers in the New Jersey school sample overestimated the proportion of people involved in violence. Since the CD is +11, the percent of heavy viewers responding in this way would be 73 percent. Finally, two numbers of respondents (Ns) are reported—the overall number of children responding to the question and the total number of light viewers who gave the “television answer.”

These analyses reveal that adolescent heavy viewers see the world as more violent and express more fear than do light viewers in a variety of ways, ranging from estimates of the number of people involved in violence, to perceived danger, to assumptions about the use of violence by the police.

Heavy viewers in both the New York and New Jersey schools are more likely than light viewers to overestimate the number of people involved in violence and the proportion of people who commit serious crimes (see Table 5). In the New York sample, the finding is especially strong for boys, those of lower socioeconomic status, those who have not had a personal or family experience as a victim, and those with middle or low achievement scores. In the New Jersey sample, the relationship is stronger among girls, frequent newspaper readers, and heavy TV news viewers, as well as among those whose fathers did not attend college. Despite these variations, the association remains consistently positive for each comparison group: heavy viewers in every case are more likely than are light viewers to believe that a greater number of people are regularly involved in violence. Similarly, heavy viewers in the New Jersey sample are generally more likely to overestimate how many people commit serious crimes. The relationship is the strongest among females and occasional newspaper readers.

Most of the New Jersey students (about 80 percent) feel that it is dangerous to walk alone in a city at night (see Table 6). Yet within every comparison group, heavy viewers are more likely than light viewers to express this opinion. This pattern is most evident among girls, occasional newspaper readers, and infrequent viewers of network news. Although most consider it dangerous, there is a fair degree of variation in who is afraid to walk alone in a city at night. The New Jersey students are more afraid than the New York students; in both samples and again, especially in New Jersey, the females are considerably more afraid. Within every group, however, heavy viewers are more likely than are light viewers to express this fear. This pattern is not as consistent in the New York sample, although it persists notably for females, those of lower SES, low achievers, and those who have not been victims of crime.

<sup>3</sup> In the New Jersey sample light viewers are those who watch less than four hours of television a day; in the New York sample light viewers watch less than two hours of television a day. The levels of viewing are determined by a median split of the samples.

Table 5: Summary of cultivation analysis focusing upon involvement in violence

	New York City (N = 123) <sup>f</sup>		New Jersey (N = 425) <sup>f</sup>		New Jersey (N = 406) <sup>f</sup>	
	Percent overestimating the percent of people involved in violence <sup>a</sup>		Percent overestimating the percent of people involved in violence <sup>b</sup>		Percent overestimating the number of criminals <sup>c</sup>	
	% Light viewers <sup>d</sup> (N = 39)	CD* gamma	% Light viewers <sup>d</sup> (N = 114)	CD* gamma	% Light viewers <sup>d</sup> (N = 136)	CD* gamma
Overall controlling for:	62	+21 .51**	62	+11 .26**	77	+8 .26*
Sex						
Male	58	+29 .67**	64	+4 .10	76	+2 .05
Female	67	+12 .31	60	+17 .38**	79	+12 .46**
Grade in school						
Grades 5-8	71	+17 .48*	68	+12 .29*	81	+2 .08
Grades 9-12	56	+19 .40	57	+10 .20	74	+13 .39**
Socio-economic status						
Low	71	+22 .70*	58	+14 .30	72	+17 .53**
High	47	+15 .30	60	+14 .30***	80	+3 .11
Achievement						
Low	67	+27 .79*	57	+16 .33*	79	+2 .07
Medium	50	+26 .52*	66	+8 .19	75	+12 .39**
High	61	+15 .35				
Experience as victim						
Yes	70	+18 .50*	53	+26 .54**	78	+12 .42
No	29	+46 .76**	67	+4 .09	77	+4 .14
Network news watching						
Almost daily			61	+13 .28	76	+10 .31
Once in a while						
Hardly ever						
Father's education						
No college			65	+12 .28*	84	-1 -.04
Some college			58	+8 .16	75	+9 .27

\*\* p ≤ .05 (tau)

\*\*\* p ≤ .01 (tau)

<sup>a</sup> "Think about the number of people who are involved in some kind of violence each year. Do you think that 3 percent of all people are involved in some kind of violence in any given year, or is it closer to 10 percent?"

<sup>b</sup> "Think about the number of people who are involved in violence each week. Do you think one person out of every 100 is involved in some kind of violence in any given week, or is it closer to 10 people out of every 100?"

<sup>c</sup> "About what percent of all people commit serious crimes—is it closer to 3 percent or 12 percent?"

<sup>d</sup> Percent of light viewers giving the television answer

<sup>e</sup> CD (Cultivation Differential) is the percent of heavy viewers minus the percent of light viewers giving the "television answer."

<sup>f</sup> Total number of respondents



Table 6: Summary of cultivation analyses focusing upon the danger of walking alone at night

Overall controlling for:	Percent afraid to walk alone in a city at night <sup>a</sup>			Percent afraid to walk alone in own neighborhood at night <sup>b</sup>			Percent who think it's dangerous to walk alone in a city at night <sup>c</sup>			Percent afraid to walk alone in a city at night <sup>d</sup>		
	New York City (N = 122) <sup>e</sup>	New York City (N = 130) <sup>f</sup>	New Jersey (N = 407) <sup>g</sup>	New York City (N = 130) <sup>f</sup>	New Jersey (N = 407) <sup>g</sup>	New Jersey (N = 414) <sup>h</sup>	New Jersey (N = 139) <sup>i</sup>	New Jersey (N = 407) <sup>g</sup>	New Jersey (N = 414) <sup>h</sup>			
Sex	% Light viewers <sup>d</sup> (N = 27)	CD <sup>e</sup>	gamma	% Light viewers <sup>d</sup> (N = 9)	CD <sup>e</sup>	gamma	% Light viewers <sup>d</sup> (N = 116)	CD <sup>e</sup>	gamma			
Male	46	+ 6	.13	13	+19	.50**	79	+ 7	.24*	64	+10	.24**
Female	41	-13	-.27	6	+ 6	.36	76	+ 4	.14	45	+15	.31*
Grade in school	52	+25	.52*	21	+32	.63**	83	+ 7	.32*	81	+ 3	.09
Grades 5-8	59	+ 2	.05	16	+20	.49*	75	+10	.31*	59	+17	.38**
Grades 9-12	38	- 6	-.14	12	+10	.36	83	+ 5	.20	68	+ 5	.11
Socio-economic status	29	+24	-.47	11	+18	.52	82	+ 4	.12	65 <sup>f</sup>	+ 9	.21
Low	62	-38	-.69**	20	-14	-.62	79	+ 7	.25*	62	+12	.28*
High	32	+31	.57*	4	+28	.82**	80	+ 2	.05	61	+ 7	.16
Achievement	65	-29	-.52*	16	+ 7	.22	78	+10	.36*	66	+12	.29*
Low	47	+ 6	.12	14	+27	.62*						
Medium	51	- 3	-.07	14	+17	.47*						
High	23	+38	.68*	7	+26	.73*						
Experience as victim												
Yes												
No												
Overall controlling for:												
Sex												
Male												
Female												
Grade in school												
7th												
8th												
Ethnic group												
Ethnic												
Non-ethnic												
Newspaper reading												
Every day												
Sometimes												
Network news watching												
Almost daily												
Once in a while												
Hardly ever												
Father's education												
No college												
Some college												

\* p ≤ .05 (tau)

\*\* p ≤ .01 (tau)

<sup>a</sup> "Would you be afraid to walk alone in a city at night?"

<sup>b</sup> "Are you afraid to walk alone in your own neighborhood at night?"

<sup>c</sup> "Is it dangerous to walk alone in a city at night?"

<sup>d</sup> Percent of light viewers giving the television answer

<sup>e</sup> CD (Cultivation Differential) is the percent of heavy viewers minus the percent of light viewers giving the "television answer."

<sup>f</sup> Total number of respondents

Responses to a question about one's willingness to walk alone at night in one's own neighborhood show a strong and consistent relationship between the amount of viewing and being afraid. Females and young students are more afraid overall; these two groups also show the strongest relationship between amount of television viewing and expressing the fear of walking alone at night in one's own neighborhood.

Television viewing also seems to contribute to adolescents' images and assumptions about law enforcement procedures and activities. Among the New Jersey students, more heavy than light viewers in every subgroup believe that police must often use force and violence at a scene of violence (see Table 7). Among the New York students, there is a consistent positive relationship between amount of viewing and the perception of how many times a day a policeman pulls out his gun. Adolescents in New Jersey show a positive relationship across the board between amount of viewing and the tendency to believe that policemen who shoot at running persons actually hit them.

Finally, adolescent heavy viewers also tend to express mistrust in people and to express the belief that people are selfish (see Table 8). Although the differences are not as pronounced as they are for violence- and fear-related questions, the patterns are stable across most groups. Those who watch more television remain more likely to say that people "are mostly just looking out for themselves" (rather than trying to be helpful) and that one "can't be too careful in dealing with people" (rather than that they can be trusted).

These findings provide considerable support for the conclusion that heavy television viewers perceive social reality differently from light television viewers, even when other factors are held constant. There is considerable variation between groups in the scope and magnitude of these patterns: the extent of television's contribution is mediated, enhanced, or diminished by powerful personal, social, and cultural variables, as well as by other information sources. Yet the relationships remain positive in almost every case. The amount of viewing makes a consistent difference in the responses of these adolescents, even the "more sophisticated," "less impressionable" New Yorkers.

Parallel results were also found for a slightly younger age group. In a survey of 2200 seven- to eleven-year-old children and their parents conducted by the Foundation for Child Development, a significant relationship was found between amount of television viewing and violence-related fears even with controls for age, sex, ethnic background, vocabulary, and the child's own reports of victimization (7). We may conclude, then, that heavy viewers' expressions of fear and interpersonal mistrust, assumptions about the chances of encountering violence, and images of police activities can be traced in part to television portrayals.

Given these findings that heavy TV viewing cultivates fear of violence, why is the most vocal concern about TV-incited violence? The privileges of power most jealously guarded are those of violence and sex. In the public realm it is government that claims the legal prerogative to commit violence (in defense of law, order, and national security), and to regulate the commission and depiction of sexual acts (in defense of "decency"). In the private realm parents assert the same prerogatives over their children—the power to determine the range of

**Table 7: Summary of cultivation analyses focusing upon activities of the police**

Overall controlling for:	Percent overestimating number of times police draws guns on average day <sup>a</sup>		Percent overestimating how often police find it necessary to use force <sup>b</sup>		Percent overestimating how often police shoot fleeing suspects <sup>c</sup>	
	New York City (N = 121) <sup>f</sup>	New Jersey (N = 419) <sup>f</sup>	New Jersey (N = 82)	New Jersey (N = 97)	New Jersey (N = 423) <sup>f</sup>	
Sex			% Light viewers <sup>d</sup> (N = 4)	% Light viewers <sup>d</sup> (N = 97)	% Light viewers <sup>d</sup> (N = 423) <sup>f</sup>	gamma
Male	0	+10	6	45	53	+11
Female	13	+13		46	47	+17
Grade in school						gamma
Grades 5-8	9	+13		45	50	+14
Grades 9-12	5	+1		45	55	+9
Socio-economic status						gamma
Low	8	+15		52	56	+10
High	0	+6		42	50	+12
Achievement						gamma
Low	8	+11		42	56	+10
Medium	0	+19		47	51	+11
High	6	+14		47	51	+11
Experience as victim						gamma
Yes	6	+10		47	65	+2
No	7	+13		41	43	+13

\*  $p \leq .05$  (tau)  
 \*\*  $p \leq .01$  (tau)  
<sup>a</sup> "On an average day, how many times does a policeman usually pull out his gun—less than once a day or more than five times a day?"  
<sup>b</sup> "When police arrive at a scene of violence, how much of the time do they have to use force and violence—most of the time or some of the time?"  
<sup>c</sup> "How often do you think policemen who shoot at running persons actually hit them?"  
<sup>d</sup> Percent of light viewers giving the television answer  
<sup>e</sup> CD (Cultivation Differential) is the percent of heavy viewers minus the percent of light viewers giving the "television answer."  
<sup>f</sup> Total number of respondents

**Table 8: Summary of cultivation analyses focusing upon mistrust and alienation**

Overall controlling for:	Percent saying that you must be careful in dealing with people <sup>a</sup>			Percent saying that people are selfish rather than helpful <sup>b</sup>		
	New Jersey (N = 420) <sup>e</sup>			New Jersey (N = 413) <sup>e</sup>		
Sex	% Light viewers <sup>c</sup> (N = 97)	CD <sup>d</sup>	gamma	% Light viewers <sup>c</sup> (N = 101)	CD <sup>d</sup>	gamma
Overall	52	+10	.21*	56	+8	.17*
Male	56	+10	.21	62	+2	.05
Female	48	+12	.22*	50	+13	.27*
Grade in school						
7th	49	+16	.32**	56	+3	.06
8th	54	+5	.10	56	+13	.28*
Ethnic group						
Ethnic	62	-2	-.03	60	+7	.16
Non-ethnic	48	+14	.28**	53	+9	.19
Newspaper reading						
Every day	49	+16	.31*	59	+4	.10
Sometimes	55	+6	.12	54	+10	.20
Network news watching						
Almost daily	53	+13	.26	57	0	-.00
Once in a while	53	+8	.16	57	+5	.12
Hardly ever	48	+13	.26	52	+18	.36*
Father's education						
No college	56	+12	.23	60	+5	.10
Some college	48	+8	.17	54	+3	.06

\*  $p \leq .05$  (tau)  
 \*\*  $p \leq .01$  (tau)

<sup>a</sup> "Can most people be trusted, or do you think that you can't be too careful in dealing with people?"

<sup>b</sup> "Would you say that most of the time people try to be helpful, or that they are mostly just looking out for themselves?"

<sup>c</sup> Percent of light viewers giving the television answer

<sup>d</sup> CD (Cultivation Differential) is the percent of heavy viewers minus the percent of light viewers giving the "television answer."

<sup>e</sup> Total number of respondents

permissible and forbidden behavior. It would stand to reason, therefore, that the representatives of established order would be more worried about television violence as a threat to their monopoly over physical coercion, however limited that threat might be, than about insecurities that drive people to seek protection and to accept control.

In 1776 John Adams wrote that fear is the foundation of most governments. By demonstrating the workings of a social power hierarchy, television drama may contribute to the cultivation of assumptions that tend to maintain this hierarchy. The durable message of unequal power and victimization in television vi-

olence is clear. Any real-life violence that television incites may serve to reinforce the fear created by symbolic violence.<sup>4</sup>

The meaning of violence is in the kinds of social relationships it presents and the lessons of power—and fear of power—that may be derived from them. Conventional wisdom and fearful people, themselves victimized by images of violence around them, might stress the one or two in a thousand who imitate violence and threaten society. But it is just as important to look at the large majority of people who become more fearful, insecure, and dependent on authority, and who may grow up demanding protection and even welcoming repression in the name of security. The most significant and recurring conclusion of our long-range study is that one correlate of television viewing is a heightened and unequal sense of danger and risk in a mean and selfish world.

#### REFERENCES

1. Chaffee, S. "Television and Adolescent Aggressiveness (An Overview)." In G. A. Comstock and E. A. Rubinstein (Eds.) *Television and Social Behavior*, Volume 3: *Television and Adolescent Aggressiveness*. Washington, D.C.: U.S. Government Printing Office, 1972.
2. Comstock, G. A., E. A. Rubinstein, and J. P. Murray (Eds.) *Television and Social Behavior* (five volumes). Washington, D. C.: U.S. Government Printing Office, 1972.
3. Gerbner, G. and L. Gross. "Living with Television: The Violence Profile." *Journal of Communication* 26(2), Spring 1976, pp. 173-199.
4. Gerbner, G., L. Gross, M. Jackson-Beeck, S. Jeffries-Fox, and N. Signorielli. "Cultural Indicators: Violence Profile No. 9." *Journal of Communication* 28(3), Summer 1978, pp. 176-207.
5. Gerbner, George, Larry Gross, Nancy Signorielli, Michael Morgan, and Marilyn Jackson-Beeck. "Violence Profile No. 10: Trends in Network Dramatic Programming and Viewer Conceptions of Social Reality, 1967-1978." Annenberg School of Communications, University of Pennsylvania, April 1979.
6. Gross, Larry. "Television and Violence." In Kate Moody and Ben Logan (Eds.) *Television Awareness Training* (second edition). Nashville, Tenn.: Parthenon, 1979.
7. Zill, Nicholas. Personal communication, Foundation for Child Development, New York, April 1979.

<sup>4</sup> A striking example of what we mean can be found in *Tales of a Fourth-Grade Nothing*, a story book in its fourteenth printing by Dell Publishing Company, sold coast-to-coast. Chapter 4 begins this way:

*We live near Central Park. . . . Jimmy Fargo has been mugged three times—twice for his bicycle and once for his money. . . . I've never been mugged. But sooner or later I probably will be. My father told me what to do. Give the muggers whatever they want and try not to get hit on the head. Sometimes after you're mugged, you get to go to police headquarters. You look at a bunch of pictures of crooks to see if you can recognize the guys that mugged you.*