ABSTRACT
            A study was conducted to establish a baseline of
facts concerning the extent, nature, and social functions of the
drinking of alcoholic beverages as depicted on prime time network
television programing. A content analysis was undertaken of a random
sample of programs drawn from the three major networks over a period
of 14 evenings. The primary unit of analysis was the "drinking
incident"—the actual or implied consumption of an alcoholic drink by
a actor with a speaking role. Other items recorded included the
number of times actors refused drinks offered to them, the function
of each drinking episode, and the negative short-term and long-term
consequences of drinking that were presented. The results revealed
293 male and 113 female drinking incidents, with 64% of all programs
containing at least one such episode. The overall rate of drinking
incidents was 3.92 per hour. The negative consequences of drinking
were seldom presented, and the ratio of drinking incidents to
negative short-term consequences was 25.4 to 1, and to negative
long-term consequences 101.5 to 1. No program dealt with alcohol
abuse and treatment. (FL)

ALCOHOL CONSUMPTION PATTERNS AND CONSEQUENCES

ON PRIME TIME NETWORK TV

by

Dennis T. Lowry

Presented at the annual convention
of the Speech Communication Association.

New York City

November 14, 1980

2

Revised: January 1980

ALCOHOL CONSUMPTION PATTERNS AND CONSEQUENCES
ON PRIME TIME NETWORK TV

Without question, alcohol abuse is America's number one drug
problem. A recent report of the National Institute on Alcohol Abuse
and Alcoholism contained the following facts: There are an estimated
9.3 to 10 million adult problem drinkers in the United States, as well
as an estimated 3.3 million problem drinkers in the 14 to 17 age range
---19 percent of the youth in this age group. Liver cirrhosis was the
sixth most common cause of death in the United States in 1975, with up
to 95 percent of the cases estimated to be alcohol-related. Alcohol-
related deaths may run as high as 205,000 per year---11 percent of the
1.9 million deaths in 1975. Alcohol abuse and alcoholism cost the
United States nearly $43 billion in 1975, including the costs of such
things as lost production, health and medical costs, motor vehicle
accidents, violent crimes, and fires.[1]

Another major social problem, that of violence in America, has
stimulated a considerable body of research relating to mass communication
in general and prime time network television programing in particular.
However, the same situation is certainly not true with America's number
one drug problem. Comstock wrote in 1976: "We know very little about
the way alcohol is portrayed on television, either in entertainment or
commercials."[2] "We are rich in opinions and poor in facts."[3]

Hanneman and McEwen conducted a content analysis of network prime time programing and found that alcohol was the most frequently used drug in prime time, that it was seldom refused when offered, and that the causes and consequences of usage were seldom mentioned or shown.[4] Fernandez-Collado et al. analyzed alcohol use as as one part of a content analysis involving several types of behavior in prime time and Saturday morning television programs. They found 2.19 alcohol-related incidents per hour.[5]

One of the most outspoken critics of the television industry for its practices relating to alcohol has been Nicholas Johnson. In 1976 Johnson presented the following arguments before the U.S. Senate Subcommittee on Alcoholism and Narcotics:

. . . it seems to me, beyond controversy, that liquor is in prominent use in programs and commercials on television.

. . . whatever else may be said, clearly the portrayal of liquor does not discourage its use.

. . . broadcasters are licensed to serve the public interest, and it seems to me impossible for them to make a case that there is a public interest in increasing alcohol consumption in the United States.[6]

By contrast, the basic position of the television industry is that there is nothing wrong with the present state of affairs relating to the depiction of alcohol in either programs or commercials. The Television Code totally prohibits the advertising of hard liquor and prohibits on-camera drinking in beer and wine commercials. Regarding program

content, it states in section IV-10, "The use of liquor and the depiction
of smoking in program content shall be de-emphasized. When shown, they
should be consistent with plot and character development."

The official CBS-TV position is that (1) CBS complies with the
provisions of the Television Code and (2) ". . . television reflects the
standards and mores of society. . . ."[7] Thus, television is not serving as
a model or pro-drinking stimulus, it is simply reflecting society as
it already exists. NBC-TV's official position is very similar: "Insofar
as drinking is a legal, normal and accepted part of contemporary social
behavior, our entertainment programs must to some degree reflect that

- 4 -

fact, but we take care not to show it unnecessarily or as an activity to be emulated."[8]

The purpose of the present study is to provide a baseline of facts concerning the extent, nature, and social functions of drinking on prime time network television. Providing this factual baseline will of course not demonstrate any causal relationship between what is presented on television and the problem of alcohol abuse in the United States, but it will help to alleviate the situation to which Comstock referred---i.e., being rich in opinions and poor in facts.

More specifically, this study will analyze the equivalent of two weeks of prime time network programs and determine:

1. How many drinking incidents were presented in total, by male vs. female drinkers, and by type of drink?

2. How many drinking incidents per hour were presented in total, by network, and in children's time vs. adult time? Nielsen data indicate that many millions of children and teenagers watch prime time television; they do not go to bed or work on their homework when 8 p.m. comes around. In fact, they watch more prime time TV than "after school" or Saturday morning TV. Out of their total weekly TV viewing, they spend the following percentages watching prime time TV: children 2-5 = 21%, children 6-11 = 31%, male teens = 34%, female teens = 36%.[9]

3. What was the ratio of drinking incidents to drink refusal's? Even the casual viewer can notice numerous examples of television drinking by beautiful, rich, sexy, successful people in entertainment programs. In the same way that such beautiful people unquestionably

serve as social role models in television commercials, it is reasonable
to hypothesize that they are also serving as social role models in the
entertainment programs. Given, then, that there are numerous pro-drinking
modeling instances on prime time television, the question then becomes,
how many modeling instances are there for the almost 51 million adults
who do not choose to drink and the 13 million who should refuse because
they are problem drinkers?

4. What was the ratio of social drinking to drinking alone?

5. What were the most frequent categories of social facilitation
functions of drinking? That is, when social drinking did occur, was
drinking depicted most often as a facilitator of business discussions,
parties, romance, or what?

6. What were the most frequent categories of self-facilitation
functions of drinking? When an individual was drinking alone, was it
for the purpose of relaxing, dining, escaping, or what?

7. How many negative short-term consequences of drinking were
presented? This question is important because it will help to determine
to what extent the networks are presenting only the act of drinking and
the enjoyment of drinking and ignoring the negative short-term consequences
that sometimes occur (e.g., intoxication, motor vehicle accidents, falls,
etc.). The Third Special Report to the U.S. Congress on Alcohol and
Health states in this respect, "People who choose to drink alcoholic
beverages must be made aware of the consequences to the extent that we
know them."[10]

8. What was the ratio of serious to comedy depictions of intoxica-

tion? Everyone who has watched a substantial amount of prime time television has from time to time seen instances involving humerous, even hilarious, drunks. However,.on a long-term basis, is television teaching people that drunkenness is only a laughing matter or a serious problem? What is television's implicit message relating to/intoxication?

9. How many negative long-term consequences of drinking were presented? Again, to what extent does prime time television show only the desirable side of drinking and neglect to show the negative long-term consequences that sometimes occur (e.g., alcoholism, liver cirrhosis, etc.)?

Methods

Universe and sampling procedures. The content universe for this study consisted of all ABC, CBS and NBC network television programs broadcast in Philadelphia between 8 and 11 p.m., seven days a week, from February 15 through April 30, 1979. A sampling frame for this 75-day period was constructed for this study.

The sampling procedure consisted of drawing a simple random sample of evenings and employing a cluster sample of all of a given network's programs for a given evening. The sample size was 14 evenings per network. The completion rate for the 42 evenings was 100%, however four programs of the NBC affiliate had to be eliminated because they were local programs instead of network programs. This resulted in 36 hours of programs for NBC and 42 hours for the other two networks. All network programs were analyzed, not just entertainment or dramatic

programs.

.Definition of categories.[11]   The primary unit of analysis was the

"Drinking incident"---the actual or implied consumption of one alcoholic

drink by one speaking actor.   Actual consumption was when the speaking

actor could actually be seen putting the glass, can, or bottle to his

lips and taking at least one sip or swallow.   Implied consumption was

when a speaking actor had a drink within arm's reach and, based upon

the program and scene context, there was an implied intent to consume,

or it was implied that the actor did consume some or all of the drink

before the camera cut to this scene.   Alcoholic drink referred to

alcoholic beverages such as beer, wine, and liquor.   A speaking actor

was one who spoke at least one distinct word during the program.

Drinking incidents that were shown twice---e.g., during the opening

or closing action scenes as well as in the body of the program---were

counted twice.

"Drink offer (rejected)"---applied only when a drink was offered

to a speaking actor and the actor rejected it.

"Drinking attempt (unsuccessful)"---was coded when a speaking

actor had the clear intention of having a drink, but was never shown in

the program as successfully getting the drink within arm's reach.

Example: If five speaking actors ordered drinks in a bar but the scene

ended or was interrupted before the drinks arrived, this category would

be coded 5.

"Dominant-social facilitation function"---This category was divided

into ten subcategories: "Romance/seduction," "Business discussions,"

"Parties/celebrations," "Fortification," "Escape/release," "Relaxation/
conversation," "Strength/toughness validation," "Dining," "Reward,"
and "Other." It can be noted that these subcategories do not meet the
usual measurement requirement of being mutually exclusive. A given
drinking incident, for example, could involve both a party and romance.
This problem was minimized, however, by applying the test: What was the one
dominant social theme at the time of the drinking incident?

"Dominant self-facilitation function"---applied when a speaking
actor was drinking alone, and consisted of seven subcategories: "Dining,"
"Relaxation," "Fortification," "Escape/release," "Strength/toughness
validation," "Reward," and "Other."

"Negative short-term consequences of drinking"---The first two
subcategories here were included because of this writer's interests
and the purposes of the study: "Intoxication (serious)" and "Intoxication
(comedy)." The next twelve subcategories were taken directly out of
The Third Special Report to the U.S. Congress on Alcohol and Health.[12]
In other words, these are incidents that the alcohol abuse specialists
believe to be frequently alcohol-related: "Motor vehicle accidents,"
"Industrial accidents," "Aviation accidents," "Drownings," "Fires and
burns," "Falls," "Robberies," "Rapes," "Assaults," "Homicides,"
"Suicides," and "Family abuse." It was also necessary to add an "Other"
subcategory.

"Negative long-term consequences of drinking"---These subcategories
were developed by the author: "Alcohol addiction," "Medical dysfunctions"
(e.g., liver cirrhosis), "Occupational dysfunctions" (e.g., losing one's

job due to drinking problems), "Family dysfunctions" (e.g., family

breakups), "Social dysfunctions" (e.g., disrupted social relationships

due to drinking problems), and "Other."

"Children's time" and "Adult time"---were arbitrarily defined as

8 to 9 p.m. and 9 to 11 p.m., respectively. Presumably the drop-off

in children's and teenage viewing is gradual during the evening.

Nevertheless, this arbitrary division at 9 p.m. makes it possible to

determine whether the networks were showing fewer drinking incidents

during the first hour of prime time, when the child and teenage audience

was undoubtedly higher, than during the last two hours.

Coding procedures. All coding was done independently, working

from color video tapes. The author served as the primary coder and

two graduate assistants served as check-coders. All of the programs

in a simple random sample of 21 of the 42 sampled evenings were coded

by all three coders for the purpose of obtaining inter-coder reliability

estimates. The proportion of agreement, checked on a category-by-category

basis, was .87. The same random sample of 21 evenings of programs was

also recoded by the primary coder for the purpose of obtaining intra-

coder reliability estimates. The time intervals between coding and

recoding ranged from 4 to 25 days, and the proportion of agreement

was .96.

Results

By coincidence, the 120 hours of programs happened to produce

exactly 120 programs as well. All statistics in the remainder of this

article are derived from these 120 programs.

Research Question 1 asked: How many drinking incidents were there in total, by male vs. female drinkers, and by type of drink? The answer is that there were 406 drinking incidents and 64 unsuccessful drinking attempts. The breakdown by sex was 293 male drinking incidents and 113 female drinking incidents. Another way to take an overall look at the data would be to ask how many programs were completely free from alcohol. The answer is that 43 programs (36%) contained no reference to alcohol by any of the speaking actors. On the other hand, there was not a single program dealing with alcohol abuse and treatment.

With regard to type of drink, hard liquor was clearly the drink of choice; 201 incidents involved hard liquor. Wine was second with 136, beer third with 68, and there was one incident where it was unclear what type of alcoholic beverage was involved. It is interesting to note that hard liquor, the one type of alcoholic beverage prohibited from being advertised on television, turned out the be the most frequent type of drink in the program content.

Research Question 2 asked: How many drinking incidents per hour were there in total, by network, and in children's vs. adult time? There were 3.38 drinking incidents per hour overall, and 3.92 per hour when the drinking attempts are included. The higher figure is probably more relevant from the standpoint of assessing the overall presence of alcohol in prime time television. The speaking actors in the "Drinking attempt (unsuccessful)" category did have the clear intention of having a drink but, due to circumstances beyond their control, did not receive

the drink while the camera was on them. Projecting this 3.92 figure to a full year of prime time television by the three networks would result in a total of 12,877 drinking incidents (3 networks X 3 hours per evening X 365 days per year X 3.92).

ABC showed the most alcohol consumption: 4.31 drinking incidents per hour and 4.86 incidents per hour when drinking attempts are included. NBC was second with 3.31 and 4.11 incidents per hour, respectively. CBS was clearly in third place with 2.52 and 2.81 incidents per hour.

There were 32.5 hours of programing in the children's time block and 74 hours of programing in the adult time block. Programs which overlapped the two time blocks were excluded from this particular analysis. There were 1.75 drinking incidents per hour in children's time and 4.26 incidents per hour in adult time. When unsuccessful drinking attempts are included, these figures increase to 2.25 and 4.88, respectively. Thus, it can be said that the networks are clearly presenting a world that involves less alcohol in the children's time block than in the adult time block.

Research Question 3 asked: What was the ratio of drinking incidents to drink refusals? Comparing the 406 drinking incidents to the 29 instances where a drink offer was turned down, the ratio is 14 to 1. However, in this case it is more logical to compare the total number of drinking incidents and drinking attempts (470) to the number of drink refusals, producing a ratio of 16.2 to 1. Thus, the almost 51 million adults who choose not to drink and the 13 million who should not drink because they are problem drinkers see from the world of

prime time television that it is _not_ the typical or normal social thing to reject a drink.

Research Question 4: What was the ratio of social drinking to drinking alone? Not surprisingly, due to the nature of social relations on television, drinking is primarily a social activity. There were 389 instances of social drinking and 17 instances of drinking alone, a ratio of 22.9 to 1.

Research Question 5: What were the most frequent categories of social (facilitation) functions of drinking? Table 1 shows that the most frequent type of social activity involving drinking is simply that of two or more people sitting or standing around relaxing and talking---i.e., doing nothing special. The second most frequent social use of alcohol was to facilitate a dining situation, and the third most frequent social use was to facilitate business discussions.

Research Question 6: What were the most frequent categories of self-facilitation functions of drinking? Relaxation was the most frequent self-facilitation function, with 7 incidents. Escape/release was second with 4 incidents, "Other" was third with 3 incidents, and none of the other categories had more than 1.

Research Question 7 asked: How many negative short-term consequences of drinking were presented? There were 30 negative short-term consequences of drinking presented in the 120 hours of programs. However, this figure is misleading, because 14 of the incidents were "Intoxication (comedy)" and not actually serious representations of the possible short-term effects of alcohol. This leaves 16 instances of negative

short-term consequences: "Intoxication (serious)" = 9, "Motor vehicle accident" = 4, "Assault" = 2, and "Other" = 1. The ratio of drinking incidents to negative short-term consequences was 25.4 to 1.

Research Question 8: What was the ratio of serious to comedy depictions of intoxication? Since there were 14 instances of "Intoxication (comedy)" and 9 instances of "Intoxication (serious)", the ratio was 1.6 to 1. Clearly, then, when intoxication is shown on prime time television, it is less likely to be presented as a serious personal or social problem. Instead, it is more often presented as a laughing matter or a joking matter.

Research Question 9: How many negative long-term consequences of drinking were presented? There were 4 negative long-term consequences presented in the 120 hours of programs. All 4 instances involved alcohol addiction. The ratio of drinking incidents to negative long-term consequences was 101.5 to 1.

Discussion

As was pointed out earlier, the NAB Television Code states that the use of liquor in program content shall be de-emphasized. However, the present study of an equivalent of two weeks of network prime time programing found 201 drinking incidents involving liquor in 120 hours of programing---an amount that would project to 5,502 during a full year of prime time programs. Thus, the success of the Television Code in de-emphasizing the use of liquor in program content is questionable.

The networks could respond, though, that all of the drinking they depicted was indeed "consistent with plot and character development," as permitted by the Television Code. However, employing this defense would in effect be acknowledging Section IV-10 of the Code to be a sham. The "consistent with plot and character development" clause has the effect of negating the de-emphasis clause.

A second major issue is the extent to which the networks are accurately reflecting the drinking that is going on in society or presenting a biased picture of drinking in America---the mirror versus model issue. According to The Third Special Report to the U.S. Congress on Alcohol and Health, approximately 35% of adults are abstainers, i.e., never drink alcohol,[13] and naturally the other 65% do not accept a drink every time offered. However, in the world of prime time television, drinks are seldom refused; the ratio was 14 to 1 in favor of drinking.

Another part of this mirror versus model issue has to do with the consequences of drinking presented by the networks. Nowhere in these 120 hours of programs would a viewer have learned that alcohol abuse is America's number one drug problem. Instead, viewers would see that negative short-term consequences are relatively rare, with a ratio of 25.4 drinking incidents for every 1 consequence of this type. In particular, the networks and affiliates are clearly not serving the public interest when they present more instances where intoxication is presented as a laughing matter than as a serious matter. If the networks were doing in reality what they claim to be doing---i.e., reflecting society as it is---then they would be showing that about one out of every ten adult

drinkers is a problem drinker.[14]

In conclusion, the world of prime time network programing is a world saturated with alcohol. The success of the Television Code in de-emphasizing the use of liquor in program content is questionable at best, and in several major respects the televison networks are _not_, as they are claiming, simply reflecting society as it is. Needless to say, considerable social research is needed in this area, especially studies attempting to measure the possible social effects of these alcohol consumption patterns and relative lack of consequences on prime time network television.

[1] National Institute on Alcohol Abuse and Alcoholism, _Third Special Report to the U.S. Congress on Alcohol and Health_ (Washington, DC: U.S. Government Printing Office, 1978), p. xi.

[2] George Comstock, statement to the Subcommittee on Alcoholism and Narcotics of the Senate Committee on Labor and Public Welfare, in _Media Images of Alcohol: The Effects of Advertising and Other Media on Alcohol Abuse_ (Washington, DC: U.S. Government Printing Office, 1976), p. 368.

[3] _Ibid._, p. 373.

[4] Gerhard J. Hanneman and William J. McEwen, "The Use and Abuse of Drugs: An Analysis of Mass Media Content," in Ronald Elroy Ostman (ed.), _Communication Research and Drug Education_ (Beverly Hills, CA: Sage, 1976), pp. 76-78. See also William J. McEwen and Gerhard J. Hanneman, "The Depiction of Drug Use in Television Programing," _Journal of Drug Education_, 4:291-293 (Fall 1974).

[5] Carlos F. Fernandez-Collado and Bradley S. Greenberg with Felipe Korzenny and Charles K. Atkin, "Sexual Intimacy and Drug Use in TV Series," _Journal of Communication_, 28:33 (Summer 1978).

[6] Nicholas Johnson, statement to the Subcommittee on Alcoholism and Narcotics of the Senate Committee on Labor and Public Welfare, in _Media Images of Alcohol_, op cit., p. 149.

[7] Thomas J. Swafford, statement to the Subcommittee on Alcoholism and Narcotics of the Senate Committee on Labor and Public Welfare, in _Media Images of Alcohol_, op. cit., p. 20, italics added.

8 NBC statement to the Subcommittee on Alcoholism and Narcotics
of the Senate Committee on Labor and Public Welfare, in Media Images of
Alcohol, op. cit., p. 295, italics added.

9 1979 Nielsen Report on Television (Northbrook, IL: A.C. Nielsen,
1979), p. 9.

10 Op. cit., p. xxii.

11 Copies of the detailed coding manual are available from the
author.

12 Op. cit., pp. 61-65.

13 Op. cit., p. 7.

14 Ibid., pp. xi, 7. This figure was derived by subtracting the
number of reported abstainers from the total number of adults, and then
dividing the number of problem drinkers into the number of drinkers.

Table 1

Social Facilitation Functions of Drinking

Type of function	Percentage*
Relaxation/conversation	24
Dining	22
Business discussions	19
Parties/celebrations	15
Romance/seduction	9
Escape/release	5
Fortification	2
Reward	1
Strength/toughness validation	0
Other	4
Total (N = 389)	101%

*All percentages rounded to nearest whole percent. Total does not equal 100% due to rounding error.