

Substance Use in Popular Prime-Time Television

Sponsored by

Office of National Drug Control Policy

and

Mediascope

Macro International, Inc.

Research conducted by

Peter G. Christenson, Ph.D.

Professor of Communication

Lewis and Clark College

Lisa Henriksen, Ph.D.

Research Associate

Stanford Center for Research in Disease Prevention

Donald F. Roberts, Ph.D.

Professor of Communication

Stanford University

with

Marcy Kelly, Mediascope: Project Director

Stephanie Carbone, Mediascope: Research Manager

Adele B. Wilson, Mediascope: Project Coordinator

January 2000

Substance Use in Popular Prime-Time Television

Table of Contents

SUBSTANCE USE IN POPULAR PRIME-TIME TELEVISION	I
TABLE OF CONTENTS	i
EXECUTIVE SUMMARY	1
TOP-TEEN VS. TOP-ADULT EPISODES	3
MAJOR CHARACTERS	3
CONCLUSIONS	3
<i>Illicit Drugs</i>	3
<i>Tobacco</i>	4
<i>Alcohol</i>	4
RATIONALE AND BACKGROUND	5
INTRODUCTION	5
<i>Substance Use Among American Youth</i>	6
<i>Television and Adolescents</i>	6
<i>Previous Research on Television Substance Portrayals</i>	7
METHODS	9
THE SAMPLE	9
CODING PROCEDURES	11
<i>Episodes</i>	12
<i>Major Characters</i>	13
<i>Screen Time</i>	13
<i>Commercials and Other Non-Program Content</i>	14
RESULTS	15
SUBSTANCE USE IN PROGRAM CONTENT	17
<i>Frequency of Substance Use</i>	19
<i>Context of Substance Use</i>	27
SUBSTANCE USE IN COMMERCIAL CONTENT	31
COMPARING TELEVISION AND MOVIES	35
REFERENCES	R-1
APPENDIX A: PRIME-TIME TELEVISION STUDY SAMPLE	A-1
APPENDIX B: ADOLESCENTS AND TELEVISION	B-1

Executive Summary

Although there is much speculation about whether television influences adolescent substance use, careful examination of television content is a crucial first step in determining what influence, if any, might be attributed to the medium. This study addresses a single research question: How are illicit drugs, tobacco, and alcohol portrayed in the most popular television series? Specifically, this study examined the frequency and nature of substance use portrayals in the top-rated, prime-time shows of the fall 1998-1999 season.

The study sample, based on Nielsen Media Research ratings, was comprised of four consecutive episodes from 42 top-rated situation comedies and dramas -- a total of 168 episodes. The sample included the 20 most popular shows among teenagers and among adults, as well as the 20 most popular shows among African-American teens, among Hispanic teens and among white teens.

Substances included in the study were illicit drugs, alcohol, tobacco, and over-the-counter and prescription medicines. Researchers examined what substances were used, by whom, how often, under what circumstances and with what consequences. The study considered whether television involved substance use as an important theme, contained pro- or anti-use behavior or statements, or conveyed limit-setting messages. Also examined was the extent to which substance use portrayals varied among television series with different parental advisory labels, as well as the frequency of substance references in television advertisements. Finally, researchers compared television depictions with those found in the 200 most popular movie rentals of 1996 and 1997, which were examined in last year's study, *Substance Use in Popular Movies and Music*.¹

Findings revealed that illicit drugs were mentioned or seen in 20 percent of all episodes, tobacco in 22 percent, and alcohol in 77 percent. Illicit drug use was shown in only six episodes overall (3 percent). Illicit drug use by major characters was seldom observed. More than one-third of the episodes (41 percent) that mentioned or showed illicit drugs contained at least one negative statement about them. Four of the six episodes that showed illicit drug use mentioned some kind of negative consequence.

Tobacco was used in 19 percent of episodes. No teenage characters were observed smoking. Almost one-fourth of the episodes that portrayed tobacco use (23 percent) expressed a negative statement

¹ Roberts, D.F., Henriksen, L., Christenson, P. (1999). *Substance Use in Popular Movies and Music*, Office of National Drug Control Policy, Mediascope.

about smoking; positive statements occurred in four episodes (13 percent). Negative consequences of smoking were mentioned or portrayed in only two of the episodes that portrayed tobacco use.

Alcohol was consumed in 71 percent of all episodes, including 65 percent of the top-teen episodes. Note that the term “top-teen episodes” refers to shows popular with teenagers, not necessarily produced for teenagers. Drinking by underage characters was rarely shown. Only 6 percent of the top-teen and 3 percent of top-adult episodes portrayed alcohol use by characters under 18. Just one of these was a major character. About one-third of all episodes were set in bars, nightclubs, or restaurants where alcohol was consumed. More episodes made drinking alcohol look like a positive experience (40 percent of episodes that portrayed alcohol use) than a negative experience (10 percent). Nearly half of the episodes (45 percent) that portrayed alcohol use associated it with humor. Negative consequences of alcohol use were either mentioned or shown in almost one-fourth (23 percent) of the episodes that portrayed alcohol use.

There were few differences in substance use portrayals among the shows most popular with different teenage ethnic groups. The frequency of illicit drug portrayals was roughly the same for episodes popular with African-American, Hispanic and white teens. However, episodes popular with African-American teens were less likely to mention and depict tobacco use, and episodes popular with white teens were somewhat more likely to contain dialogue referring to excessive drinking.

Commercials for alcoholic beverages appeared in only 9 percent of all episodes studied. However, alcohol use appeared in ads for other products, such as restaurants, credit cards and hotels: 59 percent of top-teen and 60 percent of top-adult episodes contained one or more ads of this sort. Alcohol also appeared in network spots promoting upcoming programs: 50 percent of top-teen and 63 percent of top-adult episodes included one or more promotional spots that portrayed alcohol use. Ads for prescription medicines appeared in 14 percent of all episodes. Anti-drug ads appeared in 16 percent of top-teen episodes, and anti-smoking ads appeared in 11 percent.

Comparing these results to our earlier study of movies, illicit drugs were substantially less likely to be portrayed in television series than in movies. When illicit drugs were referred to, television was more likely to associate them with anti-use statements and negative consequences, and less likely to link them to pro-use statements. Finally, young viewers were considerably less likely to see smoking on television than in movies, and somewhat less likely to see alcohol consumption.

Following are additional highlights from the study:

- Illicit drugs were used in 3 percent of all episodes, tobacco in 19 percent, and alcohol in 71 percent.
- Major characters were shown using illicit drugs in 2 percent of all episodes, tobacco in 11 percent, and alcohol in 56 percent.
- Humorous references to substances were commonplace, occurring in at least half of all episodes (49 percent). Alcohol was joked about most often -- in 35 percent of all episodes. About 10 percent of episodes made humorous references to either illicit drugs or tobacco.

- Negative statements about substance use (advocating abstinence or criticizing drinking, smoking, or drug use) occurred in 14 percent of all episodes.
- About one-fourth of all episodes (26 percent) portrayed at least one negative consequence of substance use.

Top-Teen vs. Top-Adult Episodes

- Illicit drugs were mentioned in 21 percent of top-teen episodes and 20 percent of top-adult episodes.
- Alcohol use was portrayed in more episodes popular with adults (81 percent) than with teens (65 percent).
- Major characters consumed alcohol in 53 percent of top-teen and 70 percent of top-adult episodes.
- Twenty percent of top-teen and 23 percent of top-adult episodes portrayed tobacco use.

Major Characters

- Only three major characters were shown using illicit drugs. One teen and one adult male used marijuana. One female teen consumed a drink that someone else had drugged.
- None of the major characters under 18 smoked cigarettes, only one drank alcohol, and 75 percent drank non-alcoholic beverages.
- None of the major characters attempted to quit drinking or smoking on screen. Two adults described themselves as former alcoholics; none described themselves as having quit or having tried to quit using illicit drugs or tobacco.

Conclusions

Illicit Drugs

Illicit drugs were infrequently mentioned and rarely shown in prime time television. In the few episodes that portrayed illicit drug use, nearly all showed negative consequences. Typically, major characters were not shown using illicit drugs or communicating pro-use statements. However, a number of humorous references to illicit drugs occurred.

Overall, teen viewers were exposed to very little illicit drug use and, what little there was, did not glamorize drugs.

Tobacco

One in five episodes (19 percent) portrayed tobacco use. No characters under the age of 18 were shown using tobacco. Eight percent of adult major characters used tobacco. Twenty-three percent of episodes that showed tobacco use expressed negative statements about smoking.

Overall, teen viewers were exposed to relatively little tobacco use. These episodes avoided underage tobacco use and presented adult use to a limited extent.

Alcohol

A significant number of episodes (71 percent) showed alcohol use. With one exception, no drinking by underage characters was portrayed. However, a large proportion of adult major characters (66 percent) drank alcohol onscreen. Nearly half of the episodes that showed alcohol use associated it with humor. Of the episodes that portrayed alcohol use, negative consequences were shown in 23 percent and refusal to use in 1 percent.

On the whole, teen viewers were exposed to high levels of alcohol use. More episodes made drinking alcohol look like a positive experience (40 percent) than a negative experience (10 percent).

Rationale and Background

Introduction

There is ample evidence that exposure to mass media messages influences young viewers' attitudes and values in a number of domains.^{2,3,4} There is also concern that media portrayals may influence young people's attitudes and behavior toward substance use.⁵ Of all the media commanding the attention of American adolescents, television probably has the greatest potential for exerting such influence. What messages does television make available to young people about alcohol, tobacco and illicit drugs? The major aim of this study is to provide a systematic, detailed picture of substance use as portrayed in the television shows most popular among adolescents and adults.

Documenting the frequency and nature of substance use portrayals is a necessary first step in exploring television's role in forming young people's substance use attitudes and behavior. The ultimate effects of any media information, whether from television, popular music, motion pictures or any other medium, depend on a variety of factors. These include individual differences in interpretation, the influence of competing information from parents or peers, and variations in social and cultural background. Examining media messages is essential to understanding the myriad processes that determine whether a young person will engage in alcohol, tobacco or illicit drug use. If substance use is depicted frequently and positively in the television shows young people watch, then it makes sense to raise questions about the role of these depictions in encouraging substance use. If, on the other hand, substance use is portrayed rarely and negatively, then it makes little sense to attribute adolescents' substance use to the effects of television. Indeed, if substance use is presented as dangerous, unglamorous, or socially unacceptable, then television's role may be *positive*, its messages working to discourage, rather than encourage, use.

² Comstock, G., with Paik, H. (1991). *Television and the American Child*. San Diego, CA: Academic Press.

³ Christenson, P. G., & Roberts, D. F. (1998). *It's not only rock & roll: Popular music in the lives of adolescents*. New Jersey: Hampton Press, Inc.

⁴ Roberts, D.F. (1993). Adolescents and the mass media: From "Leave It to Beaver" to "Beverly Hills, 90210." *Teachers College Record*, 94 (3), 629-643.

⁵ Strasburger, V. (1995) *Adolescents and the mass media: Medical and psychological impact*. Thousand Oaks, CA: Sage.

It is also important to recognize that adolescents watch different shows than adults, and that different groups of adolescents have distinct viewing patterns. Hence, this study compares the top-rated shows for adolescents with the top-rated shows among adults. In addition, the favorite shows among three sub-groups of adolescents — African Americans, Hispanics and whites — are also compared. This is the first study of substance portrayals to contrast these samples.

Substance Use Among American Youth

The U.S. faces problematic rates of illicit drug, alcohol and tobacco use among youth. In 1999, 55 percent of high school seniors reported having used an illegal drug at least once, as did 46 percent of tenth and 28 percent of eighth graders.⁶ Among adolescents ages 12 to 17, the average ages of first use of marijuana, cocaine, and heroin were 14, 15 and 14 years, respectively.⁷ Youth tobacco smoking rates are higher now than at any time in the past 17 years. Two-thirds of U.S. high school students have tried cigarettes and more than one-third currently smoke.⁸ Every day another 3,000 American children and teenagers become regular smokers.⁹

Alcohol consumption among adolescents remains at high levels. Eighty percent of U.S. high school students have tried alcohol and 51 percent of students are current drinkers;¹⁰ in 1997, more than 31 percent of 12th graders, 25 percent of 10th graders, and 14 percent of 8th graders claimed to have consumed five or more alcoholic drinks in the preceding two weeks.¹¹ Perhaps most disturbing, among 12- to 17-year-olds who exhibit no other problem behaviors, those who have used marijuana, alcohol, or cigarettes in the past month are 17 times more likely to later consume drugs such as cocaine, heroin or LSD than those who have not used marijuana, alcohol or cigarettes.¹²

Television and Adolescents

American adolescents spend a good deal of time using mass media, and television is the medium they use most. A national study of childhood and adolescent media use sponsored by the Kaiser Family

⁶ Johnston, L.D., O'Malley, P.M., & Bachman, J.G. (1999). *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1998 Volume I: Secondary School Students*. Rockville, MD: U.S. Department of Health and Human Services, National Institute on Drug Abuse.

⁷ National Household Survey on Drug Abuse. (1997). Rockville, MD: Office of Applied Studies, Substance Abuse and Mental Health Services Administration.

⁸ Ozer, E. M., Brindis, C. D., Millstein, S. G., Knopf, D. K., & Irwin, C. E., Jr. (1997). *America's Adolescents: Are they Healthy?* San Francisco, CA: University of California at San Francisco, National Adolescent Health Information Center.

⁹ The National Center on Addiction and Substance Abuse at Columbia University 1995 Annual Report. (1996). New York: Columbia University, National Center on Addiction and Substance Abuse at Columbia University.

¹⁰ Youth Risk Behavior Surveillance: United States, 1997. (1998). Atlanta, GA: Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, MMWR 47(SS-3).

¹¹ Johnston, L. D., O'Malley, P. M., & Bachman, J. G., op cit.

¹² *Substance Abuse and the American Adolescent: A Report by the Commission on Substance Abuse Among America's Adolescents*. (1997). New York: National Center on Addiction and Substance Abuse at Columbia University.

Foundation reported that young people ages 8 to 18 years spend more than three hours a day watching television. This is about three times the time expenditure for radio, the closest competitor in the study. Viewing hours and preferences differed significantly by ethnicity. African Americans watched the most, just over 4 hours and 40 minutes per day. Hispanic youth averaged 3 hours and 50 minutes, and white youth watched just under 3 hours. Situation comedy and drama were the most popular types of programs for all three groups, but whites were disproportionately attracted to drama compared to the other two groups.¹³

Perhaps no other question in communication research has been studied more than the impact of television on children and adolescents. Although there may be disagreement on the size of the influence and whether it is, on balance, positive or negative, there can be no serious doubt that television plays a role in the process of socialization.^{14,15,16} Furthermore, evidence is mounting that increased television viewing is a risk factor for the onset of alcohol use in adolescents.^{17,18,19}

Previous Research on Television Substance Portrayals

The majority of the systematic analyses of substance use portrayals on television have focused on alcohol. While these reports are difficult to compare due to inconsistencies in methods and measurements, they do establish that references to alcohol use—either visual, verbal, or both—occur several times during an average hour of prime-time television programming. The group of studies that provide the most reliable historical comparisons suggest a trend toward more frequent alcohol portrayals in the late 1970s and early 1980s, followed by an apparent decline in these portrayals between 1984 and 1986. Even in the 1986 programming, however, over three-fourths of prime-time drama episodes had references to alcohol, and portrayals of actual consumption appeared in about half.²⁰ More recent studies confirm that the depiction of alcohol use is a regular occurrence on television.²¹

¹³ Roberts, D.F., Foehr, U.G., Rideout, V.J., & Brodie, M. (1999). *Kids and Media at the New Millennium: Executive Summary*. Menlo Park, CA: The Henry J. Kaiser Family Foundation.

¹⁴ Comstock with Paik, op. cit.

¹⁵ Roberts, 1993, op. cit.

¹⁶ Strasburger, V. (1995) *Adolescents and the mass media: Medical and psychological impact*. Thousand Oaks, CA: Sage.

¹⁷ Kotch, J.B., Coulter, M.L., & Lipsitz, A. (1986). Does televised drinking influence children's attitudes toward alcohol? *Addictive Behaviors*, 11(1), 67-70.

¹⁸ Robinson, T.N., Chen, H.L., & Killen, J.D. (1998). Television and music video exposure and risk of adolescent alcohol use. *Pediatrics*, 102, 1-6.

¹⁹ Rychtarik, R.G., Fairbank, J.A., Allen, C.M., Fox, D.W., & Drabman, R.S. (1993). Alcohol use in television programming: Effects on children's behavior. *Addictive Behaviors*, 8(1), 19-22.

²⁰ Wallack, L., Grube, J.W., Madden, P.A., and Breed, W. (1990) Portrayals of alcohol on prime-time television. *Journal of Studies on Alcohol*, 51(5), pp. 428-437

²¹ Mathios, A., Avery, R., Biscogni, C., and Shanahan, J. (1998). Alcohol portrayal on prime-time television: Manifest and latent messages. *Journal of Studies on Alcohol*, 59, pp. 305-310.

Equally important as the frequency of alcohol portrayals is the *nature* of those portrayals. Here the research suggests that alcohol consumption usually appears on television as a background activity. That is, characters drink or talk about drinking in the context of other activities, without the attachment of any direct message, either pro or con, about alcohol consumption. Drinking, according to the existing research, has generally been presented as a routine, problem-free activity. Those who drink on television are more likely to be central characters, more attractive, and of higher status than those who do not drink. References to the negative consequences of drinking are rare.^{22,23,24}

Only a few studies have looked at tobacco portrayals. In studies using comparable measures, smoking has appeared about one-tenth as often as alcohol. The research shows a sharp decline in tobacco use on television from the 1950s through the early 1980s, followed by a small increase through the early 1990s. As with alcohol, smoking is more often associated with important, positive characters than peripheral, negative characters.^{25,26}

Only two studies of illicit drug portrayals, both published in the 1970s, were found. At that time, illicit drug references of any kind — verbal or visual — were quite rare, occurring only once in every five hours of prime-time programming.²⁷

²² Mathios, op. cit.

²³ Signorelli, N. (1987). Drinking, sex and violence on television: The cultural indicators perspective. *Journal of Drug Education*, 17(3), 245-60.

²⁴ Wallack, L., Grube, J.W., Madden, P.A., and Breed, W. (1990) Portrayals of alcohol on prime-time television. *Journal of Studies on Alcohol*, 51(5), pp. 428-437.

²⁵ Cruz, J., & Wallack, L. (1986). Trends in tobacco use on television. *American Journal of Public Health*, 76(6), 698-699.

²⁶ Hazan, A. R., & Glantz, S.A. (1995). Current trends in tobacco use on prime-time fictional television. *American Journal of Public Health*, 85(1), 116-117.

²⁷ Fernandez-Collado, C.F., Greenberg, B.S., Korzenny, F., & Atkin, C. K. (1978). Sexual intimacy and drug use in TV series. *Journal of Communication*, 28(3), 31-37.

Methods

The Sample

Although there is much speculation about whether television influences adolescent substance use, careful examination of television content is a crucial first step in determining what influence, if any, might be attributed to the medium. This study addresses a single research question: How are illicit drugs, tobacco, and alcohol portrayed in the most popular television series? Specifically, this study examined the frequency and nature of substance use portrayals in the top-rated, prime-time shows of the fall 1998-1999 season. The study sample, based on Nielsen Media Research ratings, was comprised of four consecutive episodes from 42 top-rated situation comedies and dramas – a total of 168 episodes. Thus, the sample compares substance use portrayals in top-rated shows among teens versus adults, and among white, African-American, and Hispanic teens.

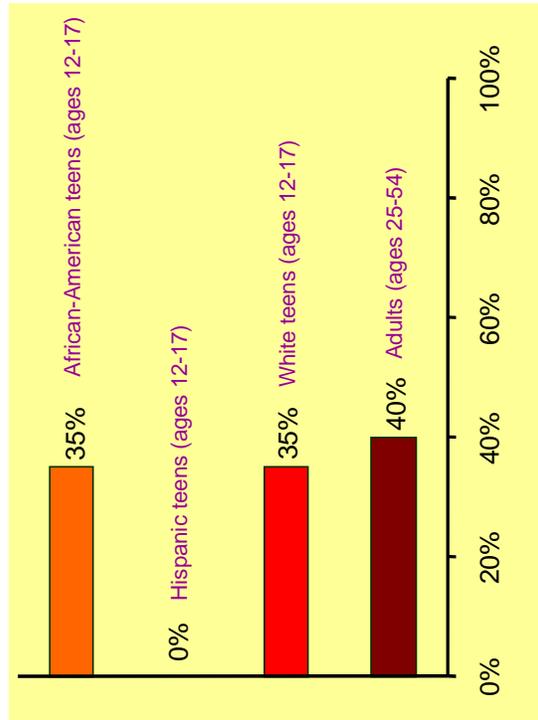
Nielsen Media Research provided television ratings for prime-time viewing by five audience groups: African-American teens (ages 12-17); Hispanic teens (ages 12-17); white teens (ages 12-17); all teens (ages 12-17); and all adults (ages 25-54). Rank-ordered lists of the Nielsen ratings for the period during which shows were taped identified the most popular shows for each audience segment. Programs other than situation comedies and serial dramas were removed from the lists until the top-20 programs within these genres were identified for each audience group. Excluded from the sample were movies (e.g., "Wonderful World of Disney"), sports events (e.g., "FOX NFL Football"), newsmagazines (e.g., "60 Minutes"), and non-fiction or "reality TV" programs (e.g., "World's Wildest Police Videos"). Such shows were excluded to avoid making inferences about substance portrayals in programs with non-comparable formats, such as non-fiction versus fiction, 2-hour movies versus 30-minute sitcoms, real people versus fictional characters. This selection procedure eliminated 9 of the highest-rated programs for African-American teens, 4 for Hispanic teens, 3 for white teens, 4 for teens as a whole, and 1 for adults. (See Appendix A.)

Due to overlapping preferences between subgroups, a total of 42 shows was sufficient to fill out the various top-twenty lists. Thus, the complete sample consists of four consecutive episodes from each of these series broadcast during the fall premiere season, October - December, 1998. Cable shows

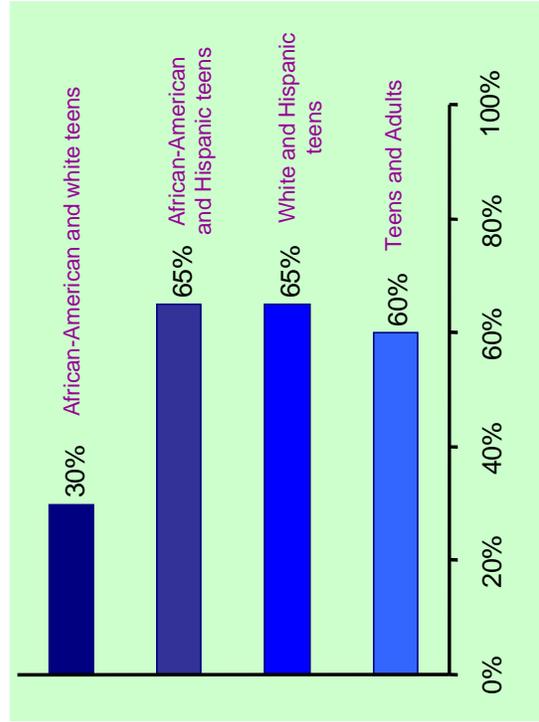
Figure 1

To what extent do multiple audiences watch the same or different programs?

Percent of top-rated shows that are UNIQUE favorites among:



Percent of top-rated shows that are SHARED preferences among:



Percentages based on the 20 top-rated shows for each audience.
Thirty-four shows accounted for the top-20 preferences among the three teen audiences.

were not included because no comedy or drama programs on cable drew a teen audience as large as or larger than the teen audiences of broadcast shows. The sample includes 13 one-hour dramas and 29 half-hour situation comedies — a total of 168 program episodes. Appendix A identifies the title, network, and broadcast time for each series. In particular, we examined substance use references and portrayals in four consecutive episodes of:

- the 20 most popular shows among adults
- the 20 most popular shows among teens
- the 20 most popular shows among African-American teens, among Hispanic teens and among white teens
- the 42 shows that appeared in *any* top-twenty list

Figure 1 compares the unique and shared program preferences for each audience group. According to the Nielsen ratings, African-American, Hispanic and white teens watched many of the same prime-time series. Thirty-four shows accounted for the top-20 preferences among the three teen audiences:

- 6 appeared on all 3 lists
- 7 appeared on both the white and Hispanic lists
- 7 appeared on both the Hispanic and African-American lists
- 7 appeared only on the African-American list
- 7 appeared only on the white list
- no shows appeared only on the Hispanic list

As shown in Figure 1, the top-20 shows among Hispanic teens were a combination of what white and African-American audiences also watched. Teen and adult viewing preferences also overlapped: 9 shows appeared in both the top-20 lists for viewers ages 12-17 and ages 25-54.

Coding Procedures

Content analyses are fundamentally concerned with counting and describing particular features of mass media content. In this study, specially trained coders examined the episodes for any visual or verbal content related to:

- Illicit drugs (controlled substances, such as marijuana, cocaine, heroin, LSD, etc.)
- Alcohol (beer, wine, champagne, hard liquor and mixed drinks)

- Tobacco (cigarettes, cigars, chewing tobacco)
- Over-the-counter medicines (legally purchased, such as aspirin, diet pills, antacids, laxatives, cough and cold serums, nicotine gum/patches)
- Prescription medication (self-administered prescription medicines, such as sleeping pills, muscle relaxants, anti-depressants, pain relievers)
- For comparison purposes, use of non-alcoholic beverages was also examined

A distinction was made between *substance use: visual* portrayals of actual consumption or implied consumption; and *substance references*: any time illicit drugs, alcohol, or tobacco were *either seen or mentioned*. Thus, the latter category is broader, including both visual portrayals and conversational references to substances.

The coding procedures pertained to four units of analysis: episodes, major characters, screen time and commercials.

Episodes

For each episode, coders paid special attention to a number of factors relevant to the *context* of substance references. These included:

- the settings in which use occurred (bar, restaurant, party, and so on)
- substance use by major versus minor characters
- whether substance use constituted a major theme or sub-plot
- the parental advisory assigned to each episode (TVG, TVPG, TV14)
- humorous references to substances
- any negative consequences attached to substance use, such as loss of friends, health effects, difficulty in keeping or getting a job, impaired functioning
- negative or critical statements concerning substance use (anti-use statements)
- positive or advocacy statements concerning substance use, such as expressions of desire or longing, or positive attributes of substances and their use (pro-use statements)
- references to intoxication, alcoholism or addiction
- attempts to quit use
- characterizations or portrayals of substance use as positive or negative, such as relaxation, social acceptance, having fun, escaping problems

These coding procedures yielded data describing each of the 168 episodes (i.e., 4 episodes each of 42 shows) in all-or-nothing terms, indicating whether a given episode mentioned or portrayed use, contained a humorous reference, described negative consequences, and so on. Results are reported in percentage terms based on all episodes in a given list of shows. For instance, we will report the percentage of all episodes popular with teens referring to or showing substance use, and compare that to the percentage of substance use references or portrayals in episodes popular with adults. Similarly, we will compare the percentages of episodes mentioning or showing substance use in episodes popular with African-American youth, with Hispanic youth, and with white youth.

Major Characters

Additional analyses were made of the substance-related behavior and statements of ongoing *major characters* in the shows. A major character was defined as anyone who appeared or was credited in a show's opening or title sequence. A total population of 270 major characters over the 42 series was identified. Information about this population is reported in terms of the proportion of characters who engaged in substance use in all 168 episodes and in the different lists of favorites. The gender, age and ethnic group for each character was identified. For comparison purposes, major character consumption of non-alcoholic beverages was also noted.

Screen Time

The mere appearance of drinking or of alcoholic beverage containers is an imprecise measure of the true salience or centrality of alcohol in a program. Accordingly, two measures of the amount of screen time taken up with alcohol portrayals were created.

Major character drinking time. Using a stopwatch, coders calculated the total time major characters were shown actually drinking or appeared with a container (glass, pitcher, bottle, cup, etc.) from which the character was presumed to be drinking an alcoholic beverage. The stopwatch was stopped whenever alcohol was off screen, as during a close-up of the actor's face. Thus, this was a conservative measure of the prominence of alcohol in a program. A similar measure of screen time for major characters consuming *non-alcoholic* beverages was taken for comparison purposes.

Alcohol venue time. Viewers may be aware of the presence of substance use or assume its presence even when it is briefly off-screen. Thus, a measure was also taken of the total amount of time spent in locations or engaged in activities typically associated with drinking – in bars, taverns, restaurants, and at parties, wedding receptions, celebrations, and so on. When these venues were encountered, the stopwatch began and kept going as long as the action continued at that venue, even if the alcohol was temporarily off-screen. In other words, timing continued as long as it was reasonable to assume that drinking was still occurring. Only those venues in which drinking was depicted by at least one character were timed. Thus, a teen party with no alcohol consumption shown would not be timed.

Commercials and Other Non-Program Content

Although the major focus of this study was program content, we were also interested in knowing what messages relating to substance use appeared in the non-program content surrounding each episode. Accordingly, coders noted the frequency of:

- ads for alcohol and, for comparison, non-alcoholic beverages
- ads for prescription and over-the-counter medicines
- references and appearances of alcohol and other substances in other product ads and network spots promoting upcoming programs
- ads with an anti-substance message, such as anti-drug and anti-smoking ads.

Results

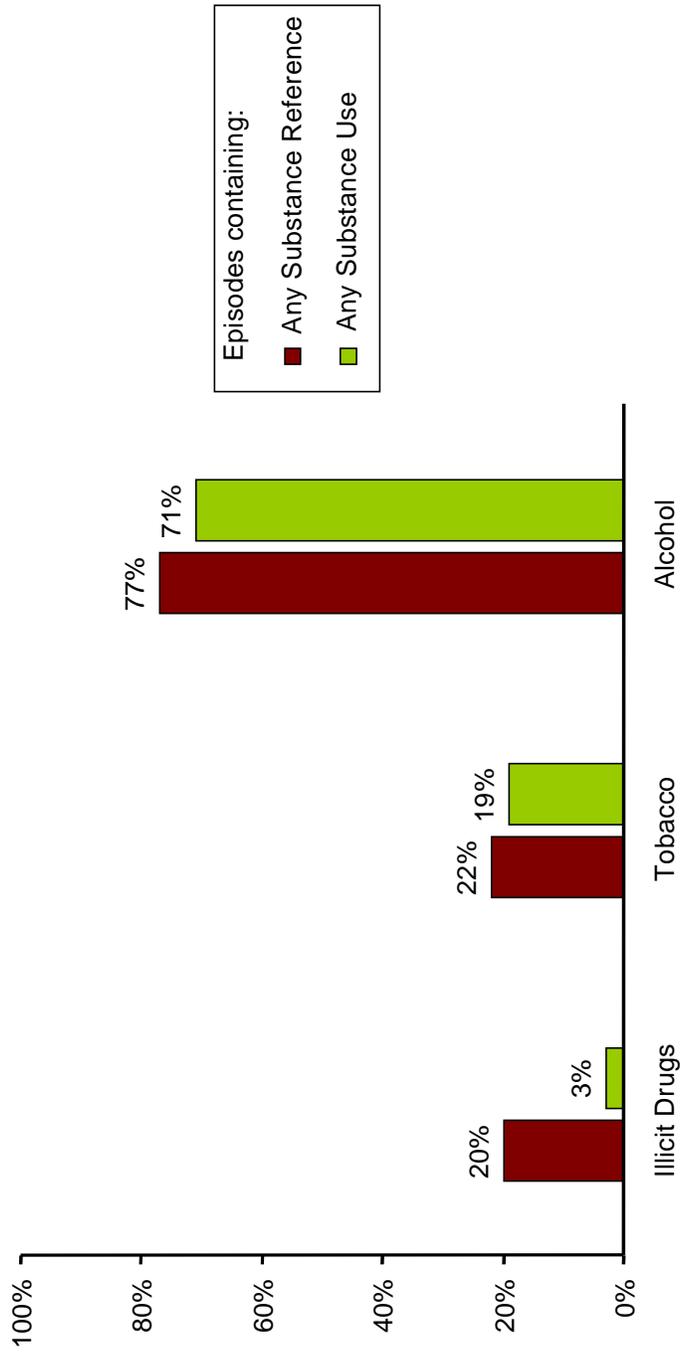
This report describes the frequency and nature of alcohol, tobacco and illicit drug portrayals in the most popular prime-time television series from the fall 1998-1999 season. Four consecutive episodes from each situation comedy and drama were analyzed. Key questions in this study were: How often are illicit drugs, tobacco, and alcohol depicted in programs that are popular with different ethnic and age groups? Who uses substances and in what context? How and how often are negative consequences of substance use portrayed?

Two terms in the findings require brief definitions. *Substance use* refers to visual portrayals of actual consumption or implied consumption, such as a character's ordering a drink or being seated at a restaurant table with a full glass of wine. *Substance reference* was noted when illicit drugs, tobacco or alcohol were seen, used or verbally mentioned. Thus, this broader category included all instances of substance use (explicit or implicit), as well as conversational references to substances or substance use.

The sample is comprised of four consecutive episodes of each of 42 top-rated prime-time series. An *episode* is one weekly installment of a situation comedy or drama. The term *show* is used to distinguish an entire series from a single episode of a series. Thirty of the 42 shows represented in the sample were comedies. Of the 168 episodes, 19 percent were labeled TVG, 59 percent were labeled TVPG, and 22 percent were labeled TV14.

Unless otherwise noted, the statistics in this report describe the proportion of episodes that contain some element of interest. Text and figures indicate whether findings pertain to: (a) all 168 episodes; (b) a subset of 80 episodes that were popular with different audiences, such as four episodes each of the top-20 shows among African-American teens, Hispanic teens, white teens, or adults (ages 25-54); (c) a subset of episodes in which substances were mentioned or used; or (d) all major characters, identified by credit or appearance in a show's title sequence or opening. Note that the term "top-teen episodes" refers to shows popular with teenagers, not necessarily produced for teenagers.

Figure 2
What proportion of episodes refer to substances or show substance use?



Percentages based on all 168 episodes.

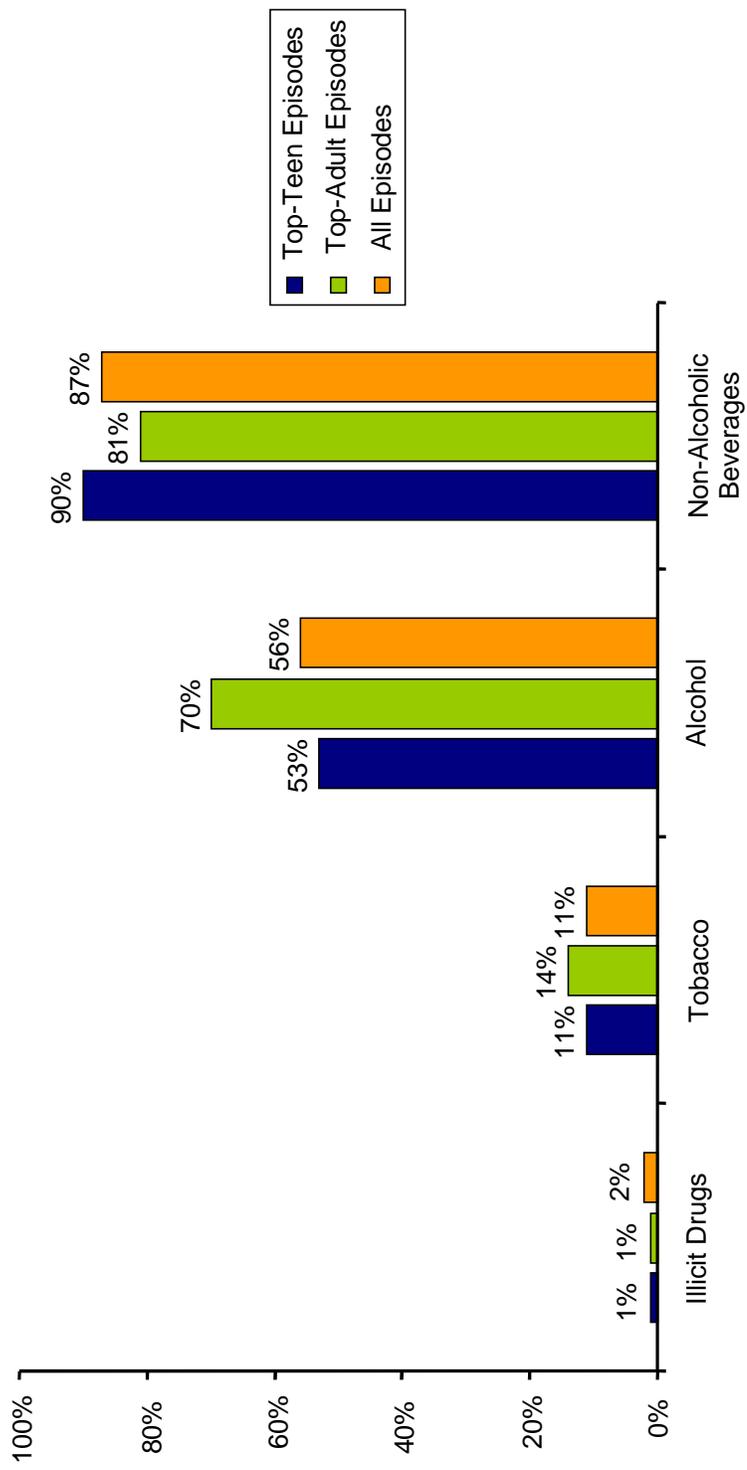
Substance Use in Program Content

A. *How do top-rated prime-time television programs depict substance use?*

Percentages are based on all 168 episodes.

1. Illicit drugs were referenced (mentioned or shown) in 20 percent of all episodes, tobacco in 22 percent, alcohol in 77 percent. (Figure 2)
2. Illicit drugs were used in only 3 percent of all episodes, tobacco in 19 percent, alcohol in 71 percent. (Figure 2)
3. Both situation comedies and dramatic shows occasionally take on substance use as a major theme or subplot. Substance use constituted an important theme in 15 percent of all episodes.
4. Major characters were shown using illicit drugs in 2 percent of all episodes, tobacco in 11 percent, and alcohol in 56 percent. (Figure 3)
5. About one-third (34 percent) of all episodes were set in bars, nightclubs, or restaurants – venues in which alcohol is typically consumed.
6. Eleven percent of episodes referred to substance use by characters who appeared to be under 21. Only 4 percent of episodes showed any substance use by underage characters. These young characters primarily consumed alcohol. Tobacco use by teenage characters was never portrayed. A teenager knowingly used illicit drugs in only one episode. In addition, illicit drug use by teenage characters was implied or mentioned in 3 episodes.
7. Humorous references to substances were commonplace, occurring in at least half of all episodes (49 percent). Alcohol was joked about most often – in 35 percent of episodes. About 10 percent of episodes made humorous references to illicit drugs, tobacco, prescription or other medicines.
8. One or more characters appeared to be intoxicated in 14 percent of all episodes; references to getting or being intoxicated occurred in 16 percent of all episodes.
9. Negative statements about substance use (advocating abstinence or criticizing drinking, smoking, or drug use) occurred in 14 percent of all episodes.
10. About one-fourth of all episodes (26 percent) portrayed at least one negative consequence of substance use.

Figure 3
What proportion of episodes portray substance use by one or more major characters?



Percentages based on 80 top-teen episodes, 80 top-adult episodes, or all 168 episodes.

B. How does the frequency of substance use differ between episodes labeled TVG, TVPG, and TV14?

Percentages are based on 32 TVG, 99 TVPG, and 37 TV14 episodes, regardless of popularity with teens, adults, or both.

11. Illicit drugs were referenced in 9 percent of episodes labeled TVG, 16 percent of those labeled TVPG, and 35 percent of those labeled TV14.
12. All episodes that portrayed illicit drug use received a restrictive label (TVPG or TV14). Illicit drugs were used in 5 percent of episodes labeled TVPG, in 1 episode labeled TV14, and in no episodes with a TVG label. (Figure 4)
13. Tobacco use was portrayed in 6 percent of TVG, 20 percent of TVPG, and 24 percent of TV14 episodes. (Figure 4)
14. Alcohol use was portrayed in 38 percent of TVG, 77 percent of TVPG, and 84 percent of TV14 episodes. (Figure 4)

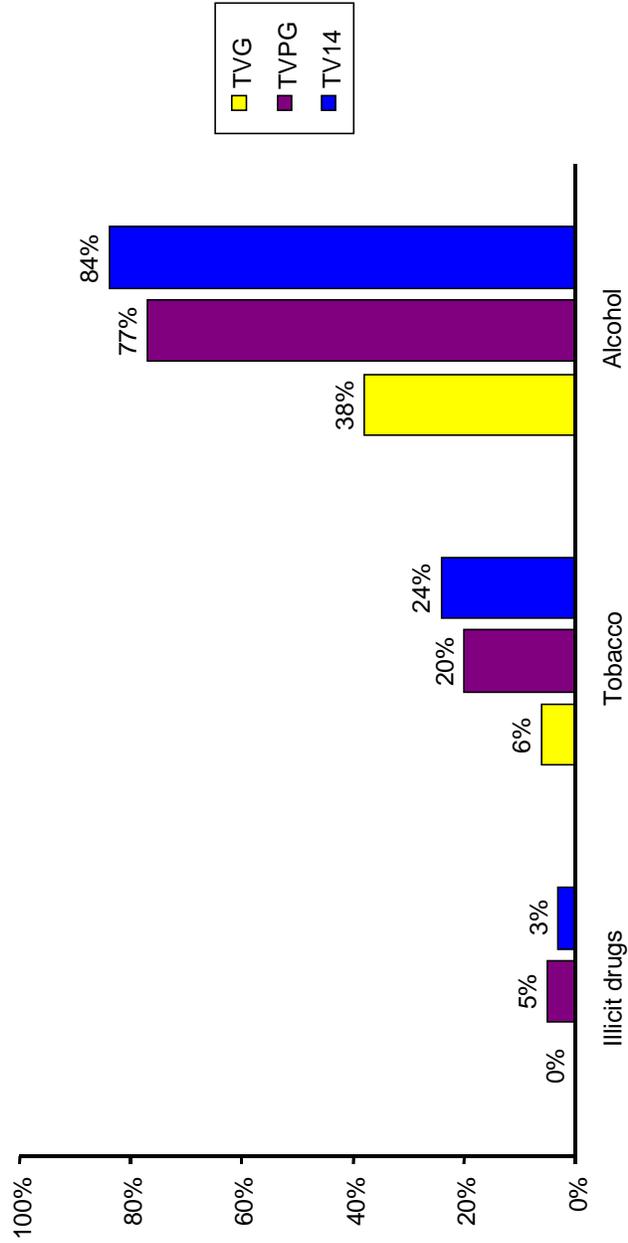
Frequency of Substance Use

C. How does the frequency of substance references differ in top-rated episodes among teens versus adults?

Percentages are based on 80 episodes popular with audiences ages 12-17 (top-teen episodes) and 80 episodes popular with audiences ages 25-54 (top-adult episodes).

15. Illicit drugs were mentioned in 21 percent of top-teen episodes and 20 percent of top-adult episodes; three of the top-rated teen and adult episodes portrayed illicit drug use.
16. Tobacco was mentioned in more episodes popular with adults (29 percent) than with teens (23 percent).
17. Twenty percent of top-teen and 23 percent of top-adult episodes portrayed tobacco use.
18. One or more major characters used tobacco in 11 percent of top-teen and 14 percent of top-adult episodes. (Figure 3)
19. Alcohol was mentioned in almost all top-adult episodes (90 percent) and in three-fourths (73 percent) of top-teen episodes.
20. Alcohol use was portrayed in more episodes popular with adults (81 percent) than with teens (65 percent).

Figure 4
What proportion of TVG, TVPG, and TV14 episodes
portray substance use?



Percentages based on 32 TVG episodes, 99 TVPG episodes, 37 TV14 episodes.

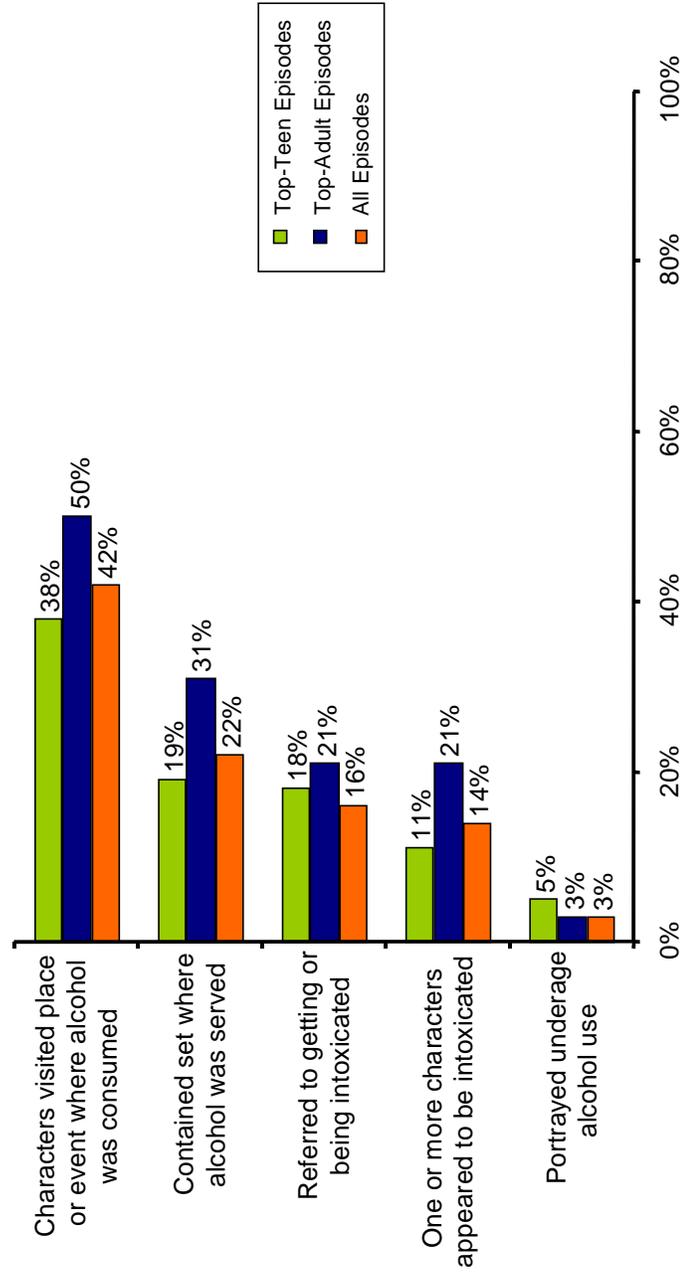
21. Major characters consumed alcohol in 53 percent of top-teen and 70 percent of top-adult episodes. They consumed non-alcoholic beverages in 90 percent of top-teen and 81 percent of top-adult episodes. (Figure 3)
22. Places and events where alcohol was served were a popular backdrop for much of the action and dialogue in top-rated teen and adult episodes. Characters drank alcohol at bars, restaurants or parties in 38 percent of top-teen episodes and in 50 percent of top-adult episodes. (Figure 5)
23. Bars, nightclubs, or restaurants where alcohol was served were permanent sets in 19 percent of top-teen episodes and 31 percent of top-adult episodes. For example, sets like the After Dark nightclub on “Beverly Hills, 90210” and the Moscow Tavern on “Drew Carey” served as central, frequent meeting places for characters. (Figure 5)
24. References to getting or being intoxicated were mentioned in 18 percent of top-teen episodes and 21 percent of top-adult episodes. (Figure 5)
25. One or more characters appeared to be intoxicated in 11 percent of top-teen episodes and 21 percent of top-adult episodes. (Figure 5)
26. Drinking by underage characters was rarely portrayed. Only 6 percent of the top-teen and 3 percent of top-adult episodes portrayed alcohol use by anyone who appeared to be under 21. (Figure 5)

D. How does the frequency of substance references differ in top-rated episodes among various teen audiences?

Percentages are based on 80 episodes most popular with African-American teens, 80 with Hispanic teens, and 80 with white teens, ages 12-17.

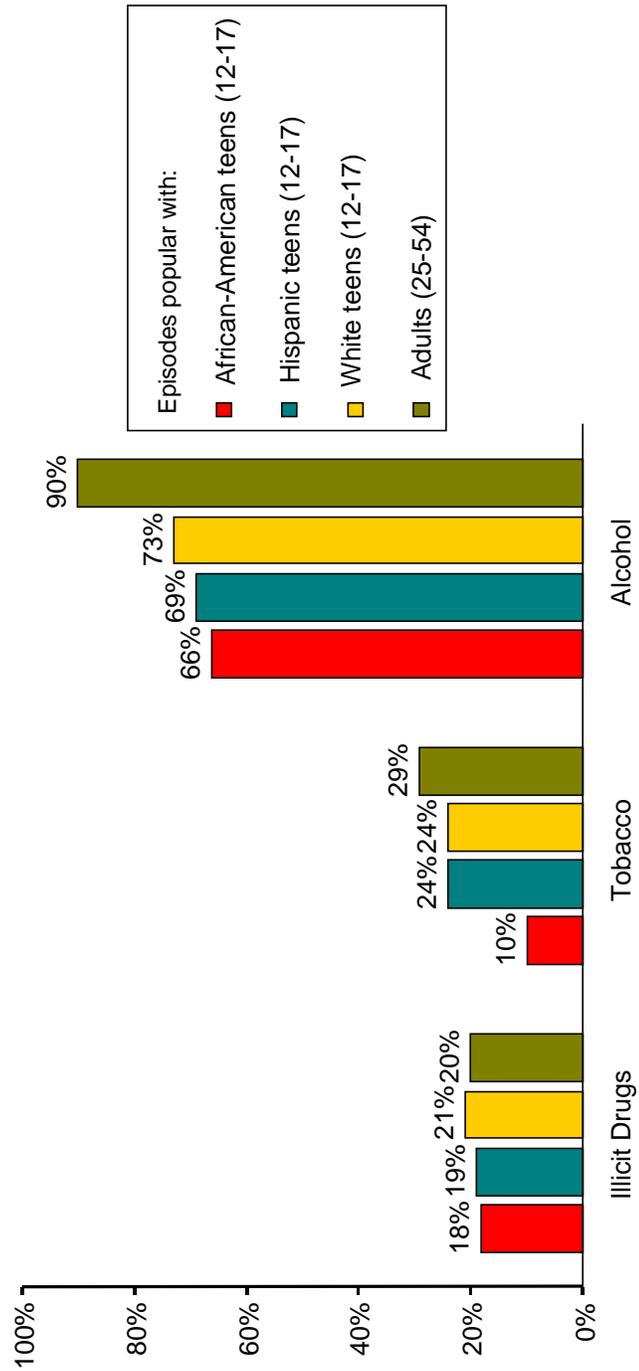
27. The frequency of illicit drug references was roughly the same for episodes most popular with African-American, Hispanic and white teens. About one-fifth of the top-rated episodes for each group contained at least one reference to illicit drugs. (Figure 6)
28. Three of the 80 top-rated episodes for African-American, Hispanic and white teens portrayed illicit drug use.
29. Episodes most popular with African-American teens were less likely than other episodes to mention and depict tobacco use. Characters used tobacco in 9 percent of episodes most popular with African-American teens, 23 percent of episodes most popular with Hispanic teens, and 20 percent of episodes most popular with white teens. (Figure 7)
30. Sixty-six percent of episodes most popular with African-American teens, 69 percent of episodes most popular with Hispanic teens, and 73 percent of episodes most popular with white teens contained at least one reference to alcohol. (Figure 6)

Figure 5
What are the characteristics of alcohol portrayals in top-rated teen and adult episodes?



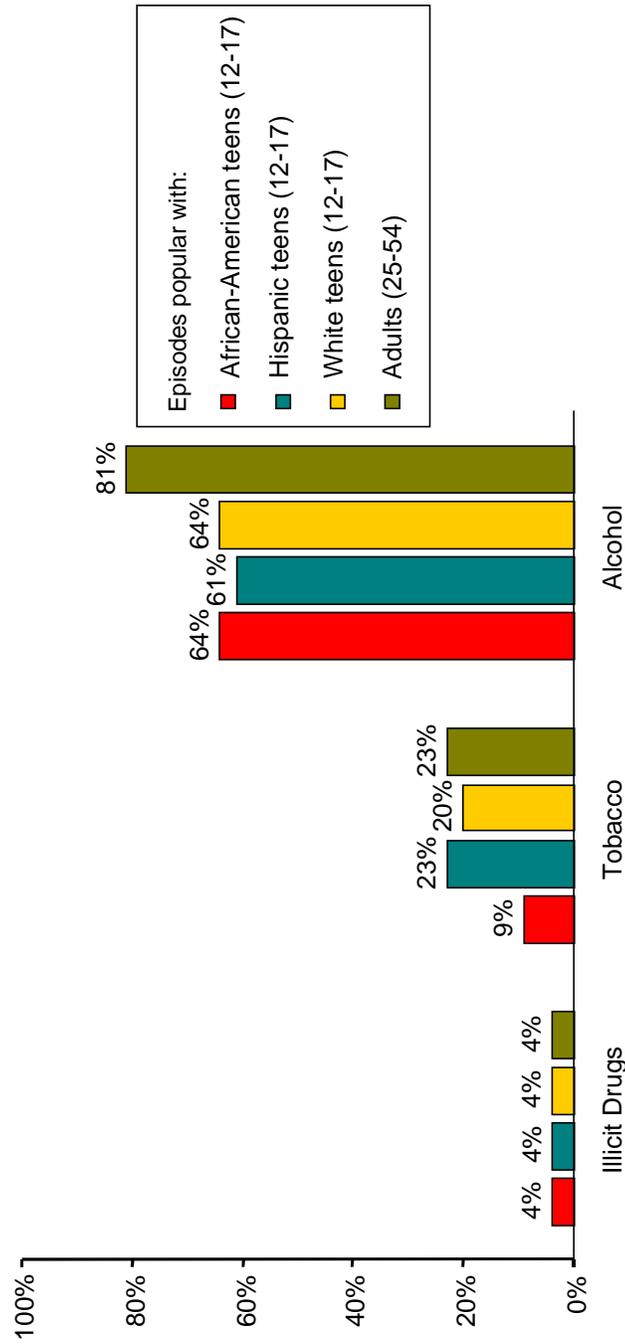
Percentages based on 80 top-teen episodes, 80 top-adult episodes, or 168 total episodes.

Figure 6
What proportion of episodes refer to substances?



Percentages based on 80 episodes popular with different audiences.

Figure 7
What proportion of episodes portray substance use?



Percentages based on 80 episodes popular with different audiences.

Substance use refers to visual portrayals of actual consumption or implied consumption.
 Substance reference was noted when illicit drugs, tobacco or alcohol were seen, used or verbally mentioned.

31. Episodes most popular with white teens were more likely than other episodes to mention drinking to excess: 10 percent of episodes most popular with African-American teens, 11 percent of episodes most popular with Hispanic teens, and 19 percent of episodes most popular with white teens contained references to being or getting intoxicated. (Figure 6)
32. Alcohol use was portrayed in 64 percent of episodes most popular with African-American teens, 61 percent of episodes most popular with Hispanic teens, and 64 percent of episodes most popular with white teens. (Figure 5)
33. One or more major characters consumed alcohol in 46 percent of episodes most popular with African-American teens, 48 percent of episodes most popular with Hispanic teens, and 51 percent of episodes most popular with white teens.

E. How much on-screen time is occupied by alcohol portrayals?

Percentages are based on 80 top-adult episodes and 80 top-teen episodes.

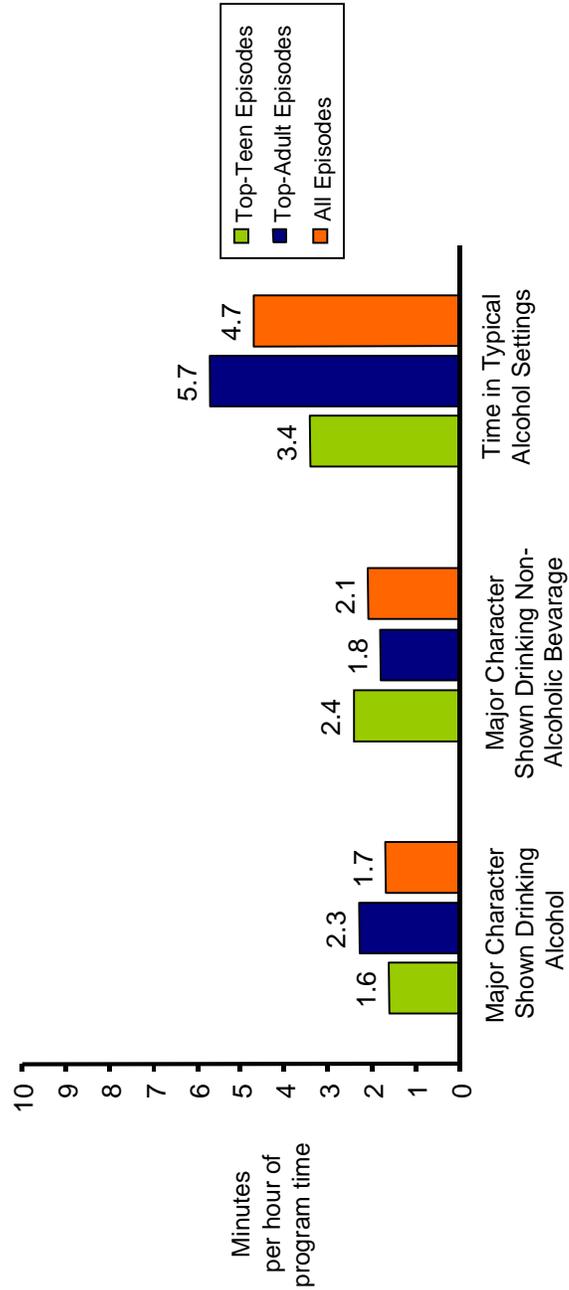
34. One or more major characters was shown drinking alcohol for an average of 1.6 minutes of each hour during top-teen episodes, and 2.3 minutes per hour during top-adult episodes. This compared with 2.4 minutes and 1.8 minutes, respectively, for non-alcoholic beverages. (Figure 8)
35. On average, 3.4 minutes per hour of top-teen episodes took place in typical drinking settings and venues (e.g., parties, clubs, bars). The amount of time in such settings was 5.7 minutes per hour in top-adult episodes. (Figure 8)

F. How common is substance use among major characters?

Another indicator of the frequency of substance use in prime time is the proportion of major characters that use illicit drugs, tobacco, and alcohol. A total of 270 major characters appeared in the 42 television series. Most major characters were male (56 percent) and between the ages of 18 and 39 (59 percent); 22 percent were under 18; 19 percent were 40 or older. The majority were white (77 percent); 22 percent of major characters were African American, four were Hispanic (2 percent) and one was Asian. Characters were coded as using illicit drugs, tobacco, alcohol, and non-alcoholic beverages if they were seen consuming these substances in one or more episodes.

36. Illicit drug use by major characters was rarely observed. Only three major characters were actually shown using illicit drugs. One teen and one adult male used marijuana. One female teen consumed a drink that someone else had drugged. (Figure 9)

Figure 8
How much screen time is devoted to drinking alcohol?



Minutes per hour of program time (excluding commercials) in which: a) one or more major characters is shown either drinking or with a container from which they are known to be drinking; and b) the episode's action takes place in a typical alcohol consumption setting -- party, night club, bar, tavern, and so on.

Percentages based on 80 top-teen episodes, 80 top-adult episodes, or all 168 episodes.

37. Illicit drug use by major characters was also implied in the dialogue or by actions that occurred off-screen. When inferences about drug use in the recent or distant past were considered in addition to observed use, 10 percent of characters under 18, 2 percent of characters ages 18-39, and 2 percent of characters ages 40 or older used illicit drugs.
38. The six major characters under 18 who used illicit drugs (voluntarily) smoked marijuana.
39. None of the major characters under 18 smoked cigarettes, only one drank alcohol, and 75 percent drank non-alcoholic beverages.
40. The three adult major characters who used illicit drugs used marijuana.
41. Eight percent of adult major characters used tobacco, 61 percent drank alcohol, and 74 percent drank non-alcoholic beverages.
42. Smoking was more common among men than women (10 percent versus 6 percent). About 9 percent of white and 7 percent of African-American adult major characters smoked.
43. Alcohol consumption was more prevalent among men than women (64 percent versus 56 percent). About 60 percent of white and 63 percent of African-American adult major characters drank alcohol.
44. None of the major characters attempted to quit drinking or smoking on screen. Two adults described themselves as former alcoholics; none described themselves as having quit or having tried to quit using illicit drugs or tobacco.

Context of Substance Use

G. How are illicit drugs portrayed?

Percentages are based on the 32 episodes that mentioned illicit drugs or 6 episodes that portrayed illicit drug use, regardless of their popularity with teens, adults, or both.

45. Illicit drugs were more often talked about than seen. The generic term “drugs” was mentioned in 44 percent of episodes, marijuana in 34 percent, heroin or other opiates in three episodes, hallucinogens, such as ecstasy, mushrooms, and peyote in three episodes, and crack or powder cocaine in three episodes.
46. The few episodes that depicted drug use showed marijuana use in four episodes, peyote in one episode, and ecstasy in one episode. In addition, a character was drugged with rohypnol, also referred to as “the date-rape drug,” in one episode.

47. Fifty percent of the episodes contained a humorous reference to illicit drugs. These statements typically joked about marijuana use or drug rehab.
48. More than one-third of the episodes that mentioned drugs (41 percent) contained at least one negative statement about illicit drugs. These statements typically advised characters to avoid drugs or warned about the hazardous effects of illicit drug use.
49. Only one episode contained a positive statement about illicit drug use: A character persuaded his friend to smoke marijuana by describing it as harmless and beneficial. The same episode also contained negative statements about drug use and portrayed clearly negative consequences to a character who used marijuana.
50. Negative consequences of illicit drug use were depicted in four of the six episodes that portrayed drug use. For example, drug use led to dangerous health consequences, to arrest, and to losing a coveted job.

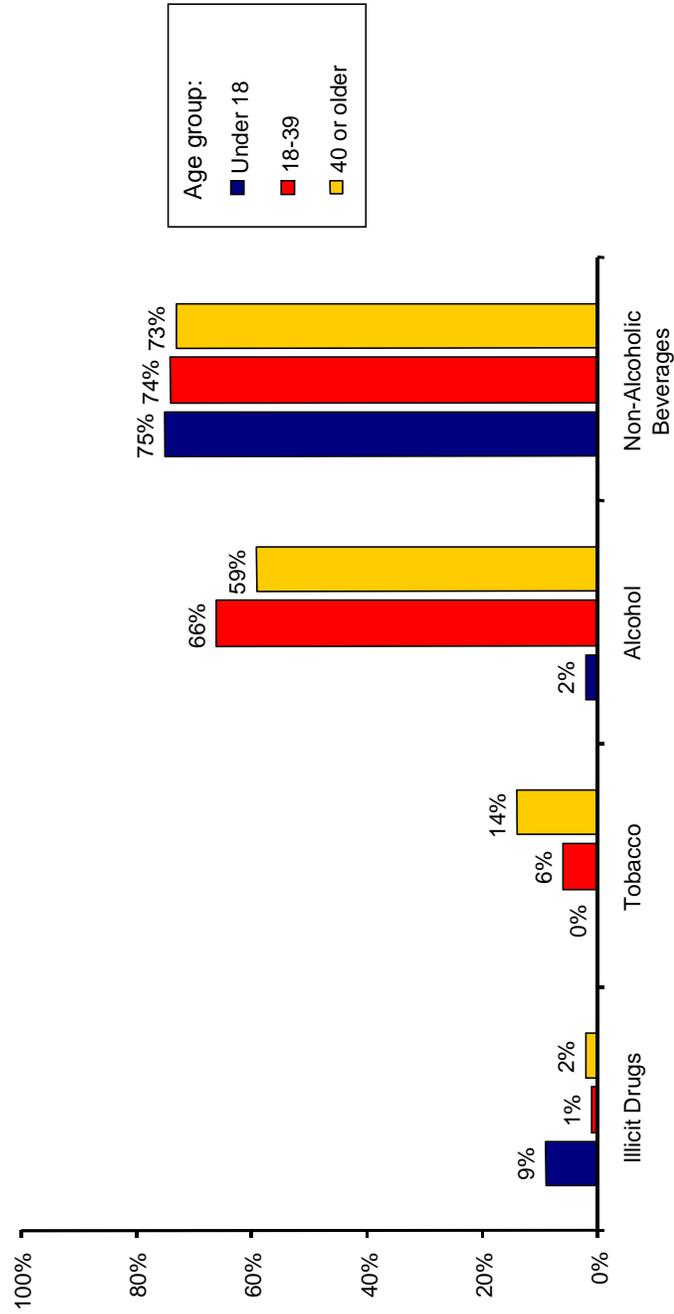
H. How are alcohol and tobacco portrayed?

Alcohol

Percentages are based on 119 episodes that portrayed alcohol use, regardless of popularity with teens, adults, or both.

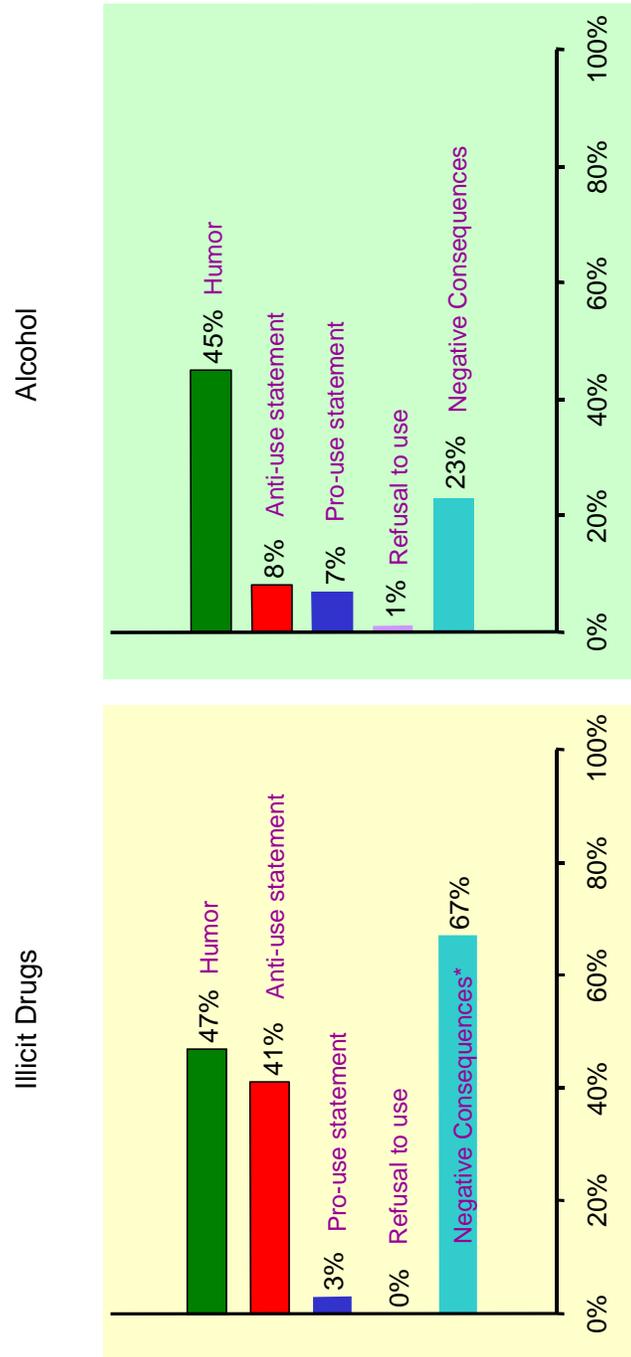
51. Characters drank beer in 65 percent of episodes that portrayed alcohol use, wine or champagne in 56 percent, and hard liquor or cocktails in 50 percent. (Figure 9)
52. Alcohol consumption was frequently portrayed in humorous contexts. Nearly half of the episodes (45 percent) associated alcohol use with humor. (Figure 10)
53. More episodes made drinking alcohol look like a positive experience (40 percent) than a negative experience (10 percent).
54. Twenty percent of episodes conveyed the idea that drinking alcohol promotes relaxation or having a good time.
55. Thirteen percent of episodes indicated that alcohol use can impair thinking, speech, or actions.
56. Few episodes expressed positive statements about drinking alcohol (8 percent), negative statements about drinking alcohol (7 percent), or limits on when, where, or how much should be consumed (9 percent). In addition, only one episode showed characters who refused a drink when offered. (Figure 10)

Figure 9
What proportion of major characters use substances?



Percentages based on 59 characters under 18 years old, 160 characters ages 18-39, 51 characters 40 years or older.

Figure 10
How often are illicit drugs and alcohol associated with:



*Percentages based on 32 episodes with any reference to illicit drugs. *Percentage based on 6 episodes portraying drug use.*

Percentages based on 119 episodes portraying alcohol use.

57. Negative consequences of alcohol use were either mentioned or portrayed in almost one-fourth of the episodes (23 percent). Fifteen percent of episodes showed clearly negative consequences to characters who drank, such as impaired functioning (slurred speech, passing out) and effects on interpersonal relationships (disapproval from friends, co-workers). In addition, characters talked about negative consequences (either what had happened or what could happen when alcohol is consumed) in 11 percent of episodes. (Figure 11)

Tobacco

Percentages are based on 31 episodes that portrayed tobacco use, regardless of popularity with teens, adults, or both.

58. Characters smoked cigarettes in 68 percent of episodes in which tobacco use was portrayed, smoked cigars in 36 percent, and smoked pipes or chewed tobacco in 7 percent. (Figure 11)
59. Almost one-fourth of the episodes (23 percent) expressed a negative statement about smoking by criticizing the habit or communicating limits about where people could smoke. Positive statements about smokers or smoking occurred in four episodes (13 percent).
60. Negative consequences of smoking were mentioned or portrayed in only two episodes.

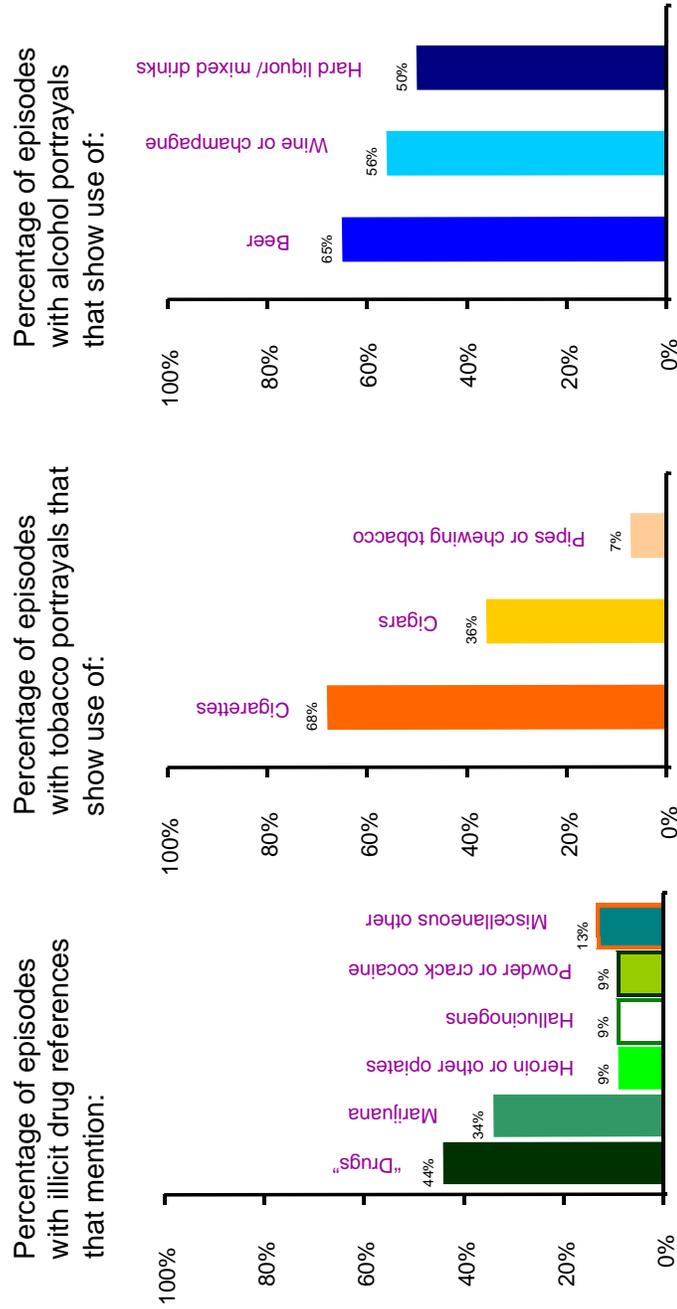
Substance Use in Commercial Content

I. How often do substance references occur in prime-time advertisements?

Percentages are based on all 168 episodes, 80 top-rated teen episodes, or 80 top-rated adult episodes.

61. Ads for alcoholic beverages appeared infrequently - in only 9 percent of all episodes. By comparison, 38 percent of all episodes contained ads for non-alcoholic beverages.
62. Only one of the top-teen episodes and two of the top-adult episodes contained an advertisement for beer. (Figure 12)
63. Ads for wine appeared in 8 percent of all episodes, 6 percent of top-teen episodes, and 13 percent of top-adult episodes. (Figure 12)
64. Ads for medicines that can be obtained only with a doctor's prescription appeared in 14 percent of all episodes. These prescription medicine ads appeared in almost as many of the top-teen as top-adult episodes (11 percent versus 13 percent). (Figure 12)

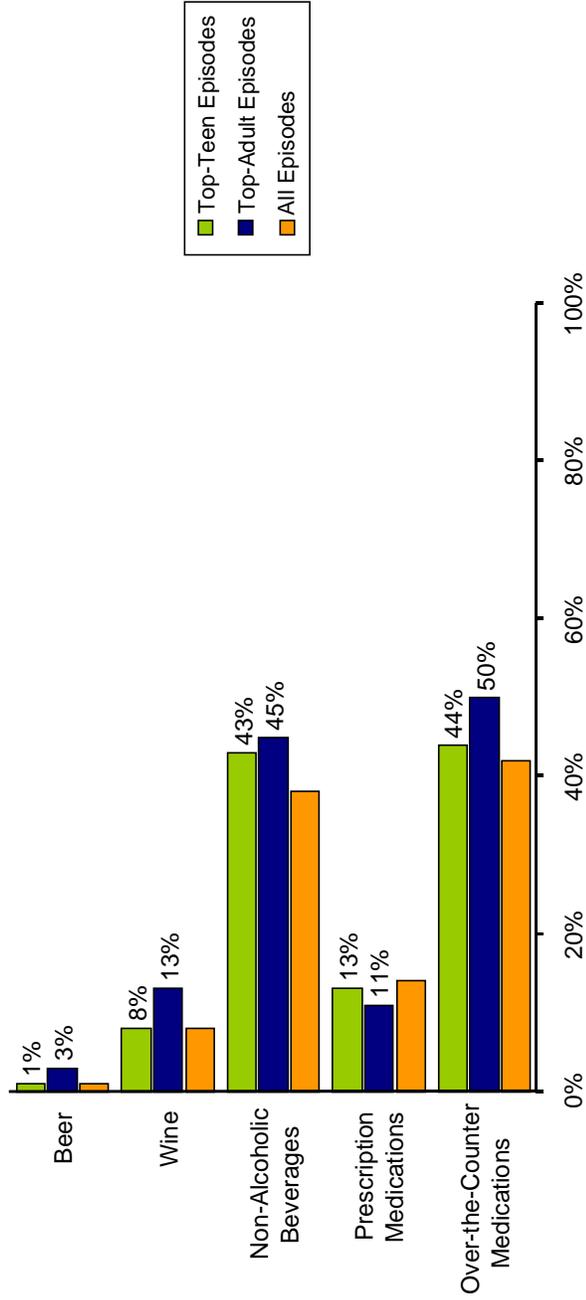
Figure 11
What types of illicit drugs, tobacco, and alcohol appear?



Percentages based on 32 episodes mentioning illicit drug use, 31 episodes portraying tobacco use and 119 episodes portraying alcohol use. Percentages sum to more than 100% because multiple substances appeared in the same episodes.

65. Ads for over-the-counter medicines, such as pain relievers, cold remedies, and smoking cessation aids appeared in 42 percent of all episodes, 43 percent of top-teen episodes, and 50 percent of top-adult episodes. (Figure 12)
66. Alcohol use appeared in ads for other products, such as restaurants, credit cards and hotels; 59 percent of top-teen and 60 percent top-adult episodes contained one or more ads like these.
67. Alcohol use appeared in network ads to promote upcoming programs; 50 percent of top-teen and 63 percent of top-adult episodes included one or more promotional spots that portrayed alcohol use.
68. Anti-drug ads with messages about drug prevention or treatment appeared in 13 percent of all episodes, 16 percent of top-teen episodes, and 11 percent of top-adult episodes.
69. Anti-smoking ads appeared in 9 percent of all episodes, 11 percent of top-teen episodes, and 5 percent of top-adult episodes.
70. Ads that warned about the dangers of drinking and driving appeared in only one episode.

Figure 12
What proportion of episodes contain commercials for beverages or medications?



Percentages based on 80 top-teen episodes, 80 top-adult episodes, or 168 total episodes.

Comparing Television and Movies

This study of prime-time television series serves as a companion piece to last year's examination of substance portrayals in popular movies and music.²⁸ This allows us to compare how the different media depict substance use.

However, the content of movies, music and television is developed for different audiences and delivered under different regulatory and economic constraints. This gives rise to fundamental differences among the media in terms of which topics are addressed and how any given topic is handled. At the most basic level, each unit varies greatly in length: a 2-hour motion picture, a 26-minute situation comedy, and a 5-minute popular song are simply not equivalent. Other obvious differences among media pertain to the number of characters that can be depicted, how familiar these characters become to the audience, the depth in which any given topic or behavior can be portrayed, and the length of time any given behavior can appear.

In addition, because television messages are transmitted over public airwaves, they are subject to a variety of FCC regulations that do not apply to movies or popular recordings (except, of course, when they are transmitted on public airwaves). In short, because each medium requires somewhat different strategies for quantifying substance depictions, precise comparisons among these media are not possible. Nevertheless, with that caveat in mind, we offer several comparative observations about how movies and television portray substances. Popular song lyrics are verbal and brief, and do not allow for these comparisons.

Movies and television seem equally likely to include references to illegal drugs. Illicit drugs were referenced in 20 percent of the 168 television episodes examined in this study, and appeared in 22 percent of the 200 movies examined last year. However, movies are far more likely than television to show illicit drug use. When illicit drug references occur on television, they are much more likely to be talked about than to be shown. Illicit drug use was shown in just 3 percent of the television episodes, as opposed to 17 percent of movies. Similarly, major characters were shown actually using illicit drugs in 2 percent of television episodes but in 12 percent of movies.

The two media also differ in the frequency of anti-use statements about illicit drugs; that is, negative or critical statements about drugs, drug use or drug users. Forty-one (41) percent of the television episodes that referred to illicit drugs contained an anti-use statement, but just 9 percent of the movies

28 Roberts, D.F., Henriksen, L., Christenson, P. (1999) *Substance Use in Popular Movies and Music*, Office of National Drug Control Policy, Mediascope.

did. In addition, 67 percent of the television episodes with portrayals of illicit drug use mentioned some kind of negative consequence (e.g., loss of control, vomiting, loss of employment). By comparison, 52 percent of the movies that portrayed illegal drug use failed to depict any consequences whatsoever.

Differences in how movies and television portray alcohol and tobacco were also observed. Tobacco appeared in about one-fifth (22 percent) of the television episodes and alcohol in about three-fourths (77 percent). Both substances, however, were almost universal in movies: tobacco use was portrayed in 89 percent of motion pictures and alcohol consumed in 93 percent. The likelihood of a major character being shown consuming alcohol in the two media was roughly equal: 65 percent of 669 adult major characters in movies consumed alcohol versus 61 percent of 211 adult major characters in television. About 4 percent of the 80 top-rated television episodes portrayed underage alcohol use while underage drinking appeared in 15 percent of the top 200 movies. Finally, a major character was substantially more likely to use tobacco in a movie (25 percent of adult major characters smoked) than in the television programming examined in this study (8 percent of adult major characters smoked).

Negative statements about smoking were expressed in 22 percent of the 172 movies in which smoking was portrayed and in 23 percent of the 31 television episodes in which smoking was portrayed. The percentage of alcohol-related anti-use statements was also roughly comparable across the two media; 8 percent of 119 television episodes and 9 percent of 183 movies in which alcohol use was portrayed contained anti-use statements. Pro-use statements, on the other hand, were more likely to be encountered in movies (20 percent in which alcohol was portrayed) than in the comparable set of television episodes (3 percent of those in which alcohol was portrayed). A drink was refused in a higher proportion of movies (14 percent) than television episodes (1 percent). Alcohol use was associated with “no consequences” in 57 percent of the movies in which it occurred, but with negative consequences in 67 percent of the television episodes in which it occurred.

In conclusion, setting aside the issue of whether or not MPAA ratings serve to control young people’s access to movies, it seems that prime-time television series offer a somewhat safer environment for young viewers than do popular motion pictures. Illicit drugs are substantially less likely to be portrayed concretely in television series than in movies, and when they are referred to, television is more likely to associate illicit drugs with anti-use sentiments and negative consequences, and less likely to link them to pro-use statements. Finally, young viewers are also substantially less likely to observe smoking on television, and slightly less likely to observe alcohol consumption.

References

Cruz, J., & Wallack, L. (1986). Trends in tobacco use on television. *American Journal of Public Health, 76*(6), 698-699.

Fernandez-Collado, C.F., Greenberg, B.S., Korzenny, F., & Atkin, C. K. (1978). Sexual intimacy and drug use in TV series. *Journal of Communication, 28*(3), 31-37.

Hazan, A. R., & Glantz, S.A. (1995). Current trends in tobacco use on prime-time fictional television. *American Journal of Public Health, 85*(1), 116-117.

Roberts, D.F., Foehr, U.G., Rideout, V.J., & Brodie, M. (1999). *Kids and Media at the New Millennium: Executive Summary*. Menlo Park, CA: The Henry J. Kaiser Family Foundation.

Kotch, J.B., Coulter, M.L., & Lipsitz, A. (1986). Does televised drinking influence children's attitudes toward alcohol? *Addictive Behaviors, 11*(1), 67-70.

Mathios, A., Avery, R., Biscogni, C., and Shanahan, J. (1998). Alcohol portrayal on prime-time television: Manifest and latent messages. *Journal of Studies on Alcohol, 59*, 305-310.

McEwen, W.J., & Hanneman, G.J. (1974). The depiction of drug use on television. *Journal of Drug Education, 4*(3), 281-293.

Roberts, D.F. (1993). Adolescents and the mass media: From "Leave It to Beaver" to "Beverly Hills, 90210." *Teachers College Record, 94*(3), 629-643.

Rychtarik, R.G., Fairbank, J.A., Allen, C.M., Fox., D.W., & Drabman, R.S. (1998). Alcohol use in television programming: Effects on children's behavior. *Addictive Behaviors, 8*(1), 19-22.

Signorelli, N. (1987). Drinking, sex and violence on television: The cultural indicators perspective. *Journal of Drug Education, 17*(3), 245-60.

Strasburger, V. (1995). *Adolescents and the media: Medical and psychological impact*. Thousand Oaks, CA: Sage.

Wallack, L., Grube, J.W., Madden, P.A., and Breed, W. (1990) Portrayals of alcohol on prime-time television. *Journal of Studies on Alcohol, 51*(5), 428-437

Appendix A:

Prime-Time Television Study Sample¹

Show Title	Network	Day	Broadcast Time (PM) ²
7th Heaven	WB	Mon	8:00
Ally McBeal	FOX	Mon	9:00
Beverly Hills, 90210	FOX	Wed	8:00
Boy Meets World	ABC	Fri	8:30
Brother's Keeper	ABC	Fri	9:30
Buffy the Vampire Slayer	WB	Tue	8:00
Charmed	WB	Wed	9:00
Clueless	UPN	Tue	8:30
Dawson's Creek	WB	Wed	8:00
Dharma & Greg	ABC	Wed	8:00
The Drew Carey Show	ABC	Wed	9:00
E.R.	NBC	Thu	10:00
Felicity	WB	Tue	9:00
For Your Love	WB	Thu	9:30
Frazier	NBC	Thu	9:00
Friends	NBC	Thu	8:00
Guys Like Us	UPN	Mon	8:00
Home Improvement	ABC	Tue	8:00
The Jamie Foxx Show	WB	Thu	8:30
Jesse	NBC	Thu	8:30
Just Shoot Me	NBC	Tue	9:00

Show Title	Network	Day	Broadcast Time (PM)
King of the Hill	FOX	Tue	8:00
Malcolm & Eddie	UPN	Mon	9:00
Melrose Place	FOX	Mon	8:00
Moesha	UPN	Tue	8:00
NYPD Blue	ABC	Tue	10:00
Party of Five	FOX	Wed	9:00
Sabrina, the Teenage Witch	ABC	Fri	9:00
The Simpsons	FOX	Sun	8:00
Sister, Sister	WB	Sun	8:00
Smart Guy	WB	Sun	8:30
Spin City	ABC	Tue	9:00
The Steve Harvey Show	WB	Thu	9:00
That '70s Show	FOX	Sun	8:30
Two Guys, a Girl, and a Pizza Place	ABC	Wed	8:30
Two of a Kind	ABC	Fri	8:00
Unhappily Ever After	WB	Sun	9:00
Veronica's Closet	NBC	Thu	9:30
Walker, Texas Ranger	CBS	Sat	10:00
The Wayans Bros.	WB	Thu	8:00
Working	NBC	Tue	9:30
The X-Files	FOX	Sun	9:00

¹ The shows excluded from the African-American teen list were: Guinness World Records, CBS NFL Football, Wonderful World of Disney, CBS Sunday Movie, City Guys, Fox NFL Football, One World, CBS Tuesday Movie, and NBC Sunday Night Movie. The shows excluded from the Hispanic teen list were: Guinness World Records, Wonderful World of Disney, World's Wildest Police Videos, and King of the Hill reruns broadcast in a second time-slot. The shows excluded from the white teen list were: Guinness World Records, Wonderful World of Disney, and World's Wildest Police Videos. The shows excluded from the general teen list were: Guinness World Records, Wonderful World of Disney, World's Wildest Police Videos, and the NBC Sunday Night Movie. The show excluded From the adult (ages 25-54) list was NFL Monday Night Football.

² Broadcast times refer to Pacific Standard Time (for the Los Angeles media market).

Appendix B:

Adolescents and Television

Teenagers are major consumers of entertainment media, and so it is widely believed that they may be influenced by the depiction of alcohol, tobacco, and illicit drugs on television. The following statistics indicate the importance that television plays in the lives of young people.

- 98 percent of American households have a television set.²⁹
- Nearly 87 percent of households with young people ages 2-17 years have two or more television sets.³⁰
- More than 60 percent of teenagers have television sets in their bedrooms.³¹ Young people who have sets in their bedrooms watch 21 more minutes per day than those without.³²
- Young people (ages 8-18) watch TV more than 3 hours per day.³³
- White youth (ages 8-18) watch television nearly 3 hours per day.³⁴
- Hispanic youth watch television nearly 4 hours per day.³⁵
- African-American youth watch television over 4 ½ hours per day.³⁶
- 77 percent of families have cable/pay TV.³⁷
- 78 percent of Americans consider watching TV with their children to be a family activity.³⁸
- Two-thirds of children 8 years and older say that the TV is usually on during meals.³⁹
- Teenage boys spend nearly twice as much time watching MTV as reading for pleasure.⁴⁰ Girls ages 11-19 watch MTV more than any other network.⁴¹

²⁹ Nielsen Media Research, 1998.

³⁰ Stranger, J.D. and Gridina, N. *Media in the Home: The Fourth Annual Survey of Parents and Children*. The Annenberg Public Policy Center of the University of Pennsylvania, 1999.

³¹ Goodstein, L. & Connelly, M. "Teen-Age Poll Finds Support For Tradition." *New York Times*, April 30, 1998.

³² *Television in the Home: The 1997 Survey of Parents and Children*. The Annenberg Public Policy Center of the University of Pennsylvania, 1997.

³³ Roberts, D.F., Foehr, U.G., Rideout, V.J., & Brodie, M. (1999). *Kids and Media at the New Millennium*. Menlo Park, CA: The Henry J. Kaiser Family Foundation.

³⁴ Roberts, D.F., Foehr, U.G., Rideout, V.J., & Brodie, M.

³⁵ Roberts, D.F., Foehr, U.G., Rideout, V.J., & Brodie, M.

³⁶ Roberts, D.F., Foehr, U.G., Rideout, V.J., & Brodie, M.

³⁷ Stanger, J. D. and Gridina, N.

³⁸ "Portrait of the American TV Household," Fact Sheet. USSB Telescope Survey. August 18, 1995.

³⁹ Jensen, E. "Study Finds TV Tops Kids' Big Diet of Media" (as cited from the "Kids & Media @ the New Millennium" study by the Kaiser Family Foundation). *Los Angeles Times*, November 18, 1999.

- Nearly 30 percent of young people (ages 10-17) say they watch shows their parents would not approve of.⁴²
- More 10- to 17-year-olds recognize the Budweiser frogs and lizards (67 percent), Joe Camel (69 percent), and “The Simpsons” (91 percent) than know the name of the Vice President of the United States (62 percent).⁴³
- Studies suggest that higher rates of television viewing are correlated with increased tobacco usage, increased alcohol intake and younger onset of sexual activity.⁴⁴
- 61 percent of young people (ages 10-17) say television does more than harm.⁴⁵

⁴⁰ Kakutani, M., “Adolescence Rules!” *The New York Times*, May 11, 1996.

⁴¹ Saatchi & Saatchi, SmartGirl Internette and Teenage Research Unlimited. *Kidscreen*, August 1998.

⁴² Stranger, J.D. and Gridina, N. *Media in the Home: The Fourth Annual Survey of Parents and Children*.

⁴³ Stranger, J.D. and Gridina, N. *Media in the Home: The Fourth Annual Survey of Parents and Children*.

⁴⁴ “Facts About Media Violence.” American Medical Association, 1996.

⁴⁵ Stranger, J.D. and Gridina, N. *Media in the Home: The Fourth Annual Survey of Parents and Children*.

Acknowledgments

MEDIASCOPE

Senior Project Team

Hubert D. Jessup, *President*
Laurie Trotta, *Executive Director*

Administrative Staff

Julie Abdul-Wahid
Lisa Allen
Meg Helgerson
Bikki Johnson
Heather Jue
Jacqueline McMahon
Leslie Price
Nathalie Valdez

Video Engineers

David Gionovarrio
Shana Honeyman
Michael Moran
Tina Pederson
Marty Romero

STANFORD UNIVERSITY

Project Coordinators

Elizabeth Bandy
Selena Burns

Research Assistants

Christopher Castro
Katie Kozuki
Page Hayton

Sarah Esberg
Stacey Nordwall

LEWIS & CLARK

Project Coordinators

William Bahrenburg
Randall Olson

Research Assistants

Anissa Beasley
Joel Borgman
Nedra Howsden

Warren Murray
Courtney Nunns

INFORMATION RESOURCES

George Austin Associates, Portland, OR
Walkabout Pictures, Los Angeles, CA

Nielsen Media Research
Olgivy & Mather, New York, NY