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By

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ABSTRACT

IMPACT OF DRAMATIC ALCOHOL DRINKING PORTRAYALS ON VIEWERS' RELEVANT ATTITUDES AND BEHAVIOR

By

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This study investigates the impact of alcohol drinking portrayals in dramatic presentations on viewers' attitudes and behavior. Empirical studies dealing with the impact of dramatic portrayals of alcohol drinking present rather inconsistent findings. One of the problems with prior inquiry might be their assumption of "unitary" influence with the ignorance of some important mediator variables particularly related to characteristics of programs, role characters, and individual viewers. The present study focused on three factors that may mediate the impact of dramatic alcohol portrayals: the absence versus presence of negative alcohol consequences, perceived reality (i.e., the degree to which the viewer perceives realism regarding the program), and role affinity (i.e., the degree to which the viewer feel attracted to a specific role character).

A total of 211 undergraduate students at Michigan State University were used as subjects. The absence vs. presence of negative consequences was experimentally manipulated by exposing subjects to one of the three versions of a dramatic film: A) the 'Negative' version that contains both alcohol

drinking and its negative consequences, B) the 'Positive' version that portrays alcohol drinking in a positive context with the absence of negative consequences, and C) the 'Neutral' version that contains neither alcohol drinking nor negative consequences. Perceived reality and role affinity as well as alcohol-related attitudes and behavioral dispositions were measured after exposure to the experimental treatment.

The results indicate that the absence and presence of negative alcohol consequences lead to more and less favorable inclinations respectively in both attitudes and behavioral dispositions related to alcohol drinking. Further, negative alcohol portrayals (i.e., with the presence of negative consequences) were found generally effective in changing behavioral aspects of alcohol drinking, whereas positive alcohol portrayals (i.e., with the absence of negative consequences) tended to influence attitudinal aspects of alcohol drinking. Finally, perceived reality was found to significantly influence the impact of negative alcohol portrayals, whereas role affinity mediates only the impact of positive alcohol portrayals.

To all those who have shared their lives with me

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CHAPTER ONE

RESEARCH PROBLEM

INTRODUCTION

Studies on mass-mediated alcohol drinking messages have been conducted in such areas as advertising, public campaigns, and entertainment programming. Atkin (1990) reviews studies on the impact of alcohol commercials and concludes that alcohol advertising (especially beer advertising) makes "a significant but mild positive" contribution to viewers' alcohol drinking. Public service announcements are found to be effective in some limited conditions. For example, Bang's (1993) recent study indicates significant influences of anti-drunk driving PSAs only if presented with strong fear appeals of negative physical consequences. In the area of alcohol portrayals in entertainment programming, there have been a significant number of content analysis studies that indicate the prevalence of alcohol drinking portrayals in dramatic programming. However, the impact of those portrayals on viewers has not yet been clearly evidenced.

Previous studies dealing with the impact of mass-mediated alcohol drinking messages have often focused on

persuasive messages as shown in pro-alcohol advertising and anti-alcohol campaigning, while relatively little attention has been given to empirical investigations on the impact of alcohol drinking portrayals in dramatic programming. However, it has been shown that a great number of alcohol-related depictions are also seen in dramatic presentations and, surprisingly, alcohol is depicted more frequently in dramatic programs than in advertisements (Cafiso, Goodstadt, Garlington, & Sheppard, 1982; Wallack, Breed, & De Foe, 1987). For the last two decades or so, many content analysis studies have persistently revealed excessive portrayals of alcohol drinking in dramatic programs and implied their potential harmful effects (see, for example, De Foe et al., 1983; Futch, Lisman, & Geller, 1984; Garlington, 1977; Greenberg, 1981; Greenberg, Fernandez-Collado, Graef, Korzenny, & Atkin, 1979; McEwen & Hanneman, 1974; Wallack, Grube, Madden, & Breed, 1990). In a recent analysis of prime-time fictional television programs, Wallack et al. (1990) report that there were about 8 alcohol drinking acts per hour from 8 to 11 p.m., while 64% of the episodes analyzed were found to contain some reference to alcohol. Thus, an average viewer watching four hours of prime-time television is expected to view nearly 32 drinking acts per night or 11,826 drinking acts per year.

Alcohol is found the most frequently depicted of drugs and of beverages on television (Cafiso et al., 1982; De Foe,

Breed, & Breed, 1983; Fernandez-Collado, Greenberg, Korzenny, & Atkin, 1978; Greenberg, et al., 1979; MacDonald, 1983; McEwen & Hanneman, 1974). Further, in dramatic presentations, all kinds of characters are seen drinking alcoholic beverages (De Foe, Breed, & Breed, 1983). And, most importantly, it has been reported that alcohol drinking is largely portrayed in a positive context, or at least in the absence of negative consequences (McEwen & Hanneman, 1974; Breed & De Foe, 1981; Lowry, 1981; Wallack et al., 1990).

Dramatic alcohol portrayals, compared to alcohol commercials and public service announcements, may influence the viewers in a slightly different way. Commercials and public service announcements usually focus on alcohol drinking as their main subject for an apparent "persuasive" purpose, which might lead the viewer to discount to some extent the claims of these messages. But, dramatic presentations often depict alcohol drinking as a natural, or seemingly inevitable, part of our lives. As long as viewers regard a dramatic presentation as an attempt to reflect reality, its portrayals of alcohol drinking in positive contexts might facilitate the acceptance of alcohol drinking practices as a necessary part of their lives. In other words, by "informing," rather than "persuading," viewers that alcohol drinking is a natural part of "reality," the dramatic presentations might be able to influence viewers

more effectively than any other "persuasion-aimed" messages.

However, a handful of empirical studies dealing with the impact of dramatic portrayals of alcohol drinking have not provided consistent findings. Thus, the present study is intended to review prior inquiries concerning alcohol portrayals in dramatic presentations and to propose, and empirically test, a new approach to the area by bringing in some theoretical constructs that have not yet been seriously considered in previous research. In the following section of this chapter, both content analysis studies and empirical impact studies on alcohol drinking portrayals in dramatic presentations are reviewed.

LITERATURE REVIEW

Studies of dramatic programming effects on young people have given much attention to the relationship between exposure to dramatically portrayed violence and real-life aggression. Also, in the past two decades or so, there has been a growing concern regarding dramatic portrayals of alcohol use. A number of content analysis studies have been conducted and have provided evidence for the prevalence of alcohol portrayals in entertainment programs. However, relatively little attention has been given to studies on the impact of those portrayals on viewers (Atkin, 1990; Singer, 1985).

In this section, the current status of research dealing with dramatic portrayals of alcohol use is examined through

reviewing the pertinent literature in two areas of prior inquiries. First, findings from various content analysis studies on alcohol portrayals in dramatic programming are reviewed in a chronological order. Second, studies concerned with empirical testing of the effects of those portrayals on viewers' relevant attitudes and/or behavior are reviewed with theoretical and methodological criticisms followed.

Alcohol Portrayals in Dramatic Programming

In one of the earliest studies of alcohol portrayals in dramatic programming, McEwen and Hanneman (1974) conducted a content analysis of prime-time television programming in the week of March 12-18, 1973. They found that alcohol is depicted most frequently (56.3%) among all legal and illegal drugs in television drama. Further, alcohol incidents are found to be more frequently depicted in a positive context, typically in a humorous, warm, or favorable setting. Garlington (1977) also coded alcohol use in fourteen different soap operas from July to November, 1975. He found that alcohol-related events averaged almost 3 1-minute intervals for each half-hour soap opera period, that alcohol use was depicted more in a drinking scene than as background drinking or as a verbal reference, and that the most frequent setting was the home, followed by cocktail lounges, bars, and restaurants and the most frequent alcoholic beverage used was straight liquor.

Fernandez-Collado et al.'s study (1978) confirms that alcohol is the most frequently depicted drug, accounting for 70 percent of all drug acts during prime-time program hours in the 1976-77 season. It was also found that the depiction of alcohol use occurs an average of 2.19 times per hour in prime-time programs (3.36 times per hour from 9-11 p.m.). Crime dramas were found to be the highest in the depiction of alcohol use (3.78 times per hour), followed by action/adventure (2.74) and family drama (2.50 times per hour). Greenberg et al. (1979), as a follow-up study to Fernandez-Collado et al. (1978), report an increase in alcohol use portrayals in the 1977-78 season compared to the 1976-77 season. In the 1977-78 season, an average of 2.66 alcohol acts per hour were found in fictional television programming, i.e., an increase of nearly one more alcohol act every two hours, while 4.60 alcohol acts were found from 9-11 p.m. From an additional analysis of demographic attributes of television characters who engage in alcohol acts, it was found that 68 percent of alcohol acts are performed by males which is similar to their proportion in the population of television characters (71%). Further, whites, 20-34 years olds, and middle class people were found to engage more in alcohol acts than their counterparts respectively.

Breed and De Foe (1981) also analyzed demographic characteristics of television drinkers in the top 15

situation comedies and the top 15 dramas of the 1976-77 season. They found that in dramas, 28 percent of drinkers were "good" characters, 18 percent were "bad" characters, and 56 percent "mixed" characters. On the other hand, 87 percent of "disapprovers," i.e., those who express disapproval of drinking, including the act of declining a drink, are good characters, although television characters are not found to frequently decline the offer of a drink. As for the amount of drinking, about 40 percent of drinking incidents involved "heavy drinking" (five drinks or more), followed by "light drinking (two drinks or less, 20%)" and "moderate drinking (three or four drinks, 16%)." Further, characters are seen to frequently drink alcohol "before, during, and after a crisis" (61 percent of the total drinking occasions). More significantly, it is pointed out that although the negative consequences of alcohol use are occasionally shown, most of the time no serious consequence is indicated.

Lowry (1981) analyzed all prime-time (8-11 p.m.) programs of the three commercial networks from February 15 through April 30, 1979. His study confirms Greenberg et al.'s (1979) finding that about 70 percent of alcohol drinking incidents are performed by male characters. Drinking incidents were found to occur 3.38 times per hour (3.92 when the drinking "attempts" are included), which is much higher than the numbers in the two previous studies

above (2.19 and 2.66). There were 4.26 incidents per hour from 9-11 p.m. The most frequent type of alcohol drink was hard liquor which is involved in about 50 percent of alcohol incidents, followed by wine (33%) and beer (17%). The ratio of drinking acts, including both incidents and attempts, to drink refusals is 16.2 to 1, which is considered an apparent distortion of the real world. Alcohol acts are depicted in a variety of social situations such as conversation, dining, party/celebration, business discussion, etc. The most frequent self-functional reason for drinking was "relaxation." Surprisingly, it was also found that the ratios of drinking incidents to negative short-term consequences (e.g., serious intoxication, automobile accident, assault, etc.) and to negative long-term consequences (e.g., alcohol addiction) were 25.1 to 1 and 101.5 to 1 respectively. On the other hand, Futch, Lisman, and Geller (1984) analyzed the top 15 most popular prime-time shows selected in mid-November 1979 and found that the average "duration" of each alcohol incident was slightly more than 1.5 minutes. They also found that 42 percent of alcohol incidents were portrayed in the home setting, followed by "in a bar" (17%). Further, it was found that the most frequent reason for drinking was celebration (33%), followed by enjoyment (29%).

Greenberg (1981) conducted another content analysis of the top ten prime-time fictional series from the 1979-80

television season. Surprisingly, it was found that there occurred 8.13 incidents of alcohol drinking per program hour during prime time (9.36 from 9-11 p.m.), which is much higher than the numbers in Greenberg and his collaborators' earlier analyses of the 1976-77 (2.19 per hour) and 1977-78 seasons (2.66 per hour). Since his third analysis included only the top ten dramas, he interprets that alcohol-related incidents are rather highly concentrated in the most popular dramas. De Foe, Breed, and Breed's (1983) analysis of prime-time shows over five seasons also reports an increase of alcohol use in the 1978-79 (9.81 per hour) and the 1979-80 seasons (9.15 per hour), compared to the prior two seasons (4.80 for the 1976-77 season and 6.21 for the 1977-78), but with the figures different from those of Greenberg and his collaborators' studies. In the 1981-82 season, the use of alcohol was still high (8.95 per hour), but depictions of actual ingestion decreased to 2.78 per hour, compared to the prior two seasons (4.00 and 3.68). The differences in numbers between De Foe et al. (1983) and the studies of Greenberg and his collaborators seem to reflect their uses of different coding rules as well as different sample programs. Whereas Greenberg and his collaborators define alcohol use as an incident of the consumption of, attempt to consume, inducement to consume, and making laudatory remarks about the consumption of alcohol, De Foe et al. include any act of ordering, accepting, holding, or

pouring as well as ingesting a drink. For example, in De Foe et al.'s study, if the same character drinks a glass of alcohol and obtains a refill but is not seen to drink again, the coding is two drinking acts. De Foe et al. also found that about half of the drinkers were "regular" characters seen weekly and that "good" characters engaged in alcohol acts five times as often as "bad" ones." Further, Breed and De Foe (1984) analyzed a total of 165 episodes (148 hours) of prime-time dramas shown during 1950 to 1982 and demonstrate that alcohol acts are more frequent in the period of 1981-81 (8.95 per hour) than other early periods, i.e., 1950-1963 (4.93), 1964-1970 (4.53), and 1971-1977 (3.74).

MacDonald and Estep (1985) conducted a content analysis of prime-time television programs during the 1982-83, 1983-84, and 1984-85 seasons. They found a steady increase in the rate of alcohol use from 2.24 acts per hour in the 1982-83 season to 2.54 acts in the subsequent season and to 3.54 acts in the third season. In their study, demographic characteristics of the users of various types of alcoholic beverage were also analyzed. Champagne was seen to be more frequently consumed by upper-middle class and older characters than their counterparts. Beer was preferred by male and working middle-class characters, whereas hard liquor users were found to be slightly older than those preferring wine and beer. Further, the most common setting

for beer or hard liquor use was in a bar, while wine and champagne were consumed more often in a restaurant or at home. The most common reason for use of beer, wine, and hard liquor was "pleasure," while champagne was used mostly for "celebration."

Wallack, Breed, and Cruz (1987) analyzed a two-week sample of all prime-time (8-11 p.m.) programming for the 1984 fall season. A total of 116 episodes were coded and classified, for purposes of comparison, into four categories: dramatic series, television movies, theatrical movies, and situation comedy. The basic units of analysis were "scenes" and "acts" of alcohol use which includes both actual ingestion and "prepared to drink" behavior. Overall, 78 percent of the 116 episodes were found to contain at least one scene of alcohol use, while little indication of social or health problems related to alcohol use was included in the portrayals. For example, portrayals of alcoholism as a consequence of heavy drinking were totally absent in the sample. As for the number of alcohol "acts," they found that the sample contained an average of 10.65 alcohol acts per hour. Specifically, dramatic series, comprising 56 percent of the sampled hour, contained 11.04 acts per hour, while theatrical movies (17.75 per hour) were the highest among the four categories of prime-time programming. As for the type of alcoholic beverage, in contrast to earlier studies, wine was found to be the most

frequent alcoholic beverage of prime time (46%), followed by distilled spirits (28%) and beer (26%). Only in theatrical movies, distilled spirits (39%) were used slightly more often than wine (34%).

Wallack et al. (1990), in their analysis of prime-time fictional programs during the 1986-87 season, report that there has been a decrease in alcohol portrayals during prime-time entertainment programming, but the rate is still high (8.1 alcohol drinking acts per hour). About 64% of the episodes contained at least some reference to alcohol, while actual ingestion of alcohol was seen in one half of all episodes. Surprisingly, all theatrical and made-for-television movies (100%) were found to contain at least references to alcohol drinking. Evening soap operas, made-for-television movies, and theatrical movies contained the highest number of alcohol drinking scenes. Further, it was also found that only 12% of the episodes presented alcohol drinking in an unattractive manner. All other episodes portraying alcohol drinking lack any indication of undesirable features of alcohol drinking.

In sum, the results of content analysis studies above generally indicate that dramatic presentations portray alcohol drinking frequently (see Table 1 for a summary). Wallack et al. (1987) compare the statistics of beverage consumption in the real and television world. In 1984, alcohol use on television is found to comprise 74 percent of

Table 1. Content Analysis Studies on Dramatic Alcohol Portrayals (Summary)

	Season	Sample	Major Findings
McEwen & Hanneman (1974)	1972 -73	112 hour prime time programs	alcohol, most frequent drug (56.3%), depicted in a positive context
Garlington (1977)	1975 -76	79 half-hour periods of soap operas	alcohol events, 3 1-minute intervals per 30-minute period; home, most frequent setting; hard liquor, most frequent type
Fernandez-Collado et al. (1978)	1976 -77	58 hours prime-time dramas	alcohol use, 2.19 times per hour (3.36 from 9-11 p.m.); crime dramas, 3.78 per hour
Breed & De Foe (1981)	1976 -77	150 hours prime-time sit coms & dramas	drinkers in dramas, 28% good, 58% mixed, 18% bad characters; 40% heavy (>4), 15% moderate, 20% light(<3) drinking; negative consequences rarely shown
Greenberg et al. (1979)	1977 -78	60 hours prime-time dramas	alcohol use, 2.66 times per hour (4.60 from 9-11 p.m.); crime dramas 4.60 per hour; males, whites, 20-34 yrs olds, & middle class more than their counterparts
Lowry (1981)	1978 -79	120 hours prime-time programs	alcohol acts (ingestion or attempt), 3.92 per hour (4.26 from 9-11 p.m.); acts vs. refusal, 16 to 1; acts vs. neg. consequences, 25 to 1 (short-term) & 101.5 to 1 (long-term); hard liquor (50%); at home (42%)
Greenberg (1981)	1979 -80	40 episodes top-ten prime-time series, 16 episodes top-two soaps	alcohol use, 8.13 per hour (9.36 from 9-11 p.m.); beer for working class, wine for middle-class, hard liquor for Black situation comedy
De Foe et al. (1983)	1976 -82	615.5 hours prime-time dramas & sit coms	alcohol use, increase in 78-79 & 79-80 seasons; half of drinkers, regular characters; good vs. bad characters, 5 to 1
MacDonald & Estep (1985)	1982 -85	468 hours prime-time programs	alcohol acts, 2.24 for 82-83, 2.54 for 83-84, 3.54 for 84-85 season; frequent reason, "pleasure"; champagne for upper-middle, celebration, & at home; beer & hard liquor in a bar
Wallack et al. (1987)	1984 -85	122.5 hours prime-time sit coms, dramas, & movies	alcohol acts, 10.65 per hr. (drama 11.04, theatrical movie 17.75, sit com 6.91); wine 46%, hard liquor 28%, beer 26%; for theatrical movie, liquor 39%, wine 34%; TV vs. real world, alcohol 4.6 to 1, soft drink 1 to 5.3, water 1 to 11
Wallack et al. (1990)	1986 -87	173 hours (195 episodes) prime-time fictional programming	alcohol acts 8.1 per hour; 64% of episodes contains, at least, some reference to alcohol; movies most likely to portray alcohol drinking; 12% of episodes portray alcohol in an apparently negative way

all beverage consumption shown on television, whereas in the real world, alcohol is the least consumed beverage (16%) among the four categories of beverage including coffee and tea (19%), soft drink (32%), and water (33%). Further, alcoholic beverages are frequently portrayed as being widely used by all kinds of characters in a "positive" context, which might imply to viewers that alcohol is a natural and necessary part of our lives. Two popular reasons for alcohol drinking on television are "pleasure" and "relaxation," while negative consequences of alcohol use are rarely shown. Alcohol drinking is shown in a variety of occasions such as conversation, dining, party/celebration, business discussion, and so forth, all of which seem to constitute a significant portion of our lives in the real world. With all these findings, what is needed at this time is empirical evidence for specific effects of dramatic alcohol portrayals on viewers. In the next section, studies dealing with the impact of dramatic alcohol portrayals on viewer's attitudes and behaviors related to alcohol drinking are reviewed.

Impact of Dramatic Alcohol Portrayals

Content analysis studies of alcohol portrayals in dramatic programming typically presume harmful effects of those portrayals on viewers. However, there has been only a handful of studies that actually attempted to empirically verify the "presumed" relationship between dramatic alcohol

drinking and real-life drinking. Further, empirical studies dealing with the effects of dramatic portrayals of alcohol drinking on viewers present rather inconsistent findings. In this section, the small number of impact studies on dramatic alcohol drinking portrayals are reviewed.

Tucker (1985) conducted a correlational study to explicate the relationship between television viewing and real-life drinking by surveying 394 high school boys of a mean age of 15.7 years. Based on their television viewing time, subjects were classified into heavy (more than four hours), moderate (between two and four hours), and light (less than two hours) viewers. Differences in the monthly rate of alcohol consumption were analyzed and compared among the three groups. The results indicate that heavy television viewers (5.1 times per month) consume alcoholic beverages more frequently than do light viewers (3.1 per month; $F= 4.1$, $p<.05$), whereas heavy viewers also showed more, but not statistically significant, alcohol consumption than moderate viewers (4.1 per month; $F=1.6$, $p>.05$). When demographic variables (such as age, year in school, race, and combined parental income) were controlled, alcohol consumption of heavy viewers became much more different from moderate ($F=5.2$, $p<.05$) and light viewers ($F=8.4$, $p<.01$).

Another correlational analysis by Signorielli (1987), however, indicates that there are no significant differences in alcohol drinking among heavy, medium, and light

television viewers. Using the data from the NORC General Social Survey of "the combined national probability samples" interviewed in 1977, 1978, 1980, and 1983, Signorielli suggests that there is even a small, but significant negative correlation between television viewing and alcoholic use, especially among those who have at least some college education and white people.

Three experimental studies are found in the literature to deal with the effects of alcohol depictions in dramatic presentations. Rychtarik, Fairbank, Allen, Foy, and Drabman (1983) studied the impact of televised use of alcoholic beverages on children's behavior by designing an experiment with three conditions, to which 75 children, 8 to 11 years of age, were randomly assigned: A) viewing a television drama with drinking depicted, B) viewing a television drama without drinking, and C) viewing no television drama. Subjects in the first condition watched a 5.5 minute segment of the television drama *M.A.S.H.* in which main characters drink alcoholic beverages, whereas subjects in the second condition viewed the same segment with drinking scenes edited out. After the television viewing session, all subjects were shown four glasses of water and told by the experimenter that two of them are "whiskey" and the other two are "water." Each subject was then presented with one of four photographs which shows either A) an adult male, B) an adult female, C) an eight-year old boy, or D) an eight-

year old girl. After showing a picture, the experimenter asked the subject which of the glasses he/she would choose to serve the person in the picture. Results of the experiment indicate that subjects who viewed televised alcohol drinking were significantly more likely to choose alcoholic beverages for pictured adults (Chi Square=6.16, df=2, $p<.05$). But when asked about drinking for pictured children, differences were not significant. Further, no significant differences were found between the two control groups and between male and female adult pictures.

Another experimental study of the impact of dramatic alcohol drinking on children was conducted by Kotch, Coulter, and Lipsitz (1986). Kotch et al. tested the hypothesis that exposure to dramatic presentations in which main characters are seen drinking alcoholic beverages can influence children's attitudes toward alcohol drinking. A total of 43 fifth and sixth graders (19 boys and 24 girls) were randomly assigned either to the experimental group or to the control group. Two different 35 minute videotapes were prepared by splicing scenes from various television programs. Children in the experimental group viewed one videotape which contain 35 drinking incidents occurring in 13 scenes out of the total 32, while children in the control group were exposed to the other videotape which contains no drinking incidents. The two videotapes were similar in length and number of scenes. After the videotape viewing

session, children's attitudes toward alcohol drinking were measured by a questionnaire. Results of the study indicate that there are no significant differences in the scores of attitudes toward drinking between the experimental group and the control group. However, in the question of the overall utility of drinking, and only among boys, those who viewed a television drama with drinking were significantly more likely, than those who viewed a control film, to respond that good things about alcohol are more important than bad things ($p<.05$).

On the other hand, Sobell et al. (1986) find no evidence for the presumed relationship between dramatic drinking and real-life drinking. Specifically, their experimental study, using a sample of 96 male college students, fail to find any support for the hypothesis that alcohol portrayals in dramatic presentations promote real-life drinking among viewers. Two different versions of *Dallas*, a popular prime-time television drama, with different combinations of advertisements inserted were used as experimental stimuli. One version of *Dallas* contained 13 alcohol incidents (7 incidents of actual ingesting and 6 incidents of "preparing to drink") and 13 verbal and visual references to alcohol, whereas the other version was specially edited to exclude any alcohol-related incidents or references, but had the equal length of time (slightly less than 1 hour) by adding the beginning part of the next

sequential *Dallas* episode. After viewing the tape, subjects were asked to participate in a taste-rating task of light beers which was expected to provide an unobtrusive measure of alcohol consumption by allowing them to drink as much of each beer as needed in order to evaluate it adequately. The results of the experiment indicated no significant differences in the amount of beer consumed during a subsequent taste test between subjects exposed to a videotaped television program with alcohol drinking and those exposed to a non-alcohol version of the same program.

In short, the studies dealing with the impact of dramatic drinking portrayals on viewers do not provide consistent findings to support the widely held assumption regarding the relationship between dramatic alcohol drinking and real-life drinking (see Table 2 for a summary). One of the problems with previous studies appears to be that they all have dealt with the effect of mass-mediated messages from the perspective of a "unitary" influence, just as has been shown in early TV violence research. These studies typically assumed that the same messages of dramatic program might have the same impact on individuals. Consequently, characteristics related to specific programs, characters, and viewers are generally ignored. Nonetheless, it is also conceivable that the impact of alcohol drinking portrayals might be different depending on the characteristics of programs, role characters, and viewers. Not all dramatic

Table 2. Effects Studies on Dramatic Alcohol Portrayals (Summary)

	Research Design	Subjects	Major Findings	Effect
Rychtarik et al. (1983)	experiment	75 8 to 11 years olds	M.A.S.H. viewers choose more alcohol for adults, but not for children	Yes & No
Tucker (1985)	survey	394 high school boys (M=15.7 yrs old)	heavy TV viewers consume more alcohol than light viewers	Yes
Kotch et al. (1986)	experiment	43 fifth & sixth graders	attitudes of alcohol drinking drama viewers not significantly different, except one item ("good things" more important)	No & Yes
Sobell et al. (1986)	experiment	96 male college students	viewers of "Dallas" with alcohol scenes consume not significantly more than their counterpart	No
Signorielli (1987)	survey	4447 NORC General Social Survey subjects	small negative correlation between TV viewing and alcohol use	No

portrayals may have the same impact on the audience, and the impact may not be the same to all viewers. What has been neglected in prior inquiry seems to be the consideration of some mediating variables that may intervene the process in which dramatic alcoholic portrayals influence the viewer's attitudes and behavior regarding alcohol drinking.

In the following chapter, constructs relating to the characteristics of program content, role characters, and viewers that may influence the effects of dramatic alcohol portrayals are presented along with theoretical propositions based on these constructs. Also, for a purpose of empirical testing, a set of research hypotheses are formulated later in the chapter.

CHAPTER TWO

THEORETICAL PROPOSITIONS

The advent of mass media has greatly expanded the range of experiences that people today can observe and model. TV dramas and movies, particularly as a dramatic representation of the lives of others, present the audience with a variety of behavioral models. Social learning theory suggests that human behavior is modeled or imitated through observation and that the modeling or imitation is facilitated by reinforcement. The most basic form of modeling may result from observing positive and negative effects that particular actions generate. Observation of positive consequences may lead to modeling the actions, while that of negative consequences may result in reluctance in imitating similar actions.

Further, the process of behavioral learning in viewing a dramatic program can be influenced by the viewer's cognitive and affective interventions. Especially with an understanding of TV dramas and movies as dramatic reconstructions of reality, viewers may first be concerned with the credibility of a particular presentation as reflecting reality before they get involved in learning

processes through evaluating the positive and negative effects of certain depicted behavior. The cognitive appraisals of a dramatic presentation regarding its credibility (i.e., whether or not it is likely to actually happen in reality) may facilitate or deter the modeling of such dramatic actions as alcohol drinking. The more the presentation is perceived credible (i.e., realistic), the more likely the viewer is to engage in learning processes.

On the other hand, even when the presentation is seen as realistic, attention to, and retention of, a behavioral model is usually channeled by personal attraction toward the model. A wide variety of behavioral models depicted in dramatic presentations often provide conflicting alternatives that can be used in life situations. It is certain that some models draw more attention and imitation than do others. Bandura (1977) suggests that models who possess attractive qualities are sought out, while those who lack charming characteristics are generally ignored or rejected (p.24). Thus, the attractiveness of a role character to the individual viewer may also be considered to facilitate the viewer's involvement in the processes of modeling such actions as alcohol drinking performed by the character.

The present study focuses on three constructs related to dramatic programs, characters, and viewers that may influence the impact of dramatic alcohol depictions on

viewers: A) absence vs. presence of negative consequences in alcohol depictions, B) perceived realism regarding the program, and C) role affinity with the drinking character. The first factor is the characteristic of a specific dramatic program which particularly relates to the nature of its overall description of alcohol drinking. That is, whether alcohol drinking is depicted as leading to positive or negative outcomes in the program is considered to influence the viewer's attitudes and behavior regarding alcohol drinking. The other two factors are perceived reality as the viewer's cognitive intervention (i.e., an interaction between an individual viewer and the program) and role affinity as the viewer's affective involvement (i.e., an interaction between the viewer and a specific character in the program). Perceived reality refers to the degree to which a viewer perceives dramatic content to be realistic, i.e., the degree to which the viewer believes that the content of the program is likely to be actually seen or to happen in the real world. Role affinity represents the extent to which the viewer is attracted or affiliate himself/herself to a specific character in a dramatic presentation. These two factors as the viewer's cognitive intervention and affective involvement during the exposure to the dramatic presentation are also considered to mediate the impact of its alcohol drinking portrayals.

Absence versus Presence of Negative Consequences

The impact of dramatic depictions of alcohol drinking on viewers may be largely determined by whether negative or positive consequences of alcohol drinking are portrayed in the dramatic presentation. Social learning theory suggests that even vicarious experiences of reinforcement or punishment may promote the tendency to behave or not to behave in similar or related ways. A form of punishment in alcohol drinking may be displayed by negative consequences of alcohol drinking acts such as tragic accidents, crimes, and personal and social dysfunctions.

On the other hand, the absence of negative consequences might be regarded as suggesting positive consequences, if the character frequently engaging in alcohol drinking is seen having no problem in his/her life depicted in the dramatic presentation. Bandura (1977) argues that "because consequences derive their value relationally, the omission of anticipated negative outcomes is indeed a significant consequence (p.119)." In many dramatic presentations, the role character is even seen achieving a great success in what he/she is doing, while depicted as frequently engaging in alcohol drinking. Greenberg et al. (1979) argue that "if, for example, the typical drinking scene results in greater joy, or as a possible prelude to victory for the hero, then one would expect a positive impression from those scenes on viewers (p.250)."

The previous empirical studies dealing with dramatic alcohol drinking portrayals have only concentrated on the impact of the absence of negative alcohol consequences. However, it is also necessary to examine the impact of portraying alcohol drinking in a negative manner, since recent dramatic programming tends to increase gradually the portrayals of some negative consequences of alcohol drinking practices (see Wallack et al., 1990). Empirical evidence regarding the effects of the absence and presence of negative consequences is indirectly found in the studies of media violence. The dramatic violence literature has generally indicated that violence depicted as being rewarded or not punished is more likely to elicit subsequent viewer aggression than violence depicted as being punished (Tan, 1986). When applied to dramatic alcohol drinking portrayals, the absence of negative consequences in dramatic alcohol portrayals may be seen as promoting more favorable, or less unfavorable, attitudes and behavior regarding alcohol drinking, whereas the presence of negative alcohol consequences in a dramatic presentation may lead to less favorable, or more unfavorable, attitudes and behavior.

Perceived Reality Regarding the Program

The degree to which a viewer perceives dramatic content to be real or realistic, i.e., "perceived reality," may also determine the impact of dramatic alcohol drinking messages on him/her. Dramatic programs are often regarded by viewers

as representing reality. Dramatic portrayals can differ in realism. In other words, depending on how closely people, settings, and stories in a dramatic presentation resemble those in the real world, some portrayals are perceived to be different from others. Thus, the degree of perceived reality regarding the content of a dramatic program may vary depending on the characteristics of both the program and the viewer. Previous studies dealing with perceived reality have often been concerned with the issue of how the perceived reality influences the viewer's reactions to dramatic violence (see for review, Potter, 1988; Dorr, Kovaric, & Doubleday, 1990). Feshbach (1972), for example, conducted a series of experiments manipulating the perceived reality of a violent film and found that those who were exposed to content labeled as real were significantly more aggressive than those exposed to content labeled as fiction.

In early studies, perceived reality has often been regarded as being largely determined by stimulus materials. However, as Atkin (1983) points out, the degree of reality of dramatic content may be determined not only by the characteristic of a stimulus material, but also by the receiver's perception of the material. Individual viewers may not make the same assessment about the reality of the same material. Perceived reality may vary from individual to individual, which may lead to different effects of dramatic presentations. Some later studies focused on such

variables as age, race, intelligence, gender, socioeconomic status, and emotional disturbance as factors affecting the degree of perceived reality regarding the same dramatic presentations (see for review, Greenberg & Reeves, 1976; Donohue & Donohue, 1977; Potter, 1988). Thus, perceived reality has been found to vary from individual to individual depending on his/her personal characteristics.

Early studies dealing with perceived reality typically focused on global measures of realism regarding the overall content of television or other media. Subjects were asked to provide their general impression or assessment on the realism of television content as a whole. This type of measure, however, may not be so useful particularly when the effects of specific dramatic programs are concerned. Greenberg and Reeves (1976) found that maximum reality perception is measured about specific characters and minimum reality about the most abstract measure of television (p.90). Thus, later studies on perceived reality began to focus on specific content aspects of dramatic presentations. For example, Donohue and Donohue (1977) differentiate three content aspects of a dramatic program such as role stereotypes, dramatic situations, and specific characters. When exposed to a specific dramatic program, each individual viewer may respond with a different degree of perceived reality that may be determined by his/her own cognitive appraisals of all content aspects of the specific

presentation. Thus, such content aspects as people, settings, and occurrences that constitute the story in a specific dramatic presentation need to be fully considered in order to obtain a more accurate, and valid, and useful measure of perceived reality regarding the presentation.

The findings in dramatic violence studies generally suggest that the impact of dramatic messages is greater on viewers with high perceived reality than those with low perceived reality. Atkin (1983), for example, hypothesized that media violence perceived as real is expected to facilitate more aggressive responses. The results of his experimental study actually demonstrate that those who perceive a scene of dramatic violence as real tend to give more aggressive responses than those who perceive it as unreal. Potter (1986) examines how perceived realism influences the viewer's conception of the world and suggests that perceived realism facilitates the viewer's conception of reality as being similar to dramatic representations of the real world. Specifically, he reports that subjects who are higher in perceived reality are found to be more likely to overestimate the probability of victimization as cultivated by television representations of the reality. However, there has been no attempt to explicate the role of perceived reality in mediating the impact of dramatic alcohol drinking depictions on viewers.

When applied to dramatic alcohol portrayals, it is

expected that high perceived reality may lead to more impact of those portrayals. Thus, the degree to which a viewer perceives dramatic content to be real or realistic (i.e., perceived reality) may mediate the impact of its portrayals of alcohol drinking. Depending on their judgment on how closely people, settings, and events in a drama resemble their counterparts in the real world, some viewers may respond differently than others. For example, if alcohol drinking acts are depicted in a realistic story of realistic people in a realistic setting, viewers may believe that other people in the world behave in the same way. In contrast, alcohol incidents portrayed on the basis of an imaginative story involving fictitious characters in an unrealistic setting may be regarded as being less likely to happen in the real world and as being less likely to be accepted by real people.

Atkin (1983) argues that since media messages perceived as real are able to elicit more attention, involvement, and retention, they should result in greater impacts, compared to the messages perceived as unrealistic. It is conceivable that when the viewer perceives high realism of a dramatic program, whether syntactically or semantically, he/she will pay more attention to, and get more involved in, its portrayals of alcohol drinking, which may in turn increase the level of retention of the portrayals. Consequently, it may be assumed that the greater reality a viewer perceives

of dramatic content, the more likely he/she is to be influenced by alcohol drinking depictions in a dramatic presentation. Thus, for example, if the drinking acts are depicted in a socially desirable context and as being rewarded in a dramatic presentation about which the viewer perceives high realism, the same behavior may be more likely to be remembered and performed by the viewer in similar situations encountered in the real world.

Role Affinity with the Drinking Character

Role affinity as an affective mediator may also play a part in varying the impact of alcohol portrayals on individual viewers. Role affinity refers to the extent to which a viewer is attracted to, or affiliates himself/herself to, a specific character in a dramatic presentation. The concept of role affinity encompasses two theoretical perspectives for explicating the effects of dramatic messages on viewers: social learning theory (Bandura, 1973, 1977) and drench hypothesis (Greenberg, 1988).

Most researchers who perform content analysis on alcohol portrayals in dramatic programs stress Bandura's social learning theory as a way of highlighting the potential impact of these programs on the audience (Wallack et al., 1985). Social learning theory explains the acquisition of human behavior based on such factors as observation and reinforcement. It assumes that human behavior is modeled or imitated through observation and that

the modeling or imitation is facilitated by reinforcement. Further, according to Bandura (1977), models who have attractive qualities are more influential, while those who lack charming characteristics are generally ignored or rejected. When applied to the area of dramatic alcohol portrayals, it is suggested that acts of alcohol drinking performed by characters in dramatic presentations are imitated or modeled through observation by viewers when the characters are seen to receive reinforcement. Also, more importantly, the drinking acts are more likely to be imitated or modeled if performed by the character who is seen as attractive and charming by the individual viewer.

Content analysis studies have persistently shown that alcohol drinking acts in dramatic presentations are typically depicted in a positive context, with insufficient indication of negative consequences, or even with positive rewards, which may facilitate social learning of the acts (Greenberg et al., 1979; Wallack et al., 1987). However, previous studies dealing with dramatic alcohol portrayals did not consider the possibility of different impacts of those portrayals on different individual viewers who may affiliate themselves with different characters, or with the same character to a different degree. Even in the world of dramatic representations, a wide variety of behavioral models often provides conflicting alternatives that can be modeled in life situations. Thus, it is also plausible that

some models draw more attention and imitation than do others in their acts of alcohol drinking.

Greenberg et al. (1979) argue that to the extent that alcohol drinking acts are performed by liked characters, the impacts on viewers will be greater. Greenberg (1981) also suggests that viewers, especially young people, are likely to emulate or imitate alcohol drinking behavior of the character to whom they affiliate. This assertion is later reflected in the 'drench hypothesis' (Greenberg, 1988; Reep & Dambrot, 1989). As opposed to traditional media theories that have often assumed a general, cumulative "drip-drip-drip" effect of dramatic messages, the drench hypothesis suggests that certain role portrayals may generate some significant "drench" effects on certain viewers (Greenberg, 1988).

One explanation for assuming a drench effect is provided by a "motivational" perspective regarding human learning. It is assumed that people are generally regarded as being motivated to learn from others some "good" repertoires of behavioral scripts, as well as some corresponding attitudes, which can be used in their own life situations. Dramatic programs present a large number of role models and behaviors among which individual viewers may choose to adopt in their lives. Thus, it is conceivable that viewers may learn a significant portion of role behaviors from some, but not all, characters in dramatic

presentations whom they perceive as a "good" role model. Greenberg (1981) states that "one aspect of identification is a desire to emulate or imitate the behavior of the character with whom one identifies" (p.232). For example, a person's favorite character, as an observed model, may make it desirable to behave in a particular manner, e.g., to get drunk for pleasure or to use alcohol to solve personal problems. The viewer of the program, then, is more likely to imitate or model the behavior, i.e., to get drunk for pleasure or to use alcohol to solve his/her own personal problems, when he/she faces a similar situation or occasion. Thus, the impact of a certain type of behavior, including alcohol drinking, portrayed in dramatic presentations appears to depend on how much the viewer is affiliated to the drinking character.

Another explanation for assuming a drench effect of dramatic portrayals is provided by a "cognitive" perspective regarding human attention and memory. People tend to pay more attention to media stimuli that are perceived as more attractive than those that are less attractive. Thus, when a media stimulus, or specifically an incident of alcohol drinking, is performed by a favorite character to whom the viewer is highly attracted, the stimulus may draw more attention that the same stimulus presented by an unattractive character. A high level of attention given to the stimulus, in turn, may produce a high level of retention

of the stimulus. Consequently, whenever the viewer faces a situation (for example, in a bar or when offered a drink) in which he/she has to decide how to behave, the memory of a similar situation in a dramatic presentation where his/her favorite character behaved in a particular way (for example, drinking beer or refusing a drink offer) can be easily retrieved and activated to direct his/her actual behavior. If the viewer has chosen to favor, or to affiliate himself/herself to, a character in a specific drama (i.e., experiences high "role affinity"), he/she might be more influenced by alcohol-related behavior of the character than by those of other characters with whom he/she feels low affinity. Thus, the more the viewer likes a dramatic character, the more likely he/she is to accept drinking behaviors shown by the character as a reference for behaving in similar situations in the real world.

Research Hypotheses

The present study is intended to explicate the roles of these alcohol consequences types, perceived reality, and role affinity in generating the impact of dramatic alcohol portrayals on the viewer's attitudes and behavior regarding alcohol drinking. Based on the discussions above, the following fourteen research hypotheses are formulated to be tested empirically.

H1: Exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences** will show **more favorableness** regarding alcohol drinking **than** does exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**.

H1a: Exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences** will show **more favorable attitudes** toward alcohol drinking **than** does exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**.

H1b: Exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences** will show **more favorable behavioral dispositions** related to alcohol drinking **than** does exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**.

H2: Exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences** will show **more favorableness** regarding alcohol drinking **than** does exposure to a film containing **no alcohol** drinking portrayals.

H2a: Exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences** will show **more favorable attitudes** toward alcohol drinking **than** does exposure to a film containing **no alcohol** drinking portrayals.

H2b: Exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences** will show **more favorable behavioral dispositions** related to alcohol drinking **than** does exposure to a film containing **no alcohol** drinking portrayals.

H3: Exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences** will show **less favorableness** regarding alcohol drinking **than** does exposure to a film containing **no alcohol** drinking portrayals.

H3a: Exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences** will show **less favorable attitudes** toward alcohol drinking **than** does exposure to a film containing **no alcohol** drinking portrayals.

H3b: Exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences** will show **less favorable behavioral dispositions** related to alcohol drinking **than** does exposure to a film containing **no alcohol** drinking portrayals.

H4: **As perceived reality** increases in the exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences**, the **favorableness** regarding alcohol drinking will also **increase**.

H4a: **As perceived reality** increases in the exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences**, the **favorableness in attitudes** toward alcohol drinking will also **increase**.

H4b: **As perceived reality** increases in the exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences**, the **favorableness in behavioral dispositions** related to alcohol drinking will also **increase**.

H5: **As perceived reality** increases in the exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**, the **favorableness** regarding alcohol drinking will **decrease**.

H5a: **As perceived reality** increases in the exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**, the **favorableness in attitudes** toward alcohol drinking will **decrease**.

H5b: **As perceived reality** increases in the exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**, the **favorableness in behavioral dispositions** related to alcohol drinking will **decrease**.

H6: As **role affinity** increases in the exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences**, the **favorableness** regarding alcohol drinking will also **increase**.

H6a: As **role affinity** increases in the exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences**, the **favorableness in attitudes** toward alcohol drinking will also **increase**.

H6b: As **role affinity** increases in the exposure to a film containing portrayals of alcohol drinking with the **absence of negative consequences**, the **favorableness in behavioral dispositions** related to alcohol drinking will also **increase**.

H7: As **role affinity** increases in the exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**, the **favorableness** regarding alcohol drinking will **decrease**.

H7a: As **role affinity** increases in the exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**, the **favorableness in attitudes** toward alcohol drinking will **decrease**.

H7b: As **role affinity** increases in the exposure to a film containing portrayals of alcohol drinking with the **presence of negative consequences**, the **favorableness in behavioral dispositions** related to alcohol drinking will **decrease**.

CHAPTER THREE

METHOD

OVERVIEW

The purpose of this study is to investigate the roles of absence vs. presence of negative consequences, perceived reality, and role affinity in generating the impact of dramatic alcohol portrayals on viewer's attitudes towards alcohol drinking. The absence vs. presence of negative consequences will be experimentally manipulated, while the individual viewer's perceived reality and role affinity are measured after his/her exposure to the experimental material. A total of 211 undergraduate students were randomly assigned to one of the three conditions and exposed to one of the three version of a dramatic film: A) the 'Negative' film version that contains portrayals of both alcohol drinking and its negative consequences, B) the 'Positive' film version that shows the same alcohol drinking portrayals but not the negative consequences, and C) the 'Neutral' film version that has the same plot, but with all portrayals of alcohol drinking and negative consequences edited out. After the exposure to a film, subjects were asked to respond to a questionnaire that was intended to

measure such variables as perceived reality, role affinity, and attitudes and behavioral dispositions regarding alcohol drinking.

SUBJECTS

Eighty male and 144 female undergraduate students were recruited from communication courses at Michigan State University. Participants were given extra credit in exchange for their participation. Thirteen participants who reported their prior exposure to the original film were excluded. Thus, the responses of 211 participants (73 for the Negative Film Condition, 64 for the Neutral Film Condition, and 74 for the Positive Film Condition) were used in analysis.

EXPERIMENTAL STIMULI

For the manipulation of absence vs. presence of negative consequences, the present study used three versions of a film that had been specially edited and prepared for the experiment. The film (*A Star Is Born*) presents a story in which a main character (John Norman Howard, played by Kris Kristofferson) frequently engages in alcohol drinking and achieves a success in what he is trying to achieve in his life. Table 3 shows a scene-by-scene synopsis of the film. The 'Negative' version of the film contains the portrayals of negative consequences of the role character's alcohol drinking as well as the character's frequent alcohol drinking acts, whereas for the 'Positive' version of the

Table 3. A Scene-by-Scene Synopsis of Stimulus Film

Scene #1	John Norman Howard, a very popular rock singer (played by Kris Kristofferson), performs for a big, cheering audience at his concert.
Scene #2	John visits a local bar to find some relaxation after his concert. At the bar, he becomes attracted to an unknown female singer, Esther Hoffman (played by Barbra Streisand) who was performing on the stage. A fight occurs between John and a fan of his who recognizes and bugs him. Esther stops singing and leads John to an exit to get out of the bar.
Scene #3	John drives Esther home and gets an offer for breakfast next morning at her place.
Scene #4	At breakfast, John asks Esther to accompany him to his concert in the afternoon. Esther accepts the offer.
Scene #5	Esther stays on the side of the stage and watches John performing for a huge crowd at the concert.
Scene #6	John brings Esther to his home. John makes up a song for Esther and she becomes attracted to him. They feel love and sleep together.
Scene #7	Next morning, John begins to train Esther to sing better. He decides to make her a big star. John doesn't do any recordings for himself for several months, but only concentrates on the preparation for Esther's success as a popular singer.
Scene #8	Esther unexpectedly gets an opportunity to sing on a big stage, at John's charity concert. John stops in the middle of his singing and requests Esther to sing a song to the audience. Esther looks embarrassed and nervous at the start of her singing, but she soon gains confidence. After her performance, she gets standing applause from the audience and is surrounded by amazed media reporters at the backstage.
Scene #10	On their drive back from the concert, Esther proposes to John, and he accepts it.
Scene #11	John and Esther have a wedding ceremony the next day. They hide and have a honeymoon in one of John's retreat places.
Scene #12	A recording company finds John and Esther and finally makes a contract with her. By her recording and concert performances, Esther gets to draw a lot of attention and popularity from both the media and the public.
Scene #13	Finally, she wins the Grammy Award for the best female vocalist.
Scene #14 (Only for Negative Condition)	John leaves home to give one of his friends a ride and gets killed by an auto accident.

film all the negative consequences are edited out. Table 4 lists the portrayals of alcohol drinking by the main character. All negative consequences depicted in the film are also listed in Table 5. Finally, the 'Neutral' version of the film is prepared by editing out all portrayals of alcohol drinking and its negative consequences, while the main plot remains intact. Thus, the Neutral film runs the shortest (27 minutes), followed by the Positive film (32 minutes) and the Negative film (36 minutes).

PROCEDURE

Participants first signed up in class for one of the scheduled experimental sessions at their convenience. They were told that they would watch a short dramatic film and fill out a questionnaire after the film and that the whole session would take less than an hour. The film viewing room was open from 5 to 9 p.m. on Mondays, Tuesdays and Thursdays and from 3 to 6 p.m. on Fridays for four weeks in April, 1994. At each session, participants were first exposed to one of the three film versions (i.e., positive, neutral, and negative film tapes) and, after the film, they were asked to fill out a questionnaire that contains question items to measure socio-demographic characteristics and stimulus-related responses of the participants including perceived reality, role affinity, and alcohol-related attitudes and behavioral dispositions. Since the number of participants in each session was determined by how many students could

Table 4. Portrayals of Alcohol Drinking in Stimulus Film

Scene #1	At his arrival for the concert, John gets off the car, holding a beer in his hand. John drinks liquor right before his performance on stage.
Scene #2	John brings his own liquor to the bar. One of his fans pours him a drink.
Scene #4	At breakfast, John asks Esther to get him an alcoholic beverage, and drinks wine instead of having breakfast.
Scene #5	John drinks liquor during the concert.
Scene #6	At his home, John drinks liquor again before he makes up a song for Esther.
Scene #12	After he drives Esther to her recording studio, John gets home and drinks liquor while composing a song.
Scene #14	Getting out of the house and approaching his car, John drinks beer. While driving his car, John continuously drinks.

Table 5. Negative Alcohol Consequences in Stimulus Film

Scene #1	John arrives very late at the concert, with a beer in hand. John forgets the lyrics of a song during the concert.
Scene #2	John punches one of his fans at the bar.
Scene #6	While drinking liquor, John is labelled, and criticized, by Esther as an alcoholic.
Scene #10	When Esther proposes to him, John first says no because he says he drinks too much, implying the negative quality of drinking excessively.
Scene #13	At the Grammy Award ceremony, John shows up late, behaves like a drunkard, and spoils the ceremony by climbing up on the stage and speaking filthy words to the audience. John, after the ceremony, gets surrounded by media reporters and punches one of them.
Scene #14	John drives his car while drunk, brings forth a fatal accident, and gets killed by the accident.

make it for the session, the decision regarding the type of film to present in each session was made session by session in order to make the number of subjects in each of the three experimental conditions about the same. Specifically, for the first three sessions, subjects were shown the positive film version in the first session, the neutral film in the second session, and the negative film in the third session. For the later sessions, subjects were exposed to the film version for the experimental condition that had the smallest number of participants in total. A total of 44 experimental sessions were conducted for the collection of the data.

MEASUREMENT OF PERCEIVED REALITY

Some previous studies dealing with perceived reality have often focused on the degree to which viewers, especially younger children, perceive dramatic events as being "real" or "actual" (i.e., actually happening in the real world, or in the "box," at the same time as the events occur in the presentation). Other studies, dealing with older children or adults, also conceptualized perceived reality as representing the degree to which viewers perceive dramatic events as being "realistic" or "probable" (i.e., likely to happen in the real world at some time in some place). The impact of media messages can be mediated by the degree to which the viewer perceives the messages as being realistic or probable as well as the degree to which the viewer perceives them as real or actual (Condry, 1989).

When an adult population is studied in relation to dramatic presentations, the measurement of the 'actuality' perception may not be necessary, because most adults understand that dramatic presentations are deliberately produced by some motivated people.

To measure the viewer's perceived reality, the present study developed a 7-point Likert-scale that contains 20 question items (Alpha=.90) for measuring the degree to which the subject perceives realism in various aspects of the stimulus film. The measurement scale relates to the realism regarding specific characters and occurrences at specific dramatic settings in the film. For example, subjects were asked to indicate how realistic they felt regarding 'occurrences at John Norman's first concert' in the film by marking an appropriate point on a 7-point scale ranging from VERY UNREALISTIC to VERY REALISTIC.

MEASUREMENT OF ROLE AFFINITY

The measurement of role affinity focuses on the degree to which the subject feels attracted to a variety of aspects of the role character. The present study developed a 7-point Likert-type scale with 12 question items (Alpha=.87) that measure the extent to which the subject feels attracted to each of the specific detailed aspects of the role character (for example, his personality and styles of speech, music, clothing, residence, goal management, dealing with other people, etc.) in the film. For example, subjects

were asked to indicate how much they like about John Norman's personality by marking an appropriate point on a 7-point scale ranging from DISLIKE VERY MUCH to LIKE VERY MUCH.

DEPENDENT MEASURES

Attitudes of subjects toward alcohol drinking were measured by a 5-point Likert scale (STRONGLY DISAGREE/ DISAGREE/NEUTRAL/AGREE/STRONGLY AGREE) with 15 question items (Alpha=.84) adapted from Klein's (1990) measurement scale on college students' beliefs about alcohol drinking. For example, subjects were asked to indicate the degree to which they agree or disagree with the statement, "ALCOHOL DRINKING SHOULD BE PROHIBITED IN THIS COUNTRY" by marking an appropriate point on a 5-point scale ranging from STRONGLY DISAGREE to STRONGLY AGREE. Behavioral dispositions to drink alcohol are also measured by asking them how likely they are to use alcoholic beverages on each of the 15 hypothetical occasions listed that they may face in future (Alpha=.88). For example, they were asked to indicate the likelihood that they will engage in alcohol drinking "WHEN MY NEXT EXAM IS OVER" by marking an appropriate point on a 5-point scale ranging from VERY UNLIKELY to VERY LIKELY.

PILOT STUDY

About two months before the actual experiment, a pilot study using a separate group of 54 undergraduate students as subjects was conducted in order to check the appropriateness

of the stimulus materials and the measurement instruments. The stimulus materials were generally found to produce a sufficient range of variance in the degrees of both perceived reality (Mean= 81.5, Standard Deviation=16.40, Variance=269.00) and role affinity (Mean=37.16, Standard Deviation=10.12, Variance=102.40). Also, three film conditions were found not to be significantly different in the scores of both perceived reality ($F=2.44$, $p>.05$) and role affinity ($F=.60$, $p>.05$). Further, the students reported no difficulty in understanding the questionnaire for measuring independent and dependent variables.

STATISTICAL ANALYSIS

Socio-demographic variables that might influence alcohol-related attitudes and behavioral dispositions were also measured and tested among the three experimental conditions by a t-test or a Chi Square test depending on the level of measurement. These statistical analyses were to assure that subjects in those three conditions have about the same characteristics related to the variables, i.e., for the purpose of controlling for all other variables that might influence the dependent measures otherwise.

The items in the two dependent measures were factor analyzed to identify relevant dimensions of alcohol-related attitudes and behavioral dispositions separately. Reliabilities of these dimensions were checked by using Cronbach's Alpha. Multiple regression analysis was

conducted to examine the effect size of the film condition on the dependent measures. One-way ANOVA along with Scheffe's test was also used to detail the variations among the three film conditions. To clarify the roles of perceived reality and role affinity in influencing the impact of alcohol portrayals, correlation analysis was conducted separately for the positive film condition and for the negative film condition. Finally, as a post hoc analysis, two different path models drawing upon the present data were constructed, and tested, for the positive condition and for the negative condition respectively.

CHAPTER FOUR

RESULTS

In this chapter the results of statistical analyses of research data are organized in the following format. First, descriptive statistics of the data including socio-demographic compositions of research participants are presented and compared among film conditions. Second, the results of exploratory factor analysis for each of the two dependent variables (i.e., alcohol-related attitudes and behavioral dispositions) are reported in tabular form and commented upon. Third, the hypotheses proposed in Chapter 2 are tested based on the results of statistical analyses regarding the relationships among variables. Finally, based on the relationships found among variables, a path model of variables (including perceived reality and role affinity) influencing alcohol attitudes and behavior is constructed for each of the two experimental conditions (i.e., positive and negative film conditions) and its goodness of fit is statistically tested.

DESCRIPTIVE ANALYSIS

Descriptive characteristics of research participants are summarized in Table 6. The average age of participants

Table 6. Descriptive Characteristics of Sample

Category	Sample Descriptions
Gender:	male 75 (35.5%) female 136 (64.5%)
Age (average):	19.8 years old (S.D.=1.53)
Year in College:	freshman 72 (34.1%) sophomore 58 (27.5%) junior 54 (25.6%) senior 27 (12.8%)
Residence Type (I):	living on-campus 139 (65.9%) living off-campus 72 (34.1%)
Residence Type (II):	living with college students 178 (84.4%) not with college students 33 (15.6%)
Parent Drinking:	Yes 79 (37.4%) No 132 (62.6%)
Number of Friends Drinking Alcohol Regularly (average):	3.34 of 5 (S.D.=1.64)

is found 19.8 years old (S.D.=1.53). Overall, the sample consists of more females (64.5%), more freshmen and sophomores (61.6%), more on-campus residents (65.9%), and more living with college students (84.4%) than their counterparts respectively. Table 7 compares the statistics of three experimental conditions, while testing the significance of the differences among the three film conditions. Chi-square tests indicate that there are no significant differences among the three conditions in 'gender,' 'year in college,' 'on-campus living,' and 'parent drinking,' whereas significant ($p<.05$) differences are found in the variable 'living with college students.' However, no

Table 7. Sample Characteristics and Tests of Differences by Film Condition

Characteristic	Film Condition NEGATIVE	NEUTRAL	POSITIVE	Significance of Differences
Gender: (male)	27	23	25	n.s.
(female)	46	41	49	(Chi Sq.=.17)
Age:	19.7	20.0	19.8	n.s. (F=.84)
Year in College:				
(freshman)	24	22	26	
(sophomore)	21	18	19	
(junior)	21	15	18	n.s.
(senior)	7	9	11	(Chi Sq.=1.56)
Residence (I):				
(on-campus)	46	42	51	
vs.				n.s.
(off-campus)	27	22	23	(Chi Sq.=.57)
Residence (II):				
(with college students)	63	48	67	
vs.				
(not with college st.)	10	16	7	p<.05 (Chi Sq.=6.60)
Parent Drinking:				
(Yes)	30	21	28	n.s.
(No)	43	43	46	(Chi Sq.=1.01)
Number of Drinkers out of Five Best Friends:	2.83	3.48	3.71	p<.01 (F=5.93)

significant difference was found in the number of participants who live with college students between the positive and negative film conditions.

One-way ANOVA tests reveal that participants in the three film conditions are about the same age, but the differences among the conditions in the number of friends who drink regularly are significant ($F=5.93$; $p<.01$). Participants in the positive film condition report the largest number of their friends drinking alcohol regularly (3.71 of 5), followed by the neutral film condition (3.48) and the negative film condition (2.83). A Scheffe test, however, indicates that the difference between the positive film condition and the neutral film condition and the difference between the negative film condition and the neutral film condition are not statistically significant, whereas only the difference between the negative film condition and the positive film condition is found statistically significant ($p<.05$). Thus, participants in the positive condition reported that they have significantly more friends who drink alcohol regularly than do those in the negative condition.

The fact that among seven variables which the present study attempted to control for by random assignment, only one variable, the number of drinking friends, shows a significant difference between the positive condition and the negative condition may invite some rootless

speculations. It may be possible that since the number of drinking friends was measured right after the measurement of alcohol related attitudes and behavioral disposition, the subject's self-report of drinking friends might have been influenced by their responses to the prior measurement of alcohol-related attitudes and behavioral dispositions which the present study hypothesizes had been affected by the exposure to one of the stimulus films. Nonetheless, it is not clear from the present data whether these differences in the number of drinking friends were produced by the order of the measurements or by actual dissimilarities in subjects between the film conditions. The implications of this problem are dealt with as a limitation of the present study in Chapter Five.

DIMENSIONS OF ALCOHOL ATTITUDES AND BEHAVIORAL DISPOSITIONS

Responses to the 15 scale items regarding attitudes toward alcohol drinking were factor analyzed in an attempt to unveil the underlying dimensions of those attitudes. A varimax rotated factor analysis found three factors with eigenvalues above 1.00 (Cumulative Percent of Variance = 56.0). Table 8 provides factor loadings for each of the items in relation to the dimension in which it is factor loaded most highly and greater than .40. The first dimension 'Amusement' (Eigenvalue=4.75; Alpha=.81) indicates the role of alcohol drinking in cheering them up on various occasions. Specifically, this dimension deals with

Table 8. Factor Loadings and Inter-Item Reliability for Dimensions of Attitudes toward Alcohol Drinking

Factor	Eigen-value	Alpha	Factor Loadings	Scale Items
1. Amusement	4.75	.81	.82	1. Drinking is a necessary part of celebration.
			.78	2. A person giving a party should always make sure that alcoholic beverages are available.
			.68	3. When they are at a gathering together, people who drink have more fun than people who don't.
			.61	4. Drinking helps us see things in a better way.
			.55	5. Drinking makes sexual relationships more enjoyable.
2. Tension Release	1.42	.78	.74	1. Drinking gives us some courage to accomplish things which you would not when sober.
			.71	2. Drinking relieves tension.
			.70	3. It is easier to meet new people if we are drinking.
			.65	4. Drinking is a good way of getting rid of stress.
			.54	5. It is okay to drink in order to feel more comfortable around others.
3. Propriety	1.11	.46	.77	1. Alcohol drinking should be prohibited in this country.(R)*
			.61	2. It is okay to drive after we have had just a few drinks.
			.56	3. People should be able to drink as much as they want as long as they don't harm anyone else.

* Scores were reversed. Cumulative percent of variance = 56.0

attitudes toward drinking alcohol: A) for celebration (e.g., "Drinking is a necessary part of celebration."), B) for party hospitality ("A person giving a party should always make sure that alcoholic beverages are available."), C) for fun at a gathering ("When they are at a gathering together, people who drink have more fun than people who don't."), and so on.

The second dimension 'Tension Release' (Eigenvalue= 1.42; Alpha=.78) emphasizes that alcohol drinking relieves tension or stress and helps them manage their lives more comfortably and successfully. The dimension includes such items as "Drinking relieves tension," "Drinking gives us some courage to accomplish things which you would not when sober," "It is easier to meet new people if we are drinking," and so on. The third dimension 'Propriety' (Eigenvalue=1.11; Alpha=.46) focuses on whether alcohol drinking itself should be controlled or limited by some outside forces. Thus, the dimension of 'Propriety' consists of such items as "Alcohol drinking should be prohibited in this country," "It is okay to drive after we have had just a few drinks," "People should be able to drink as much as they want as long as they don't harm anyone else." Finally, the two items with factor loadings less than .40 for any of the three dimensions above were excluded from the analysis.

Responses to the 15 items dealing with behavioral dispositions to drink alcohol were also factor analyzed to

uncover their underlying dimensions. A factor analysis with varimax rotation yielded three dimensions of alcohol drinking dispositions (Cumulative Percent of Variance= 61.4). Table 9 shows three factors with eigenvalues above 1.00 and their items with factor loadings above .40. First, the 'For Problems' dimension (Eigenvalue=5.69; Alpha=.86) represents the participant's dispositions to drink alcohol in order to solve their personal problems. This dimension includes such items as (I would probably drink) "when I feel lonely," "when I get upset greatly," "when I feel distressed," "when I have a serious family problem," and so on. Second, the 'For Fun' dimension (Eigenvalue=2.37; Alpha=.86) indicates a desire to drink alcohol for having fun on various occasions. For example, the dimension includes such occasions as "when I go to a bar," "when I go to a party," "when I have something to celebrate," and so on. Finally, the third dimension "For Sociability" (Eigenvalue=1.16, Alpha=.67) shows a desire to drink alcohol for establishing good relationships with others. Such items as "before I make love," "when I want to develop a personal relationship with somebody," "when I go out on a date," and so on.

For the purpose of statistical analyses, scores of the items that belong to each dimension were summed and divided by the number of the items in order to yield a standardized composite score for each of the dimensions of attitudes and

Table 9. Factor Loadings and Inter-Item Reliability for Dimensions of Behavioral Dispositions to Drink Alcohol

Factor	Eigen-value	Alpha	Factor Loadings	Scale Items
1. For Problems				
	5.69	.86	.85	1. When I feel lonely.
			.84	2. When I get upset greatly.
			.84	3. When I feel distressed.
			.76	4. When I have a serious family problem.
			.55	5. When I can't get to sleep.
			.49	6. When I have serious things to discuss with my friend.
2. For Fun				
	2.37	.86	.89	1. When I go to a bar with friends.
			.88	2. When I go to a party.
			.85	3. When I have something to celebrate.
			.68	4. When my next exam is over.
			.48	5. When I watch a sporting event on television.
3. For Sociability				
	1.16	.67	.73	1. Before I make love.
			.67	2. When I want to develop a personal relationship with somebody.
			.57	3. When I go out on a date.
			.51	4. When I have a big dinner at a restaurant.

Cumulative percent of variance = 61.4

behavioral dispositions regarding alcohol drinking. Nevertheless, the total scores of alcohol attitudes and behavioral dispositions were also computed for testing the research hypotheses. Cronbach's Alpha Coefficients for the total scores indicate fairly high reliabilities of the two dependent measures: attitudes toward alcohol drinking (.84) and behavioral dispositions to drink alcohol (.88).

HYPOTHESIS TESTS

Presence vs. Absence of Negative Consequences. To test the impact of presence vs. absence of negative consequences of alcohol drinking, the present study operationalized the variable by exposing research participants randomly to one of the three versions of the same movie: A) the positive film version that contains portrayals of alcohol drinking, but not of its negative consequences, B) the negative film version that portrays both alcohol drinking and its negative consequences, and C) the neutral film version that carries the main plot, but shows neither alcohol drinking nor its negative consequences. Table 10 provides correlations among the variables including film condition as well as the means and the standard deviations of each of the variables. The value '3' was assigned to the positive film condition, '2' to the neutral film condition, and '1' to the negative film condition. The variable 'film condition' is found to be significantly correlated to 'alcohol attitudes,' i.e., attitudes toward alcohol drinking, ($r=.25$, $p<.001$) and to

Table 10. Correlations, Means, and Standard Deviations for All Variables

Variables	1	2	3	4	5	6	7	8	9	10
1. Film Condition	--									
2. Friends Drinking	.22**	--								
3. Parents Drinking	-.01	.19**	--							
4. Gender	-.04	.17**	-.05	--						
5. Age	-.02	.06	.03	.20**	--					
6. Year in College	.01	.05	.05	.16*	.79***	--				
7. On-campus Living	.06	-.13	-.05	-.12	-.54***	-.60***	--			
8. Living with College Students	.07	.18**	.05	.01	-.37***	-.27***	.14	--		
9. Alcohol Attitude	.25***	.41***	.19**	.26***	-.03	-.02	-.06	.12	--	
10. Alcohol Behavior	.20**	.47***	.15*	.14*	.11	.11	-.16*	.02	.69***	--
Mean	2.01	3.33	.37	.35	19.82	2.19	.65	.84	32.49	34.69
Std Dev	.84	1.65	.48	.48	1.53	1.04	.48	.36	7.91	9.06

(N=206)

* p<.05 ** p<.01 *** p<.001 (one-tailed probability).

NOTE. Variables were coded as follows. Film condition: negative film condition 1, neutral film condition 2, positive condition 3. Friends drinking: # of drinking friends out of 5. Parents drinking: 'no' 0, 'yes' 1. Gender: 'female' 0, 'male' 1. On-campus living: 'no' 0, 'yes' 1. Living with college students: 'no' 0, 'yes' 1. Alcohol attitude: minimum 0, maximum 75. Alcohol behavior: minimum 0, maximum 75.

'alcohol behavior,' i.e., behavioral dispositions to drink alcohol ($r=.20$, $p<.01$). The significant correlations suggest that the absence vs. presence of negative consequences of alcohol drinking may indeed influence the viewer's relevant attitudes and behavioral dispositions.

Other independent variables that show significant correlations with alcohol attitudes are 'friends drinking' ($r=.41$; $p<.001$), 'gender' ($r=.26$; $p<.001$), and 'parents drinking' ($r=.19$; $p<.01$). That is, the greater the percentage of their friends who drink alcohol regularly, the more favorable their attitudes toward alcohol drinking. Also, males tend to show more favorable attitudes than females, while those whose parent(s) drink(s) alcohol indicate more favorableness toward alcohol drinking. Moreover, alcohol behavior is found to significantly correlate with 'friends drinking' ($r=.47$; $p<.001$), 'on-campus living' ($r=-.16$; $p<.05$), 'parents drinking' ($r=.15$; $p<.05$), and 'gender' ($r=.14$; $p<.05$). The greater the percentage of their friends drinking alcohol, the more favorable their behavioral dispositions regarding alcohol drinking. Those who live off-campus are more disposed to drink alcohol than those who live on-campus, while males and children of drinking parents are more likely to use alcohol than their counterparts respectively.

For the purpose of more detailed investigations of the research data regarding the impact of film condition on

alcohol attitudes and behavior, such statistical techniques as Multiple Regression Analysis and Analysis of Variance (ANOVA) were employed. Following are the results of the statistical analyses regarding the impact of film condition on the two dependent variables, i.e., attitudes toward alcohol drinking and behavioral dispositions to drink alcohol.

First of all, Table 11 shows the results of a multiple linear regression of alcohol attitudes on film condition and other variables. The present study hypothesized that film condition, i.e., the experimental manipulation of the participants' exposure to one of the three film versions, would be a significant determinant of attitudes toward alcohol drinking. In particular, it was expected that those who are exposed to the positive film version (i.e., the film

Table 11. Multiple Linear Regression of Attitudes toward Alcohol Drinking on Film Condition and Subject Characteristics

Predictor	Beta	t	p
Film condition	.21	3.30	.001
Friends drinking	.29	4.41	.000
Parents drinking	.15	2.26	.020
Gender	.24	3.73	.000
Age	-.10	-.92	.358
Year in college	-.04	-.35	.725
On-campus living	-.08	-1.06	.292
Living with college students	.01	.09	.926

R square=.269. Adjusted R square=.239. F=9.14; p<.001.

with alcohol drinking only) would show more favorable attitudes toward alcohol drinking than those exposed to the neutral film version (i.e., the film with no alcohol drinking) and that those exposed to the negative film version (i.e., the film with both alcohol drinking and its negative consequences) would be less favorable toward alcohol drinking than those shown the neutral film version. The results of the first multiple regression analysis indicate that the model accounts for a significant portion of the variance (Adjusted R square=.239, $F=9.14$; $p<.001$) and that film condition as the focal variable in the present study acts as a significant predictor (Beta=.21, $t=3.30$; $p<.001$) of the dependent variable, alcohol attitudes. Specifically, film condition is found to be positively and significantly related to alcohol attitudes. Thus, it is suggested that those in the positive condition are likely to show more favorable attitudes toward alcohol drinking than those in the neutral condition and those in the negative condition and that those in the neutral condition are likely to show more favorable attitudes than those in the negative condition. The results of a multiple linear regression of behavioral dispositions to drink alcohol reveal that the model explains a significant portion of the variance (Adjusted R square=.218, $F=8.27$; $p<.001$). However, film condition (Beta=.12, $t=1.83$; $p>.05$) is not found to be a significant predictor variable of behavioral dispositions to

Table 12. Multiple Linear Regression of Behavioral Dispositions to Drink Alcohol on Film Condition and Subject Characteristics

Predictor	Beta	t	p
Film condition	.12	1.83	.069
Friends drinking	.41	6.09	.000
Parents drinking	.08	1.22	.224
Gender	.05	.86	.392
Age	.01	.02	.981
Year in college	.01	.14	.889
On-campus living	-.09	-1.18	.241
Living with college students	-.03	-.51	.612

R square=.249. Adjusted R square=.218. F=8.27; p<.001

drink alcohol as the dependent variable (see Table 12).

As for the three dimensions of alcohol attitudes, Table 13 shows the results of multiple linear regression analyses of each of the dimensions as the dependent variable. As indicated in Table 13, film condition is found to be a significant predictor for the Tension Release dimension (Beta=.29, t=4.56; p<.001) and for the Amusement dimension (Beta=.13, t=1.98; p<.05), but not for the Propriety dimension (Beta=.02, t=.31; p>.05). Specifically, the results suggest that since film condition is seen as positively related to the dimensions of Amusement and Tension Release, those in the positive film condition are likely to show the most favorable attitudes and those in the negative condition the least favorable attitudes in relation

Table 13. Regression Results for Dimensions of Attitudes toward Alcohol Drinking

	Amusement		Tension Release		Propriety	
Predictor	Beta	t	Beta	t	Beta	t
Film condition	.13	1.98*	.29	4.56***	.02	.31
Friends drinking	.24	3.44***	.25	3.71***	.24	3.33**
Parents drinking	.09	1.40	.14	2.26*	.13	1.89
Gender	.28	4.34***	.16	2.59*	.13	1.83
Age	.01	.87	-.10	-.97	-.20	-1.73
Year in college	-.23	-2.13*	.03	.31	.16	1.40
On-campus living	-.08	-1.01	-.05	-.70	-.07	-.85
Living with college students	-.02	-.30	.02	.25	-.01	-.04
R	.216		.251		.131	
Adjusted R	.185		.221		.097	
F	6.91***		8.45***		3.80***	

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

to these dimensions. However, as is the case with the index of total scores, for the dimensions of behavioral dispositions to drink alcohol, film condition is not found to be a significant predictor for any of the three dimensions (see Table 14).

Now, for specific tests of research hypotheses, the present study conducted oneway ANOVA analyses on the differences among the three film conditions in participants' attitudes toward alcohol drinking and behavioral dispositions to drink alcohol. The first three hypotheses deal with the impact of film condition, or more specifically the impact of the absence vs. presence of negative consequences of alcohol drinking in a dramatic presentation, on the viewer's attitudes and behavioral dispositions regarding alcohol drinking. Specifically, the following relationships were hypothesized.

H1a: Those in the Positive Condition will show more favorable attitudes toward alcohol drinking than those in the Negative Condition.

H1b: Those in the Positive Condition will show more favorable behavioral dispositions related to alcohol drinking than those in the Negative Condition.

H2a: Those in the Positive Condition will show more favorable attitudes toward alcohol drinking than those in the Neutral Condition.

H2b: Those in the Positive Condition will show more favorable behavioral dispositions related to alcohol drinking than those in the Neutral Condition.

Table 14. Regression Results for the Dimensions of Behavioral Dispositions to Drink Alcohol

	For Problems		For Fun		For Sociability	
Predictor	Beta	t	Beta	t	Beta	t
Film condition	.09	1.24	.11	1.71	.06	.85
Friends drinking	.19	2.62**	.45	6.84***	.31	4.30***
Parents drinking	.12	1.69	.05	.73	.04	.57
Gender	.14	2.04*	.01	.22	-.04	-.52
Age	.03	.24	-.07	-.66	.07	.64
Year in college	-.02	-.19	.03	.27	.02	.19
On-campus living	.04	.42	-.14	-1.84	-.10	-1.25
Living with college students	.02	.22	-.05	-.76	-.05	-.65
R	.101		.273		.147	
Adjusted R	.065		.244		.114	
F	2.84**		9.37***		4.37***	

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

H3a: Those in the Negative Condition will show less favorable attitudes toward alcohol drinking than those in the Neutral Condition.

H3b: Those in the Negative Condition will show less favorable behavioral dispositions related to alcohol drinking than those in the Neutral Condition.

Table 15 shows the results of a oneway ANOVA test and a Scheffe's test as a supplementary analysis on the differences in the scores of attitudes toward alcohol drinking among three film conditions: A) the negative film condition (presence of negative consequences along with alcohol drinking), B) the neutral film condition (no alcohol drinking), and C) the positive film condition (absence of negative consequences with alcohol drinking). First of all, the ANOVA test indicates that there are significant differences in alcohol attitudes among film conditions ($F=7.29$, $p<.001$). Specifically, the subjects in the positive condition show the most favorable attitudes toward

Table 15. Attitudes toward Alcohol Drinking by Film Condition (Oneway ANOVA)

	Mean	Standard Deviation	Confidence Interval (95%)
1. Negative Film Condition	35.4	8.17	33.5 to 37.3
2. Neutral Film Condition	37.5	8.31	35.4 to 39.6
3. Positive Film Condition	40.6	8.28	38.7 to 42.5
		(F=7.29, p<.001)	

Scheffe's Test: 3>1

alcohol drinking (Mean=40.6), followed by those in the neutral condition (Mean=37.5) and those in the negative condition (Mean=35.4). However, a Scheffe's pairwise analysis reveals that only the difference between the positive condition and the negative condition is statistically significant ($p<.05$). Thus, the attitudes of those in the positive condition are found to be significantly more favorable toward alcohol drinking than those in the negative condition, which confirms Hypothesis 1a. However, since the differences between the negative condition and the neutral condition and between the positive condition and the neutral condition were not found statistically significant, the present data do not seem to support Hypotheses 2a and 3a.

Table 16 presents the results of testing differences in behavioral dispositions to drink alcohol among the three film conditions. The experimental manipulation of film

Table 16. Behavioral Dispositions to Drink Alcohol by Film Condition (Oneway ANOVA)

	Mean	Standard Deviation	Confidence Interval (95%)
1. Negative Film Condition	31.9	9.21	29.7 to 34.0
2. Neutral Film Condition	36.1	9.44	33.8 to 38.5
3. Positive Film Condition	36.2	7.93	34.3 to 38.0
		(F=5.50, p<.01)	

Scheffe's Test: 3,2>1

condition also yielded significant differences in the scores of behavioral dispositions to drink alcohol ($F=5.50$; $p<.01$). Subjects in the negative condition show more favorable dispositions to drink alcohol than those in the positive condition and those in the neutral condition. The results of a Scheffe's test also suggest that the differences between the negative film condition and the neutral film condition and between the negative film condition and the positive film condition are statistically significant ($p<.05$). That is, those in the negative film condition showed significantly less favorable dispositions to drink alcohol than those in the neutral film condition and those in the positive film condition. Thus, the data support Hypotheses 1b and 3b. However, since no significant difference was found in behavioral dispositions to drink alcohol between the positive film condition and the neutral film condition, Hypothesis 2b is not supported by the present data.

As for the three dimensions of alcohol attitudes, Table 17 shows the results of oneway ANOVA analyses that indicate significant differences among the conditions only in the dimension of Tension Release ($F=14.11$; $p<.001$). The manipulation of film condition appears to have influenced only the participants' attitudes regarding the role of alcohol drinking in relieving tension and stress. Specifically, a Scheffe's test reveals that the scores of

Table 17. Oneway ANOVA for Dimensions of Attitudes toward Alcohol Drinking by Film Condition

	Film Condition				
	NEGATIVE	NEUTRAL	POSITIVE	F	Significance
1. Amusement	1.84	2.03	2.10	2.790	n.s.
2. Tension Release	2.47	2.65	3.13	14.112	p<.001
3. Propriety	2.84	2.95	2.96	.636	n.s.

the Tension Release dimension for the positive film condition are significantly higher than those for the neutral film condition and those for the negative film condition, whereas the difference between the negative condition and the neutral condition is not found statistically significant (see Table 18).

The results of the individual tests for the three dimensions of alcohol-related behavioral dispositions are presented in Table 19. Oneway ANOVA tests indicate that there are significant differences among the conditions in the 'For Fun' dimension ($F=4.51$; $p<.05$) and in the 'For Sociability' dimension ($F=3.40$; $p<.05$), but not in the 'For Problems' dimension. Specifically, as can be seen in Table 20, those who were exposed to the negative film version showed significantly less favorable dispositions to drink alcohol in the 'For Fun' dimension than those exposed to the positive film version. As to the 'For Sociability' dimension, those in the negative film condition scored significantly lower than those in the neutral film

Table 18. Oneway ANOVA for the Tension Release Dimension of Alcohol Attitudes by Film Condition

	Mean	Standard Deviation	Confidence Interval (95%)
1. Negative Film Condition	2.47	.82	2.28 to 2.66
2. Neutral Film Condition	2.65	.74	2.47 to 2.84
3. Positive Film Condition	3.13	.75	2.95 to 3.30
		(F=14.11, p<.001)	

Scheffe's Test: 3>1,2

Table 19. Oneway ANOVA for Dimensions of Behavioral Dispositions to Drink Alcohol by Film Condition

	Film Condition				
	NEGATIVE	NEUTRAL	POSITIVE	F	Significance
1. For Problems	1.46	1.66	1.64	2.404	n.s.
2. For Fun	3.15	3.49	3.60	4.515	p<.05
3. For Sociability	1.88	2.18	2.07	3.396	p<.05

Table 20. Oneway ANOVA for the For-Fun Dimension of Alcohol Behavior by Film Condition

	Mean	Standard Deviation	Confidence Interval (95%)
1. Negative Film Condition	3.15	1.11	2.89 to 3.42
2. Neutral Film Condition	3.49	.94	3.25 to 3.72
3. Positive Film Condition	3.60	.72	3.44 to 3.77
		(F=4.52, p<.05)	

Scheffe's Test: 3>1

condition, whereas no significant differences were found between the positive film condition and the neutral film condition (see Table 21).

Table 21. Oneway ANOVA for the For-Sociability Dimension of Alcohol Behavior by Film Condition

	Mean	Standard Deviation	Confidence Interval (95%)
1. Negative Film Condition	1.88	.66	1.73 to 2.03
2. Neutral Film Condition	2.18	.71	2.00 to 2.35
3. Positive Film Condition	2.07	.67	1.92 to 2.23
		(F=3.40, p<.01)	

Scheffe's Test: 2>1

Perceived Reality and Role Affinity. The present study considers two other media-related variables, i.e., perceived reality and role affinity. It was proposed that the viewer's perceived reality regarding the dramatic presentation and his/her role affinity with the main character would determine the degree of the impact of film condition on alcohol attitudes and behavioral dispositions. Specifically, hypotheses 4 through 7 relate to the role of perceived reality and role affinity in shaping the attitudes and behavioral dispositions regarding alcohol drinking as resulting from the exposure to a dramatic presentation containing alcohol portrayals.

H4a: As perceived reality increases in the Positive Film Condition, the favorableness in attitudes toward alcohol drinking will increase.

H4b: As perceived reality increases in the Positive Film Condition, the favorableness in behavioral dispositions related to alcohol drinking will increase.

H5a: As perceived reality increases in the Negative Film Condition, the favorableness in attitudes toward alcohol drinking will decrease.

H5b: As perceived reality increases in the Negative Film Condition, the favorableness in behavioral dispositions related to alcohol drinking will decrease.

H6a: As role affinity increases in the Positive Film Condition, the favorableness in attitudes toward alcohol drinking will increase.

H6b: As role affinity increases in the Positive Film Condition, the favorableness in behavioral dispositions related to alcohol drinking will increase.

H7a: As role affinity increases in the Negative Film Condition, the favorableness in attitudes toward alcohol drinking will decrease.

H7b: As role affinity increases in the Negative Film Condition, the favorableness in behavioral dispositions related to alcohol drinking will decrease.

Table 22 shows the correlations of each of the independent variables (including perceived reality and role affinity) with alcohol attitudes as the dependent variable in each of the three film conditions. The results indicate that there is a significant and negative correlation between perceived reality and alcohol attitudes in the negative film condition ($r=-.22$; $p<.05$), which supports Hypothesis 5a. In

Table 22. Correlations of Subject Variables Including Perceived Reality and Role Affinity to Attitudes toward Alcohol Drinking

Variables	Film Condition NEGATIVE	NEUTRAL	POSITIVE
Perceived reality	-.22*	-.03	.08
Role affinity	-.07	.19	.24*
Friends drinking	.36**	.33**	.45***
Parents drinking	.25*	.15	.21*
Gender	.26*	.25*	.33**
Age	-.10	.05	.07
Year in college	-.05	.06	-.01
On-campus living	.08	-.12	-.20
Living with college students	.17	.01	.17

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

other words, when the participants were exposed to the negative film version, the greater their perceived reality regarding the film, the less favorable their attitudes toward alcohol drinking. However, the impact of perceived reality on alcohol attitudes in the positive condition was not significant ($r=.08$; $p>.05$). So, the present data do not support Hypothesis 4a.

Role affinity shows a significant and positive correlation with alcohol attitudes in the positive film condition ($r=.24$; $p<.05$), which supports Hypothesis 6a. That is, the results suggest that for those who were exposed to the positive film version, the greater their role affinity with the drinking character, the more favorable

their attitudes toward alcohol drinking. However, role affinity was not found to be significantly correlated with alcohol attitudes in the negative film condition ($r=-.07$; $p>.05$). Thus, Hypothesis 7a is not supported by the present data.

As for the index of behavioral dispositions to drink alcohol as another dependent variable, Table 23 shows its correlations with each of the independent variables in each of the three film conditions. Again, supporting Hypothesis 5b, perceived reality is significantly and negatively correlated with the dependent variable, i.e., alcohol-related behavioral dispositions, in the negative film condition ($r=-.20$; $p<.05$). Thus, when participants were shown the negative film version, the greater their perceived reality regarding the film, the less favorable their alcohol-related behavioral dispositions. However, as was the case with alcohol attitudes, the correlation between perceived reality and alcohol drinking dispositions was not found to be statistically significant in the positive film condition ($r=.18$; $p>.05$). So, Hypothesis 4b does not find empirical support from the present data.

Role affinity with the drinking character is also found to be significantly correlated with alcohol-related behavioral dispositions in the positive film condition. As shown in Table 23, in the positive film condition, the correlation is found to be significant and positive ($r=.23$;

Table 23. Correlations of Subject Variables Including Perceived Reality and Role Affinity to Behavioral Dispositions to Drink Alcohol

Variables	Film Condition NEGATIVE	NEUTRAL	POSITIVE
Perceived reality	-.20*	-.01	.18
Role affinity	-.16	.05	.23*
Friends drinking	.53***	.27*	.52***
Parents drinking	.21*	.11	.23*
Gender	.02	.17	.27*
Age	.06	.13	.21*
Year in college	.11	.11	.13
On-campus living	-.18	-.03	-.29**
Living with college students	.14	-.04	.04

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

p<.05), which supports Hypothesis 6b. The results indicate that when participants are exposed to the positive film version, the greater their role affinity with the drinking character, the more favorable their alcohol-related behavioral dispositions. But in the negative condition, the correlation between role affinity and alcohol drinking dispositions is not found to be significant (r=-.16; p>.05). Thus, Hypothesis 7b is not supported by the present research data.

The correlational analyses for the three dimensions of alcohol attitudes are reported in Table 24 (for the negative film condition) and Table 25 (for the positive film condition). As seen in Table 24, for the negative film

Table 24. Correlations of Subject Variables to Dimensions of Attitudes toward Alcohol Drinking for Negative Condition

Variables	Amusement	Tension Release	Propriety
Perceived reality	-.14	-.23*	-.18
Role affinity	-.07	-.07	-.02
Friends drinking	.26*	.33**	.31**
Parents drinking	.16	.21*	.26*
Gender	.22*	.18	.28**
Age	-.09	-.07	-.10
Year in college	-.09	-.02	-.02
On-campus living	.01	.12	.04
Living with college students	.09	.18	.16

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

Table 25. Correlations of Subject Variables to Dimensions of Attitudes toward Alcohol Drinking for Positive Condition

Variables	Amusement	Tension Release	Propriety
Perceived reality	.01	.16	.07
Role affinity	.19	.28**	.07
Friends drinking	.35**	.39***	.31**
Parents drinking	.12	.24*	.10
Gender	.28*	.28*	.21*
Age	-.01	.04	.17
Year in college	-.16	.05	.13
On-campus living	-.04	-.19	-.28**
Living with college students	.13	.04	.17

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

condition, although both perceived reality and role affinity are negatively correlated with all the dimensions of alcohol attitudes, only the correlation between perceived reality and the Tension Release dimension is found to be statistically significant ($r=-.23$; $p<.05$). Thus, for those who were exposed to the negative film stimulus, the greater their perceived reality about the film, the less favorable their attitudes regarding the role of alcohol drinking in releasing tension or stress.

On the other hand, for the positive film condition, while both perceived reality and role affinity are found to be positively correlated with all the three dimensions of alcohol attitudes, only the correlation between role affinity and the Tension Release dimension of alcohol attitudes is statistically significant ($r=.28$; $p<.01$). The results indicate that when participants were exposed to the positive film stimulus, the greater their role affinity with the drinking character, the more favorable their attitudes in the dimension of Tension Release.

As for the dimensions of behavioral dispositions, Tables 26 and 27 show the correlations of each dimension with the independent variables for the negative film condition and for the positive film condition respectively. As seen in Table 26, while in the negative condition perceived reality and role affinity are negatively correlated with all the three dimensions, only the

Table 26. Correlations of Subject Variables to Dimensions of Behavioral Dispositions to Drink Alcohol for Negative Condition

Variables	For Problems	For Fun	For Sociability
Perceived reality	-.22*	-.09	-.17
Role affinity	-.10	-.13	-.16
Friends drinking	.20	.55***	.42***
Parents drinking	.12	.22*	.17
Gender	.02	.05	-.11
Age	-.14	.04	.25*
Year in college	-.07	.05	.30**
On-campus living	.17	-.21*	-.35**
Living with college students	.13	.13	.07

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

Table 27. Correlations of Subject Variables to Dimensions of Behavioral Dispositions to Drink Alcohol for Positive Condition

Variables	For Problems	For Fun	For Sociability
Perceived reality	.03	.18	.25*
Role affinity	.21*	.16	.18
Friends drinking	.41***	.48***	.33**
Parents drinking	.23*	.20	.11
Gender	.26*	.25*	.10
Age	.12	.25*	.12
Year in college	.03	.21*	.08
On-campus living	-.15	-.33**	-.20*
Living with college students	.04	.01	.06

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

correlation between perceived reality and the For Problems dimension is found to be statistically significant ($r=-.22$; $p<.05$). Thus, the results reveal that when participants were shown the negative film version, the greater their perceived reality regarding the presentation, the less disposed to drink alcohol for problems. On the other hand, for the positive film condition, perceived reality and role affinity are positively correlated to all the three dimensions, but only the correlations between perceived reality and the For-Sociability dimension ($r=.25$; $p<.05$) and between role affinity and the For-Problems dimension ($r=.21$; $p<.05$) are found to be statistically significant. Specifically, the results suggest that for the viewers of the positive film version, the greater their perceived reality, the more likely they are to drink alcohol for sociability and the greater their role affinity with the drinking character, the more likely they are to drink alcohol for problems.

POST HOC PATH ANALYSIS

As a post hoc analysis based on the results above, a path model was established for attempting to explain the relationships among the variables as ultimately shaping alcohol-related attitudes and behavioral dispositions. Table 28 presents correlation coefficients between variables including perceived reality and role affinity for the positive film condition and for the negative film condition.

Table 28. Correlations between Variables including Perceived Reality and Role Affinity for Positive and Negative Conditions

Variables	1	2	3	4	5	6	7	8	9	10	11
											(N=74)
1. AA	--	.65***	.11	.29**	.51***	.23*	.29**	.01	-.03	-.22*	.14
2. AB	.74***	--	.18	.25*	.52***	.22*	.24*	.13	.11	-.30**	.03
3. PR	-.23*	-.20*	--	.21*	.12	.06	-.12	.01	-.06	-.11	-.11
4. RA	-.10	-.17	.13	--	.27*	.29**	.20*	-.07	-.08	-.16	-.06
5. FD	.38**	.51***	-.09	.09	--	.32**	.29**	.06	-.01	-.26*	-.07
6. PD	.19	.18	-.14	-.26*	.18	--	.03	.02	-.01	-.08	.06
7. GE	.26*	.03	.19	.15	.05	-.06	--	.33**	.22*	-.26*	-.16
8. AG	-.08	.07	.08	-.22*	-.00	-.06	.04	--	.81***	-.53***	-.12
9. YR	-.01	.13	-.00	-.29**	.02	-.04	.11	.80***	--	-.59***	-.16
10. OC	.08	-.20*	-.11	-.05	-.13	.01	-.00	-.54***	-.54***	--	.18
11. WC	.16	.13	-.18	.25*	.38**	.01	.14	-.36**	-.26*	.11	--
											(N=73)

* p<.05 ** p<.01 *** p<.001 (one-tailed probability).
NOTE. Coefficients above the diagonal are for the positive film condition and those below the diagonal are for the negative film condition. The abbreviations above represent as follows. AA=alcohol attitude (score on 5-point scale); AB=alcohol behavior (score on 5-point scale); PR=perceived reality (score on 7-point scale); RA=role affinity (score on 7-point scale); FD=friends drinking (# of drinking friends out of 5); PD=parents drinking (no 0, yes 1); GE=gender (female 0, male 1); AG=age; YR=year in college; OC=on-campus living (no 0, yes 1); WC=living with college students (no 0, yes 1).

Figures 1 and 2 show the hypothesized path models for the positive film condition and for the negative film condition respectively. As suggested in Table 28 and earlier in Table 10, for both models a positive relationship was expected from the paths of: A) parents drinking to friends drinking, B) gender to friends drinking, C) friends drinking to role affinity, D) gender to role affinity, E) perceived reality to role affinity, and F) alcohol attitudes to alcohol behavior. The paths from on-campus living to friends drinking, from age to role affinity, and from year in college to role affinity were expected to be negatively directed for both conditions.

However, the paths from parents drinking to role affinity, from role affinity to alcohol attitude, and from perceived reality to alcohol attitude were hypothesized to be different for the positive film condition than for the negative film condition. A correlational analysis indicates that when alcohol drinking leads to negative consequences, those who have drinking parent(s) tended to dislike the drinking character, compared to those whose parents do not drink alcohol regularly ($r=-.26$, $p<.05$). On the other hand, it was also found that with the absence of negative consequences portrayals, i.e., when exposed only to the portrayals of alcohol drinking in a positive context, they seemed to approve the drinking character more than do those who have non-drinking parents ($r=.29$, $p<.01$).

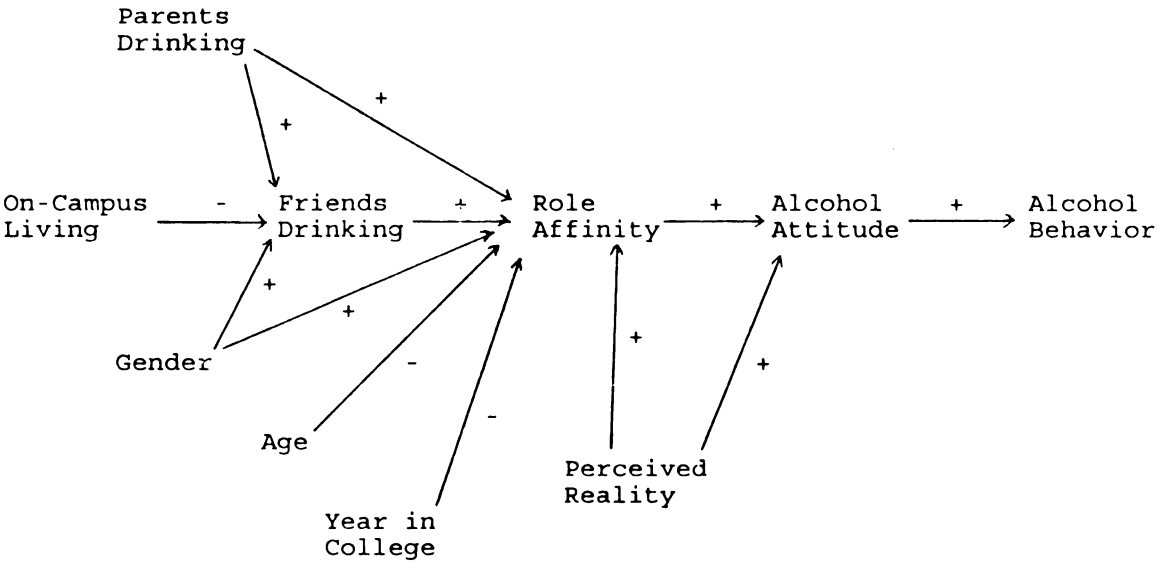

Figure 1. Hypothesized Path Model of Factors Influencing Alcohol Drinking Attitudes and Behavioral Dispositions for Positive Film Condition

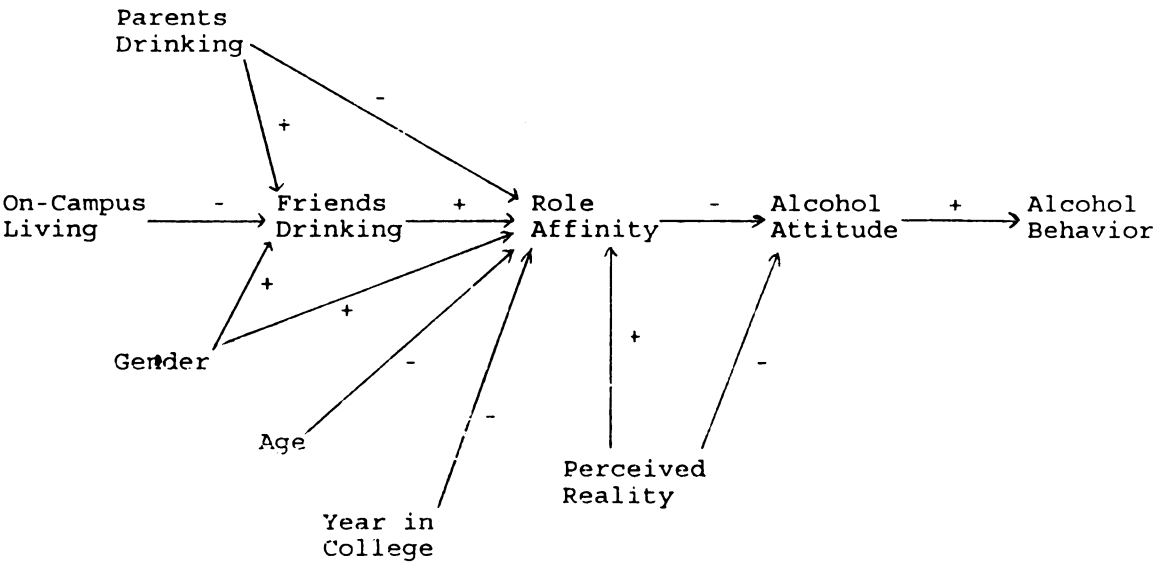

Figure 2. A Hypothesized Path Model of Factors Influencing Alcohol Drinking Attitudes and Behavioral Dispositions for Negative Film Condition

The positive film version depicts the main character as enjoying alcohol drinking, but does not show any negative consequences of alcohol drinking, while the character is seen to achieve what he attempts to achieve. So it was originally expected that in the positive film condition, the greater the level of perceived reality with the film itself and the greater the level of role affinity with the drinking character, the more favorable their attitudes toward alcohol drinking. On the other hand, when the negative film version was presented, the opposite results were expected. The negative film version contains the portrayals of negative consequences of alcohol drinking as well as the character's frequent drinking. Thus, it was also hypothesized that in the negative film condition, the greater the level of perceived reality and the greater the level of role affinity, the less favorable their attitudes toward alcohol drinking. These original propositions were reflected in the path models to be statistically tested once again. The variable of living with college students was eliminated from the analysis due to the lack of variability and inconsistencies found in its correlations with other variables.

The path models were statistically tested regarding: A) the "goodness of fit" of each of the models to the data and B) the significance of each of the path coefficients (see Figures 3 and 4). Figure 3 shows the results of a path

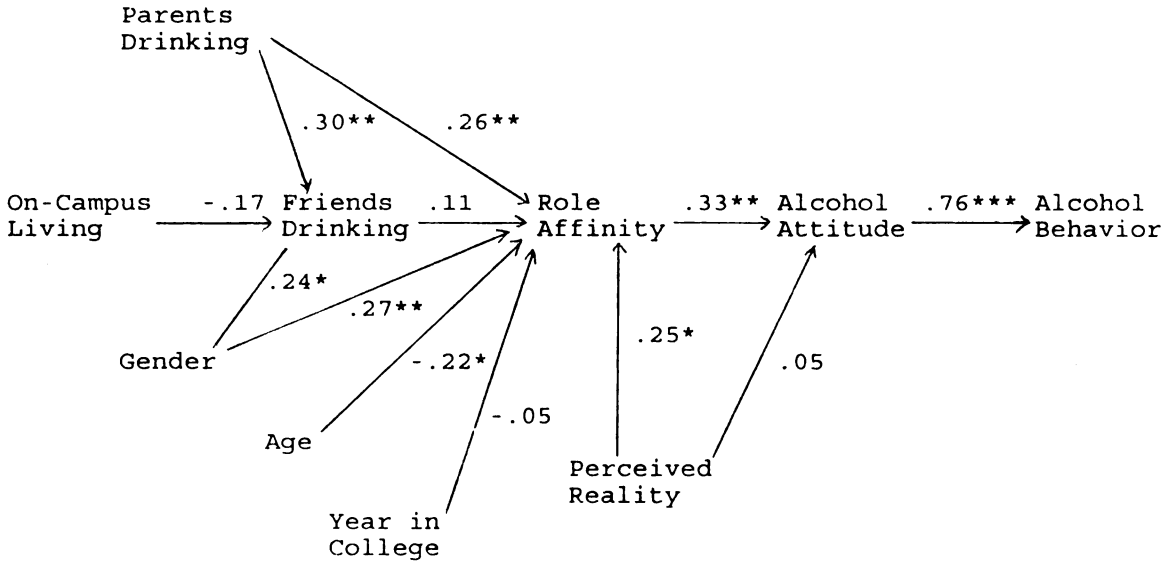

Figure 3. A Path Analysis of Factors Influencing Alcohol Drinking Attitudes and Behavioral Dispositions for Positive Film Condition

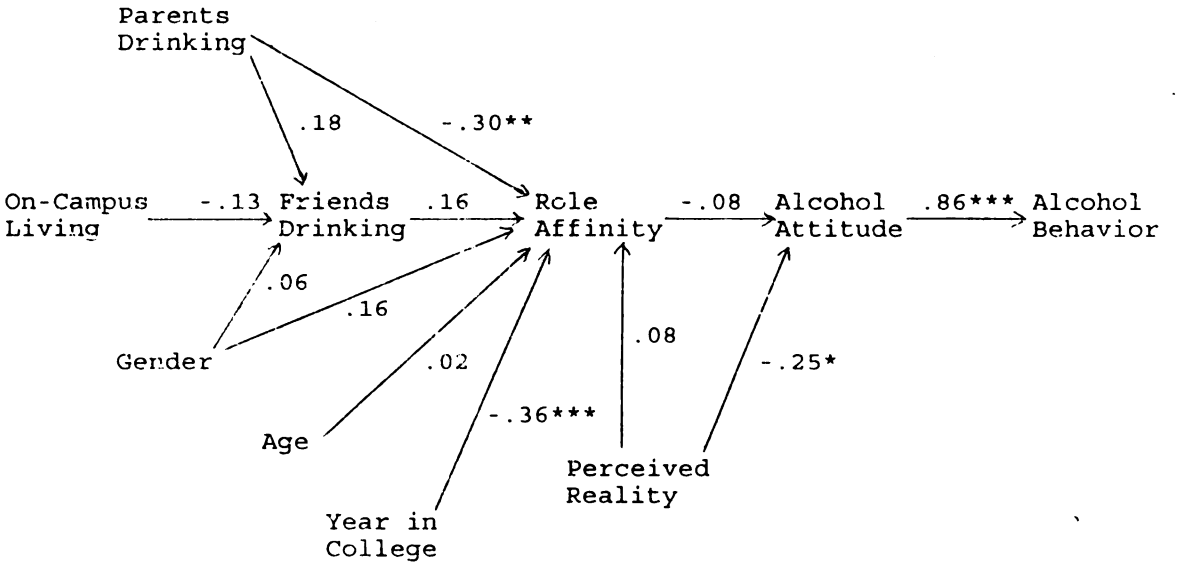

Figure 4. A Path Analysis of Factors Influencing Alcohol Drinking Attitudes and Behavioral Dispositions for Negative Film Condition

analysis of variables influencing alcohol attitudes and, then, alcohol behavior (specifically, behavioral dispositions) for the positive film condition. Results indicate that the data fit the model well (Chi-square=28.13, df=18, p>.05). The test for the overall goodness of fit indicates that the matrix of correlations predicted by the model does not deviate significantly from the matrix of correlations observed.

In addition to this overall assessment, individual tests of significance for each of the path coefficients indicate that coefficients significantly different from zero are found in the paths from parents drinking to friends drinking (.30, p<.01), from gender to friends drinking (.24, p<.05), from parents drinking to role affinity (.26, p<.01), from gender to role affinity (.27, p<.01), from age to role affinity (-.22, p<.05), from perceived reality to role affinity (.25, p<.05), from role affinity to alcohol attitude (.33, p<.01), and from alcohol attitude to alcohol behavior (.76, p<.001). The results suggest that in the positive film condition parents drinking, gender, age, and perceived reality are significant determinants of role affinity, which in turn significantly influence alcohol attitude, and then alcohol behavior. Specifically, upon the exposure to a positive film version, parents drinking, gender (i.e., being a male), and perceived reality are found to be positive indicators of role affinity, whereas age

influences role affinity negatively. Males and children of drinking parents tend to show greater role affinity with the drinking (male) character in a film that depicts alcohol drinking in a favorable context. The greater the level of perceived reality regarding the film, the greater the level of role affinity with the main character who enjoys drinking alcohol without facing any negative consequences. Also, the older the participants, the less the level of role affinity they feel with the character. Finally, role affinity is found to influence alcohol attitude and, then indirectly, alcohol behavior in the positive film condition. Alcohol attitude is found to be a strong indicator of alcohol behavior (path coefficient=.76, $p<.001$). It is also notable that perceived reality is found to be only a weak direct indicator of alcohol attitude (path coefficient=.05, $p<.05$).

Figure 4 presents the results of a path analysis for the negative film condition. The overall 'goodness of fit' test indicates that the data still fit the path model for the negative film condition (Chi-square=24.94, df=18, $p>.05$). Micro-level tests of significance for each of the path coefficients, on the other hand, reveal that parents drinking (path coefficient=-.30, $p<.01$) and year in college (path coefficient=-.36, $p<.001$) are significant indicators of role affinity. However, in the negative film condition, role affinity is found to be only a weak indicator of alcohol attitude (path coefficient=-.08, $p>.05$), whereas

perceived reality appears to be a significant indicator of alcohol attitude (path coefficient=-.25, $p<.05$). Specifically, it is suggested that children of drinking parent(s) and students of older year in college are significantly less likely to feel affinity with the drinking character than their respective counterparts when exposed to the portrayals of negative consequences of alcohol drinking. Role affinity, in turn, was found to reduce the favorableness of alcohol attitude in the negative film condition, but the contribution was not strong enough ($p>.05$). Finally, and most importantly, it was found that in the negative film condition perceived reality acts as a significant negative predictor of alcohol attitude. That is, when the negative film version was presented, the greater the level of perceived reality, the less favorable their attitudes toward alcohol drinking and, then, the less likely they are to drink alcohol in future.

In sum, the results of path analyses suggest that when the negative film version was presented, perceived reality, but not role affinity, was a significant, and negative, indicator of alcohol attitudes and behavior. However, upon the exposure to the positive film version, role affinity, but not perceived reality, played a significant role in shaping favorable attitudes toward alcohol drinking and, then, favorable behavioral dispositions to drink alcohol. It is also notable that although it is not a direct

indicator of alcohol attitudes and behavior in the positive film condition, perceived reality was found to indirectly influence alcohol attitudes and behavior through its impact on role affinity which is a significant, and positive, antecedent of alcohol attitudes and behavior.

CHAPTER FIVE

DISCUSSION

The major findings of the present research are summarized and discussed in this chapter. In addition, limitations of the present research and suggestions for future research are presented. These tasks are achieved in two sections: A) summary and implications of findings and B) limitations and suggestions.

SUMMARY AND IMPLICATIONS OF FINDINGS

The present research focused on three variables that are considered the most relevant for explicating the impact of dramatic presentations, including television dramas and movies, containing alcohol drinking portrayals on the viewer's alcohol-related attitudes and behavioral dispositions. These three variables are: A) absence vs. presence of negative consequence portrayals, B) perceived reality regarding the dramatic presentation, and C) role affinity with the drinking character. The first variable is mostly concerned with the overall message of alcohol-related portrayals in a dramatic presentation. Specifically, it deals with whether alcohol drinking is portrayed in a positive context or in a negative, discouraging direction. As argued in Chapter Two, the absence of negative

consequences of alcohol drinking in the presentation was regarded as depicting alcohol drinking in a positive context, because alcohol drinking is often seen as a natural part in the processes of satisfying certain personal and social needs. However, the presence of negative consequences in alcohol drinking portrayals was regarded as delivering a message of a negative judgment on alcohol drinking. Showing negative aspects of alcohol drinking was expected to discourage the viewer from developing or holding favorable attitudes and behavioral dispositions regarding alcohol drinking.

Hypotheses 1 through 3 dealt with the impact of absence vs. presence of negative consequence portrayals on the viewer's attitudes and behavioral dispositions related to alcohol drinking. In order to test the impact of absence vs. presence of portrayals of negative consequences, the stimulus film was specially edited to make three versions of the same presentation. First, the 'negative' (i.e., presence of negative consequences) stimulus version contained portrayals of the main character's alcohol drinking acts and subsequent negative consequences. Second, the 'positive' (i.e., absence of negative consequences) stimulus version left out only the depictions of the negative consequences, while showing the same alcohol drinking acts by the character. Finally, the 'neutral' (i.e., no alcohol drinking) version kept the main plot

intact while leaving out all drinking scenes and the portrayals of negative consequences. Subjects were exposed randomly to one of the three versions of the film and, then, their attitudes and behavioral dispositions regarding alcohol drinking were measured.

Consistent with Hypothesis 1a and 1b, the absence vs. presence of portrayals of negative consequences along with alcohol drinking in a dramatic presentation (i.e., positive vs. negative alcohol drinking portrayals) did yield significant differences in the two dependent variables. The exposure to the positive film version led to significantly more favorable attitudes and behavioral dispositions regarding alcohol drinking than did the exposure to the negative film version. The differences in alcohol-related attitudes between the negative condition and the neutral condition and between the neutral condition and the positive condition (H2a and H3a) were also found to be in the expected direction (i.e., negative < neutral < positive), but not to be statistically significant. Regarding alcohol-related behavioral dispositions, the negative condition was found to be significantly different from the neutral condition (H2b) as well as from the positive condition (H1b), but the positive condition was not significantly different from the neutral condition (H3b).

The findings generally suggest that it could make a real difference whether the negative consequences of alcohol

drinking are presented along with alcohol drinking, or not. If the exposure to a 30 minute film could make such changes in the viewer's attitudes and behavioral dispositions, it may not be too unreasonable to conclude that repeated experiences of viewing dramatic portrayals of alcohol use in a certain direction can indeed generate some profound effects. Portraying dramatically the negative aspects of alcohol drinking, on the one hand, may to some degree dispirit the viewer both in their attitudes and behavioral dispositions regarding alcohol drinking. On the other hand, it is also possible that showing alcohol drinking without negative consequences repeatedly may positively boost the viewer's relevant attitudes and behavioral dispositions. If this is true, the criticism appearing in a number of content analysis studies about the prevalence of alcohol drinking portrayals and the rareness of the depictions of negative alcohol consequences should be taken into account seriously.

Separate examinations on each of the dimensions of the dependent variables identified by factor analysis provided some more clarification regarding the impact of absence vs. presence of negative alcohol drinking consequences. Factor analysis uncovered three underlying dimensions for each of the dependent variables. As explained in the previous chapter, attitudes toward alcohol drinking were found to consist of such dimensions as 'Amusement,' 'Tension Release,' and 'Propriety,' whereas alcohol-related

behavioral dispositions included such dimensions as 'For-Problems,' 'For-Fun,' and 'For-Sociability.' It is interesting that among the three dimensions of alcohol-related attitudes, only the 'Tension Release' dimension yielded significant differences between experimental conditions. Specifically, those who were exposed to the positive film version showed more favorable attitudes toward the role of alcohol drinking in relieving tension and stress than do those exposed to the neutral version and than do those exposed to the negative version.

The findings are not quite as difficult to interpret if we notice that the main character (John Norman Howard) in the movie uses alcohol often to relieve tension or stress. For example, John Norman is seen drinking alcohol right before, after, and even during his performance for a big audience, seemingly to relieve his tension or stress as in scenes #1, #2, and #5 (see Table 4 for specific incidents and also see items #1, #2, and #4 of the 'Tension Release' factor in Table 8). Again, John drinks alcohol when he tries to establish his new relationship with Esther in scenes #4 and #6 (also see items #3 and #5 of the 'Tension Release' factor in Table 8). Thus, it is probable that John's way of releasing tension and stress (i.e., drinking alcohols) along with his great success as a rock star in the positive film might have appealed to the viewers. However, when negative consequences such as the shameful disturbance

at the Grammy Awards ceremony (scene #13) and the death after the drunken driving (scene #13) were shown along with alcohol drinking, the viewers in the negative condition tended not to express as much favorableness as did those in the positive condition regarding the role of alcohol drinking in reducing stress or tension. The viewers of the neutral film also showed skepticism about the tension release function of alcohol drinking a little less than did those of the negative film, but the difference was found not to be statistically significant.

As for the dimensions of alcohol-related behavioral dispositions, significant differences were found only about the For-Fun dimension and the For-Sociability dimension. Specifically, the For-Fun dimension finds a significant difference between the negative condition and the positive condition, whereas the positive condition is not significantly different from the neutral condition. The evidence here indicates that exposure to the portrayals of negative consequences of alcohol drinking might have discouraged the viewer from using alcohol just for fun, at least in his/her near future. Further, the significant difference in the For-Sociability dimension between the negative condition and the neutral condition also implies that the portrayals of negative aspects of alcohol drinking may indeed restrain the viewer from drinking alcohol even for establishing social relationships. However, it should

also be noted that although, as expected, the scores for the For-Problems dimension of alcohol-related behavioral dispositions were lower in the negative condition than in the neutral condition and in the positive condition, the differences were not statistically significant. One possible reason for this discrepancy might be that the scores of the entire sample for the For-Problems dimension of alcohol drinking dispositions were so low (Mean=1.59, SD=.62) that a ceiling effect might have occurred and have diluted the differences between the conditions.

Finally, the most interesting finding concerning the impact of presence vs. absence of negative alcohol consequences might be that in shaping attitudes toward alcohol drinking, the impact of the positive film version (i.e., the absence of negative consequences) was more significant than that of the negative film version (i.e., the presence of negative consequences), whereas for behavioral dispositions regarding alcohol drinking the opposite was true. For example, in the Tension Release dimension of attitudes toward drinking, which was the only dimension showing significant differences between the conditions, scores for the positive condition were significantly higher than those for the neutral condition and those for the negative condition, whereas no significant difference was found between the negative condition and the neutral condition. This finding suggests that the

difference found between the positive condition and the negative condition might have been only the result of the influence of the positive film, but not that of the negative film which yielded about the same scores as the neutral film.

On the other hand, for the total scores of alcohol related behavioral dispositions, the negative condition was found significantly different from both the neutral condition and the positive condition, whereas the scores of the positive condition and those of the neutral condition were not significantly different. This finding implies that in relation to behavioral dispositions regarding alcohol drinking, the impact of the negative film can be greater than that of the positive film. Thus, it is suggested that the film portraying alcohol drinking in a negative, discouraging way can be more effective in changing behavioral dispositions regarding alcohol drinking (i.e., the likelihood of actually drinking alcohol), whereas the film depicting alcohol drinking in a positive context is more influential in reshaping attitudes toward alcohol drinking (i.e., general judgments on the desirability of alcohol drinking).

The present research also focused on the media-related variables, perceived reality and role affinity. Perceived reality as a cognitive mediator and role affinity as an affective mediator were both considered to augment or

attenuate the impact of film content. As indicated in H4 through H7, it was hypothesized that the more reality the viewer perceives regarding the film content and the more affinity the viewer feels with the main (drinking) character, the greater the impact of the film content. Specifically, those who were exposed to the film that portrays alcohol drinking in a positive context, i.e., with the absence of negative consequences (Positive Film Condition), were expected to show more favorableness about alcohol drinking as they perceive more reality regarding the film and to show less favorableness as they perceive less reality. Likewise, they were also expected to be more favorable about alcohol drinking as they feel more affinity with the drinking character, and to be less favorable as they feel less affinity. On the other hand, for those who were exposed to the film that depicts alcohol drinking in a negative way, i.e., with the presence of negative consequences (Negative Film Condition), the opposite effects were expected. Thus, the greater the perceived reality and the greater the role affinity, the less favorable the viewer's attitudes and behavioral dispositions regarding alcohol drinking.

The present data, however, were found to provide only partial support for the propositions above. Perceived reality was found to play a significant role for both dependent measures in the negative film condition, but not

in the positive film condition. Specifically, when the film containing the portrayals of negative alcohol consequences was presented, the greater the perceived reality about the film, the less favorable the attitudes towards alcohol drinking and the less favorable the behavioral dispositions related to alcohol drinking. However, when the film portraying alcohol drinking in a positive context was shown, the level of perceived reality did not seem to directly influence the dependent variables.

On the other hand, role affinity was found to generate significant outputs for both dependent measures in the positive condition, but not in the negative condition. Specifically, when the film with positive portrayals of alcohol drinking was shown, the greater the role affinity with the drinking character, the more favorable the attitudes toward drinking and the more favorable the alcohol-related behavioral dispositions. But, when the film with negative portrayals of alcohol drinking was presented, role affinity was not found to significantly influence the dependent variables.

What is interesting here is that for the film containing negative alcohol portrayals, perceived reality was found to be more important than role affinity in shaping relevant attitudes and behavioral dispositions, whereas for the film containing positive alcohol portrayals, role affinity was found more important than perceived reality.

Further, it was also found that only for the positive film condition, perceived reality positively correlated with role affinity, while it shows no significant correlations with the dependent variables. To interpret these findings, it may be assumed that there are two separate processes of influencing the viewer's alcohol-related attitudes and behavioral dispositions through dramatic portrayals of alcohol drinking either with or without its negative consequences. That is, the process of generating the impact of the negative portrayals of alcohol drinking may not be the same as that of the positive portrayals.

Specifically, on the one hand, when the negative consequences of alcohol drinking are portrayed in a dramatic presentation, it is likely that the viewer attributes the unpleasant occurrences to alcohol drinking itself, not to a specific character. If so, what might be more important in determining the impact of these portrayals is whether the viewer perceives the presentation as realistic or not. Thus, as long as the portrayals of negative consequences are regarded as being realistic, the viewer may be influenced by these negative portrayals of alcohol drinking.

For example, in scene #1 of the stimulus film, John Norman (main character) shows up very late to his concert with a beer in hand (seemingly drunk), drinks strong liquor at the backstage, and begins performing on stage. Later on the stage (in the negative film version), John, seemingly

drunk, fails to remember the lyrics of a song in the middle of singing, asks other members of his band for help, and finally stops the song, while the audience members in the film get very disappointed and yell at him for his poor performance. In this case, it is likely that the viewer of the film, regardless of how much they like or dislike him, attributes the poor performance to his alcohol drinking. Thus, as far as the negative consequences of alcohol drinking are concerned, it may not be so important which character is involved in events like this, because negative occurrences are likely to be attributed to alcohol drinking itself. Here, what is really important in the process of influencing the viewer regarding alcohol drinking through the negative stimulus film might be just how realistic the presentation is (i.e., how credible the story is) rather than how much they are attracted to the drinking character in the presentation. This explanation fits the finding that perceived reality was more influential than role affinity in the negative film condition. This finding was also confirmed by the path analysis suggesting that perceived reality, but not role affinity, is a significant, and negative, indicator of attitudes toward alcohol drinking and, then, behavioral dispositions regarding alcohol drinking.

On the other hand, when positive portrayals of alcohol drinking are presented, whether the viewer is influenced or

not might be determined by how much he/she is attracted to the drinking character. Since dramatic presentations typically show a variety of life styles that are feasible in the real world, the viewer faces the same variety of chances to imitate or model some of them for their own needs in reality. For example, when they need to reduce tension or stress, alcohol drinking is just one of many alternatives to satisfy that need. In the positive stimulus film of the present study, John Norman is often seen drinking alcohol to relieve tension or stress, while enjoying large success as a popular rock star. Thus, when attracted to the role of the main character, according to social learning theory, the viewer may want to imitate or follow the example of the way the character reduces tension or stress in the film. Or, as the halo effect suggests, the viewer may at least think rather favorably about the character's way of alcohol drinking for relieving tension or stress, if he/she is indeed attracted to the role of the character. What is important here is how much the viewer feels affinity with the role of the drinking character. The more affinity the viewer feels with the character, the more likely he/she is to be influenced by those positive portrayals of alcohol drinking. This explanation also fits the finding that role affinity played a more significant role in determining the impact of positive alcohol portrayals than did perceived reality.

In addition, it should be also noted that in the positive film condition, perceived reality was found to be a significant indicator of role affinity. As perceived reality regarding the presentation increases or decreases, role affinity with the character also increases or decreases (However, this effect was not found significant in the negative film condition). Thus, it can be suggested that the viewer should first perceive the presentation as realistic before he/she actually starts feeling affinity with a specific character (only in the positive film condition). This relationship was reflected and tested in the path model constructed from the present data. The results of the path analysis confirmed the finding that with the absence of the portrayals of negative alcohol consequences, perceived reality acted as a significant, and positive, indicator of role affinity, while role affinity plays a strong positive determinant of attitudes toward alcohol drinking and, then, behavioral dispositions regarding alcohol drinking.

Finally, it is also interesting to note that the variable parents drinking (i.e., whether their parent(s) regularly drinks or not) plays a negative predictor for role affinity in negative alcohol portrayals, whereas positive alcohol portrayals make the same variable act as a positive indicator of role affinity. Thus, when alcohol drinking is depicted in a negative manner, viewers with drinking parents

are less likely to feel affinity with the drinking character than do those whose parents do not drink alcohol regularly. However, when alcohol drinking is shown in a positive context without any negative consequences, they tend to feel more affinity with the drinking character if they have parents drinking alcohol regularly than if their parents are not regular drinkers. One possible interpretation of these results is that showing negative features of alcohol drinking to children of regular alcohol drinkers may cognitively activate their negative thoughts about alcohol drinking more vividly than showing negative features to children of non-drinking parents. The reason for this is that children of regular alcohol drinkers have had more opportunities to experience negative aspects of alcohol drinking in real life with their drinking parents. This rather intense activation may lead them to reject the drinking character in the dramatic presentation more strongly than do their counterparts. By the same token, it is also possible that exposure only to positive features of alcohol drinking may activate their pleasant thoughts regarding alcohol drinking more vividly and intensely if they are given more chances to experience positive aspects of alcohol drinking in real life by having drinking parents. Nonetheless, these interpretations could only be tested by further studies on relevant cognitive activation processes in exposure to dramatic alcohol portrayals.

To summarize, the following are the most significant findings. First, the present study provides moderate support for the hypothesized impacts of presence vs. absence of negative consequences in dramatic alcohol drinking portrayals (i.e., negative vs. positive alcohol drinking portrayals) on relevant attitudes and behavioral dispositions. Second, negative alcohol portrayals appeared to be influential in changing behavioral dispositions of alcohol drinking, whereas positive alcohol portrayals were more effective in reshaping attitudes toward alcohol drinking. Third, the influence of alcohol drinking portrayals was found to be rather specific. For example, the portrayals including alcohol uses for 'tension release' in the stimulus film were effective particularly for shaping the attitudes toward the role of alcohol drinking in relieving tension. Finally, in negative alcohol drinking portrayals, perceived reality, but not role affinity, was found to significantly augment or dilute the impact of the portrayals, whereas in positive alcohol drinking portrayals role affinity (influenced by perceived reality) mediated the impact of the portrayals.

LIMITATIONS AND SUGGESTIONS

The present study adopted an experimental research design with self-report measures to explicate the impact of alcohol drinking portrayals in dramatic presentations. Consequently, the common, widely-debated, but still

debatable, limitations both regarding experimental research (such as "artificiality of laboratory setting") and self-report measures (such as "lack of observational accuracy") also may be applied here. In addition, it should be noted that in the present research the experimental treatment was provided only once for a relatively short period of time (about 30 minutes). Thus, it is questionable whether this experimental treatment reached the full potential of what would be needed as the manipulation of the variable. If not, the insufficiency of treatment, if it is unfortunately the case with the present research, might have hampered a more complete clarification of the potential, and real, impacts of the intended treatment. Even so, we may still argue that if this one-shot treatment has yielded any significant results, it should be taken as an indication of greater effects with multiple treatments.

Also, the fact that the treatment effect was measured just at one time might be another debatable issue. It may be argued that the one-shot measurement may not be sufficient to assure us that the treatment effect would last even after a short interval. As a matter of fact, what is really important in relation to the treatment impact might be how strong, or impressive, the impact of the treatment is and how soon the next similar treatment, or experience, is faced to revive, sustain, or strengthen the former impact. Nonetheless, it should be pointed out as a limitation that

the present study used only a one-shot measure and, as a result, cannot guarantee more convincing accounts of the real treatment effect.

Another limitation of the present research could come from the sensitivity of the issue of alcohol drinking. The dependent variables, attitudes toward alcohol drinking and behavioral dispositions of alcohol drinking were measured by a self-administered questionnaire. The measure for attitudes toward alcohol drinking employed a five-point Likert scale on which participants were asked to indicate their response from STRONGLY DISAGREE to STRONGLY AGREE for each of the 15 attitudinal statements. Behavioral dispositions were measured by having them indicate on a five-point scale ranging from VERY UNLIKELY to VERY LIKELY the likelihood that they will engage in drinking alcohol on each of the 15 occasions. The measures may have obtained what they purported to. But we cannot completely exclude the possibility that the sensitive nature of the issue might have, to some degree, kept them from disclosing complete information about their attitudes and behavioral dispositions regarding drinking 'alcohol' which is often regarded by some members of the society as a drug associated with antisocial outcomes.

Another limitation might have come with the measurement of the variable 'friends drinking,' i.e., the number of regular alcohol drinkers out of the participant's five best

friends. The variable was measured after they responded to the question items measuring alcohol-related attitudes and behavioral dispositions. Right after their attitudes and behavioral dispositions were measured, the participants were asked to indicate the number of friends who drink alcohol regularly. With this order of measurements, we cannot completely rule out the possibility that their responses to the measures of alcohol-related attitudes and behavioral dispositions might have influenced their response to the measurement of friends drinking. In the present research, the descriptive statistics suggested that those in the negative condition reported much smaller number of drinking friends than those in the positive condition and those in the neutral condition. Considering that participants were assigned randomly to one of the three film conditions and that all other independent variables except the dependent variables showed no significant difference between the negative condition and the positive condition, we cannot ignore the possibility of such unwanted influence. It is possible, for example, that if subjects in the negative film condition had oriented themselves towards disliking alcohol drinking, their already negative attitudes and behavioral dispositions regarding alcohol drinking might have made them illusively perceive the number of their drinking friends as fewer than they might otherwise perceive. Nonetheless, more accurate accounts for this abnormality of the present data

regarding the variable might be provided by further research that would vary the order of such measurements. This effort, if successful, might also enable the researcher to correctly interpret the high correlations that continuously appeared between friends drinking and alcohol-related attitudes and behavioral dispositions in the present data.

With all these potential limitations, however, it should be also noted that the present research attempted to explore some new aspects of the subject area. First, it attempted to examine the impact of negative alcohol portrayals as well as that of positive alcohol portrayals in dramatic presentations. Second, perceived reality previously dealt with by some media violence researchers was imported into the present research to explicate the impact of alcohol portrayals in dramatic presentations. Third, role affinity as another new construct in the area was introduced in the present research to better explain the variability of the impact of the dramatized alcohol portrayals. Finally, a new methodological approach to measuring perceived reality was attempted in the present study. Perceived reality was dealt with as a stimulus-specific reaction that results from the interaction of a specific program and an individual viewer, not as a general tendency or trait of an individual regarding a certain medium (e.g., television). Thus, perceived reality was measured on various content aspects that pertain only to the

specific stimulus film. As a consequence of all these attempts, the present study reached the following, tentative conclusions. First, negative alcohol portrayals are generally effective in changing behavioral aspects of alcohol drinking, whereas positive portrayals tend to reshape attitudinal aspects of alcohol drinking. Second, perceived reality appears to be an important factor for generating the impact of negative alcohol portrayals, whereas role affinity mediates the impact of positive portrayals.

In order to corroborate these findings, future research is needed, preferably with a well-devised research design that could overcome all the limitations mentioned above. Future research may consider the following suggestions. First, to ensure the sufficiency of the treatment, subjects may need to be exposed repeatedly to a series of stimulus materials, as long as they are protected from knowing the purpose of the research. Second, their attitudes and behaviors related to alcohol drinking need to be observed at multiple times for a long period in order to explicate all the potential, and real, impacts of the treatment. Third, the measurement of variables such as alcohol-related attitudes and behavior should not rely solely on self-reports. In order to overcome the barrier to the disclosure of information related to alcohol drinking as a quite sensitive topic, methodological improvements are required to

better observe the subject's alcohol-related attitudes and behavior as influenced by the treatment. For example, future research may use an unobtrusive observer such as a close friend of the subject who can have easy, either direct or indirect, access to the subject's personal life in order to measure the subject's alcohol behavior for a long term after the treatments, while the connection between the observer and the researcher is kept unknown, if possible, to the subject. Finally, future research should not be confined only to laboratory experimental designs. The data collected through other methods such as survey or field experiments as well as qualitative inquiry can also be utilized to provide better expositions of the impact of alcohol portrayals in dramatic presentations.

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APPENDIX

Questionnaire

1

I. Please indicate your opinion on the realism of the following content aspects of the movie (i.e., how likely it is to happen in the real world). Circle the number that you think best represents your opinion for each item. The left end of each scale (i.e., "1") should be circled if you think such content item is very unrealistic (i.e., it is almost never likely to happen in the real world. You may circle the "7" if you think the content item is very realistic (i.e., it is very highly likely to happen in the real world). The "4" indicates that your opinion is neutral (i.e., neither unrealistic nor realistic). Please remember that the interval between numbers is always equal.

	VERY UNREALISTIC						VERY REALISTIC
1. the overall plot	1	2	3	4	5	6	7
2. the settings	1	2	3	4	5	6	7
3. the characters	1	2	3	4	5	6	7
4. occurrences at John's first concert	1	2	3	4	5	6	7
5. occurrences at the local bar	1	2	3	4	5	6	7
6. occurrences at Esther's home	1	2	3	4	5	6	7
7. occurrences at John's second concert	1	2	3	4	5	6	7
8. occurrences at John's home	1	2	3	4	5	6	7
9. occurrences at the recording studio	1	2	3	4	5	6	7
10. occurrences at the charity concert	1	2	3	4	5	6	7
11. occurances at the wedding	1	2	3	4	5	6	7
12. occurrences to Esther as a singer after the charity concert	1	2	3	4	5	6	7
13. occurrences at the Grammy Awards ceremony	1	2	3	4	5	6	7
14. John Norman Howard	1	2	3	4	5	6	7

15. Esther Hoffman	1	2	3	4	5	6	7
16. John's staff members	1	2	3	4	5	6	7
17. concert audience	1	2	3	4	5	6	7
18. media reporters	1	2	3	4	5	6	7
19. other characters in the movie	1	2	3	4	5	6	7
20. other background people	1	2	3	4	5	6	7

II. How much do you like the main character, John Norman Howard? Please show us the degree to which you like the character by indicating that you would like to have a person like him as which of the following categories. (Please check one.)

_____ your family member (e.g., marital partner or in-law)
_____ your friend
_____ your acquaintance
_____ a person in your neighborhood
_____ a person in your town
_____ a person in your country
_____ a person not in your country

III. Please circle a number between number 1 and 7 for each of the following items in order to indicate the degree to which you like each aspect of the character, John Norman Howard. Please remember that the interval between numbers is always equal. So, the degree to which you like about each item should be indicated by the position of the number you choose. The "4" indicates that your opinion is neutral (i.e., neither like nor dislike). But, the "5" indicates that you like it a little, whereas the "3" indicates "somewhat dislike," and so on.

	DISLIKE VERY MUCH						LIKE VERY MUCH
1. John Norman Howard	1	2	3	4	5	6	7
2. John's personality	1	2	3	4	5	6	7
3. John's music style	1	2	3	4	5	6	7
4. John's talking style	1	2	3	4	5	6	7
5. John's clothing style	1	2	3	4	5	6	7
6. John's house style	1	2	3	4	5	6	7
9. John's style of goal management	1	2	3	4	5	6	7

3

7. John's hair style	1	2	3	4	5	6	7
9. John's eating tastes	1	2	3	4	5	6	7
10. John's manner of dealing with other people	1	2	3	4	5	6	7
11. John's style of treating his romantic partner	1	2	3	4	5	6	7
12. THE MOVIE IN GENERAL	1	2	3	4	5	6	7

IV. Have you seen the movie before? _____YES _____NO

LIFE STYLE SURVEY

PART 1

A. What is your favorite news medium? (Please check one)

_____ NEWSPAPER
_____ RADIO
_____ TELEVISION
_____ NEWS MAGAZINE
_____ Other (Specify) _____

B. Which of the following do you think is the most important issue on campus these days?

_____ Campus Parking
_____ Smoking on Campus
_____ Tuition Raise
_____ Racial Conflict
_____ Sexual Discrimination
_____ Other (Specify)_____

C. Which of the following sports are you active in? (Check all that apply)

_____ Golf
_____ Tennis
_____ Racquetball
_____ Running
_____ Swimming
_____ Skiing
_____ Boating

D. How many hours do you watch sporting events on television for an average week?

About ( ) hours a week

E. Please indicate how much do you like watching the following sports on television?

	LIKE VERY MUCH	LIKE	NEUTRAL	DISLIKE	DISLIKE VERY MUCH
1. College Basketball	5	4	3	2	1
2. Professional Basketball	5	4	3	2	1
3. Professional Baseball	5	4	3	2	1
4. College Football	5	4	3	2	1
5. Professional Football	5	4	3	2	1
6. Tennis	5	4	3	2	1
7. Golf	5	4	3	2	1
8. Figure Skating	5	4	3	2	1

F. How do you usually come to school?

_____WALK _____BY BIKE _____BY BUS _____Other ( )

G. Please read each of the following statements and choose the response which most nearly represents your position or opinion.

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1. Alcohol drinking should be prohibited in this country.	5	4	3	2	1
2. It's okay to drink as long as we don't get drunk.	5	4	3	2	1
3. Drinking relieves tension.	5	4	3	2	1
4. Getting drunk is just a harmless way of having fun.	5	4	3	2	1
5. A person giving a party should always make sure that alcoholic beverages are available.	5	4	3	2	1
6. Drinking is a necessary part of celebration.	5	4	3	2	1
7. When they are at a gathering together, people who drink have more fun than people who don't.	5	4	3	2	1
8. People should be able to drink as much as they want as long as they don't harm anyone else.	5	4	3	2	1
9. It is easier to meet new people if we are drinking.	5	4	3	2	1
10. Drinking is a good way of getting rid of stress.	5	4	3	2	1
11. Drinking helps us see things in a better way.	5	4	3	2	1
12. Drinking makes sexual relationships more enjoyable.	5	4	3	2	1
13. It is okay to drink in order to feel more comfortable around others.	5	4	3	2	1
14. Drinking gives us some courage to accomplish things which you would not when sober.	5	4	3	2	1
15. It is okay to drive after we have had just a few (less than three) drinks.	5	4	3	2	1

H. Please indicate the likelihood that you would drink alcohol beverages on the following occasions.

	VERY LIKELY	LIKELY	NEUTRAL	UNLIKELY	VERY UNLIKELY
1. When my next exam is over:	5	4	3	2	1
2. When I go out on a date:	5	4	3	2	1
3. When I go to a party:	5	4	3	2	1
4. When I watch a sporting event on television:	5	4	3	2	1
5. When I have a serious family problem:	5	4	3	2	1
6. When I can't get to sleep:	5	4	3	2	1
7. When I want to develop a personal relationship with somebody:	5	4	3	2	1
8. When I feel lonely:	5	4	3	2	1
9. When I get upset greatly:	5	4	3	2	1
10. When I have something to celebrate:	5	4	3	2	1
11. When I have a big dinner at a restaurant:	5	4	3	2	1
12. When I feel distressed:	5	4	3	2	1
13. When I go to a bar with friends:	5	4	3	2	1
14. When I have some serious things to discuss with my friend:	5	4	3	2	1
15. Before I make love:	5	4	3	2	1

I. What percentage of American college students do you think drink alcoholic beverages regularly? ( )%

J. What percentage of American adults do you think drink alcoholic beverages regularly? ( )%

K. How many of your five best friends drink alcohol regularly? ( ) of 5

L. Does either of your parents drink alcoholic beverages regularly?

_____YES _____NO

M. Please answer the following questions.

1. Your gender? _____MALE _____FEMALE

2. Your age? ( )

3. Your year in college?

_____FRESHMAN

_____SOPHOMORE

_____JUNIOR

_____SENIOR

4. Where do you live?

_____ON-CAMPUS _____OFF-CAMPUS

5. Who do you live with?

_____WITH COLLEGE STUDENTS

_____WITH FAMILY

_____WITH BOYFRIEND/GIRLFRIEND OR SPOUSE

_____Other (Specify)_____

Thank you so much!