

Perceptions of Postdrinking Anxiety: Effect of Sex,  
Beverage, and Sex of Companion

by

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(ABSTRACT)

The purpose of the current studies was to look at the importance of contextual and individual difference factors, as well as sex differences, on the expected effects of alcohol. The vulnerability and gender role violation hypotheses were examined as explanations for previous findings of sex differences in anxiety responses to alcohol consumption within heterosexual social situations. In the first study, the contextual variables of sex of the target being rated and sex of target's companion as well as the factors of sex of subject and beverage consumed were examined to clarify the role of anxiety related to the presence of opposite sex companions and anxiety. The factors of sex of companion, sex of target, and beverage were manipulated within a vignette format. Subjects were asked to read the vignette and to answer questions about the main character in the vignette. There were significant beverage by sex of subject interactions indicating that male subjects expected alcohol to reduce impairment and increase social appeal relative to female subjects who tended to expect that consuming alcohol would decrease social appeal

and increase impairment. In addition, male subjects expected alcohol to decrease anxiety and increase social skill while female subjects did not expect such an increase and, instead, expected a decrease in social skill in male targets drinking alcohol and no effect on anxiety. These findings did not support either the hypothesis of vulnerability or of gender role violation as explanations of sex differences in alcohol expectancies. Based on the findings of the first study, the goals of the second study were to tease apart possible relationships that individual differences in gender role, sexual description of target, and additional motivation to impress the companion could have with feelings of anxiety and other alcohol expectancies in a situation in which both alcohol and being with an opposite sex companion are involved. This was done within a vignette format. Described target sexuality, motivation to impress, and discomfort with behaviors outside the traditional feminine gender role were not found to moderate alcohol expectancies. Interpretation of the results in relation to the vulnerability and gender role violation hypotheses and directions for future research are discussed.

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Perceptions of Postdrinking Anxiety: Effect of Sex,  
Beverage, and Sex of Companion

Until fairly recently, studies of alcohol effects had been confined to pharmacological research. The uncharacteristic behavior of people drinking alcohol has been seen as the sole result of the pharmacological effects of alcohol. Lately, however, researchers have been studying the effects people expect from alcohol as important in addition to pharmacological effects. The impetus for a focus on alcohol expectancies comes from MacAndrew and Edgerton's (1969) anthropological evidence of the cultural influence on behavior after alcohol consumption. MacAndrew and Edgerton (1969) found that postdrinking behavior was dramatically different for people of different cultures. This finding led researchers to conclude that the effects of alcohol on behavior were not necessarily pharmacological in nature but had more to do with societal norms for the effects of alcohol consumption. Consequently, the study of the changes people expect alcohol to make in their behavior became a focus of research. Alcohol expectancies, then, concern the changes that people expect the consumption of alcohol will make in their behavior which do not necessarily reflect pharmacological influence.

The study of outcome expectancies was originally proposed by Bandura (1977). Outcome expectancies as defined by Bandura (1977) concern expectancies of what will happen if one performs a given behavior. The importance of outcome expectancies as predictors of behavior in regard to relapse prevention and future drinking behavior has been reported by Marlatt (1985) and Leigh (1989).

There are two primary types of research on alcohol expectancies--the balanced placebo design and the assessment of expectancies by questionnaire. The balanced placebo design consists of a 2 x 2 factorial crossing of actual alcohol consumption with the belief that alcohol has been consumed. One cell of subjects consumes alcohol and is told they are consuming alcohol, one cell consumes alcohol and is told they are not consuming alcohol, one cell does not consume alcohol and is told they are consuming alcohol, and one cell does not consume alcohol and is told that they are not consuming alcohol. Comparisons of the conditions in which the subjects are told they are consuming alcohol versus those conditions in which subjects are told they are not consuming alcohol suggest that the expectancy of consuming alcohol, rather than the

pharmacological action of alcohol, is producing the effect in behavior.

The use of the balanced placebo design (Rohsenow & Marlatt, 1981) has provided a paradigm for deciphering the effects of expectancies from the pharmacological effects of alcohol. The results of studies using this paradigm have created a growing body of literature which shows the power of expectancies over social behavior. In general, the research suggests that alcohol expectancy has its strongest effect on deviant social behaviors such as further alcohol consumption and increased sexual arousal in response to erotic stimuli (i.e. depictions of rape etc.; Hull & Bond, 1986). Expectancies also account for changes in other types of behavior. Hull and Bond (1986), in a meta-analysis, found that expectancy predicted behavior change concerning the expression of emotion, anxiety, and aggression better than did the actual ingestion of alcohol.

The balanced placebo design allows the indirect study of alcohol expectancies. Comparisons are made between subjects who are told they are or are not consuming alcohol and differences between groups are interpreted to reflect group differences in alcohol expectancies. This design provides a way to test

causality of expectancies versus pharmacological effects of alcohol and avoids the demand characteristics associated with directly asking subjects about their alcohol expectancies. However, within the balanced placebo design, researchers are only able to study one or a few dependent variables and only those variables that can be studied in a laboratory setting.

Another method of studying alcohol expectancies involves asking, on a paper and pencil measure, what the subject expects to experience under the influence of alcohol. The questionnaire paradigm for identifying alcohol expectancies has identified specific expectancies for the effects of alcohol consumption and the behavioral correlates of certain kinds of expectancies. The areas of expectancies include: sexual disinhibition, cognitive impairment, tension relief, mood effects, and aggression. These direct measures of alcohol expectancies have been shown to correlate with alcohol use in college students, adolescents, and adults (Leigh, 1989) with greater positive expectancies correlated with greater reported alcohol use. Leigh (1989) has critiqued questionnaire investigation of alcohol expectancies for, among other things, failing to study contextual factors and

individual differences that may moderate expectancies. This approach does have the advantage of being able to tap a wide range of alcohol expectancies with minimal cost. Additionally, alcohol expectancy questionnaires also have the advantage of being able to study dependent variables that are not amenable to laboratory research (i.e. sexual behavior). However, the self-reported alcohol expectancies are subject to demand characteristics and various biases including social desirability.

One area in which the role of expectancy is somewhat clouded is in its effects on anxiety within social situations. Although alcohol is generally regarded as a social lubricant, a tension reducing effect of expected alcohol consumption in social situations is not unanimous across studies. Hull and Bond (1986) reported that the results of balanced placebo design studies looking at the effect of expectancy on general arousal are heterogeneous. Suspecting that this heterogeneity might be due to sex differences, they compared five studies using only male subjects to one study using only female subjects. They found a significant difference in the subjects' arousal in reaction to the expectancy of consuming alcohol depending on the sex of the subjects. The arousal

level of male subjects went down when they believed they were drinking alcohol, while the arousal level of the female subjects went up when they believed that they were drinking alcohol. The single study of the effect of alcohol expectancy on arousal in women precludes firm conclusions about the role of sex but suggests the need for further research.

The only two balanced placebo designs that employed both men and women subjects failed to find the predicted expectancy by sex interaction on measures of arousal (McCarty, Diamond & Kaye, 1982; Tucker, Maisto, Vuchinich, & Blumenthal, 1979). However, upon closer examination, these studies assessed physiological arousal in response to sexually arousing stimuli. The studies that suggest the interaction of sex with expectancy focused on physiological arousal and anxiety in response to being placed in a stressful heterosexual social situation. Wilson and Abrams (1977), using only male subjects, employed the balanced placebo design in a study in which the subjects were asked to make a favorable impression on a female stranger without speaking. The authors operationally defined social anxiety as increases in heart rate and scores on social anxiety in the State Trait Anxiety Inventory and the Subjective Units of Disturbance Scale (Wilson & Abrams,

1977). The subjects who believed that they had consumed alcohol showed less anxiety on self-report questionnaires and heart-rate measures. In a follow-up study using only female subjects, Abrams and Wilson (1979) employed the balanced placebo design again asking subjects to make a favorable impression on a male stranger without him talking back to them. In this study, the female subjects were more anxious as measured by observations of social behavior and heart-rate and GSR when they believed that they had consumed alcohol. However, the women in the same study (Abrams & Wilson, 1979) self-reported less anxiety if they thought that they were drinking alcohol. Consequently, in an anxiety provoking interpersonal situation women and men appear to react differently to the knowledge that they had consumed alcohol. The behavior of women indicated that they were more anxious and that men became less anxious when believing they consumed alcohol.

A study by Caudill, Wilson, and Abrams (1987) provides additional evidence for interaction effects of sex and alcohol expectancy on anxiety in social situations. Subjects were told they had or had not consumed alcohol and were asked to interact with a confederate of the opposite sex. Male subjects who

believed that they and the confederate had consumed alcohol self-disclosed more than males who did not believe that they had consumed alcohol. Female subjects, on the other hand, showed a decrease in self-disclosure if they believed that they had consumed alcohol. Possible hypotheses about the reasons for this finding are that women experience increases in guardedness when they believe that they have consumed alcohol or that they are attempting to make the interaction less intimate.

Several hypotheses could account for the sex difference in alcohol expectancies. Abrams and Wilson (1979) and Marlatt (1986) proposed that women may feel more vulnerable or defensive particularly in the presence of a strange man. Their anxiety would be expected to increase when drinking alcohol in these situations if they believe alcohol will lower their control over their own behavior. This vulnerability hypothesis predicts that the anxiety found in women who believe they have consumed alcohol depends on the presence of the male in the situation. No studies, however, have tested this assumption by having subjects interact with both males and females. An alternative or, perhaps related, hypothesis, the gender role violation hypothesis, suggests that the sex differences

in expectancies might be due to greater social sanctions against drinking for women than are present for men (Rohsenow & Marlatt, 1981; Rohsenow, 1983). In this case, the sex of the companion is less important than the act of drinking itself.

The results of two studies by George, Gournic, and McAfee (1988) may shed some light on the reasons why women become anxious in social situations in which they expect alcohol. In the first study, the researchers asked subjects to complete an alcohol expectancy effects questionnaire for a young man or for a young woman. Subjects rated the woman who drank alcohol as more sexual than they rated the man who drank alcohol. In the second study, the researchers asked subjects to read a vignette describing a woman on a date with a man she had met previously but with whom she was not in a relationship. The researchers varied the beverage she drank in the vignette as either cola, beer, wine, or whiskey. The subject read the vignette and then completed an expectancy questionnaire. The subjects rated only the woman in the vignette. The woman who drank alcohol was rated as less attractive, less socially skilful, more aggressive, more impaired, more sexually available and more likely to engage in foreplay and intercourse than the target woman who

drank cola. The difference between ratings of the alcohol and non-alcohol drinking target women was greater for the female subjects than for the male subjects. The findings of George et al. (1988) favor Marlatt's hypothesis in that women in the alcohol condition were seen as more sexually available and more impaired and, therefore, more vulnerable. However, they did not assess expectations of anxiety in the same study thus precluding a direct test of the hypothesis.

George et al. (1988) proposed that the difference between the ratings made by female versus male subjects might arise from women's defensive assessment that danger exists in a social situation involving a relatively unknown male particularly when the woman is drinking alcohol. It could be extrapolated that anxiety in this situation might be due to rape myth acceptance (the belief that a woman who is drinking alcohol and is raped is at fault for the rape) or, more simply, to accurate assessment of the prospects of victimization in such a situation. Again, the assumption made by the authors is that the differences in judgments about women versus men arises from the presence of the male in the social situation. They did not, however, test this assumption by varying the sex of the companion.

An alternative explanation for the findings of increased anxiety in women after the consumption of alcohol focuses on gender role appropriate behavior. The expectancy that a woman who drinks alcohol becomes less attractive, less socially skillful, and more sexually available might lead to anxiety for women in social situations involving alcohol because these qualities are not congruent with women's traditional role. Support for the idea that drinking alcohol is not congruent with traditional women's roles comes from the survey literature. Celentano and McQueen (1984) did a survey of women in Baltimore during 1980 and found that traditional gender role attitudes were associated with lower alcohol consumption. Similarly, Johnson (1982) found that married employed women had higher rates of consumption and problems with alcohol than married women not working outside of the home. The implication is that women who have less traditional roles, those who work outside the home, have higher alcohol consumption. It follows, then, that individual attitudes about gender role appropriate behavior for women versus men could impact the consumption of alcohol. These attitudes may result in differential expectancies for the effects of alcohol on women versus men. It seems likely that women with traditional

gender role images would have more negative expectancies about alcohol and those may involve expectations about sexual availability and the accompanying negative valence of that effect. Gender role identification may, therefore, moderate anxiety in response to the expectancy of consuming alcohol.

While the George et al. (1988) study indicates that a woman who drinks alcohol with a man may be seen as less socially skillful and less attractive than a woman who does not drink with a male companion, the results of the George et al. (1988) study do not clarify the relationship between negative perceptions about women who drink in any situation versus women who do not drink. In other words, the results of the George et al. (1988) study could be due to general negative attributions made concerning women who drink alcohol, or the results could be due to specific attributions about women who drink alcohol in the company of a relatively unknown man. Consequently, the situational aspects concerning women's expectations about experiencing social anxiety need to be addressed more clearly.

The purpose of the first study was to look at the importance of contextual factors on the expected effects of alcohol in relation to the vulnerability and

gender role violation hypotheses. The vignette study by George et al. (1988) provided the paradigm used in the current study for studying contextual variables in alcohol expectancy. The vignette paradigm lends the experimenter the ability to manipulate and evaluate several factors independently and assess their potential interaction in relation to perceptions of target characteristics. Use of the vignette methodology avoids the pitfall of direct assessment of alcohol expectancies, demand characteristics, while maintaining the advantage of being able to manipulate key contextual variables.

In the first study, the contextual variables of sex of the target being rated, sex of target's companion, and beverage consumed were varied. In addition, sex of subject was included as a factor to replicate previous findings of differences in the alcohol expectancies held by men and women. The dependent measures assess the perceived attributes of the target including: anxiety, sexual disinhibition, social skillfulness, impairment, social appeal, and extent of self-disclosure to the companion. The subjects were asked to read a vignette depicting a dyadic social situation and to answer questions that concern the dependent measures.

In general, the first study explored the relationship of contextual factors to expectancies for alcohol effects. Specifically, the study seeks to clarify the role of anxiety related to the presence of opposite sex companions and anxiety. In addition, the study examined the sex by alcohol interaction on social anxiety using ratings of both male and female drinkers.

The hypotheses are as follows:

1. Targets with opposite sex companions will be perceived as having more social anxiety than targets with same sex companions.
2. The sex of companion and alcohol condition will interact to heighten the anxiety of female, but not male, targets supporting the vulnerability hypotheses proposed by Marlatt (1986), George et al. (1988), and Abrams and Wilson (1979). Similar three-way interactions of beverage, sex of companion, and sex of target for the dependent variables of sexual disinhibition, impairment, and self-disclosure will further support the vulnerability hypothesis.
3. In contrast, a two-way interaction of sex of target x beverage condition such that female targets will be perceived to be more anxious when drinking alcohol than when not drinking alcohol

while male targets will be perceived to be less anxious when drinking alcohol than when not drinking alcohol would support the gender role violation hypothesis proposed by Rohsenow (1983) and Rohsenow and Marlatt (1981). Findings of similar two-way interactions of beverage by sex of target for the dependent variables of social appeal, social skillfulness, and sexual disinhibition would lend further support for the gender role violation hypothesis when female targets drinking alcohol are seen as less socially appealing, less skillful, and more sexually disinhibited than female targets not drinking alcohol.

4. For female subjects, perceived anxiety and perceived impairment of the female target drinking alcohol will be greater than for male subjects. This finding would replicate George et al., (1988) and support both the gender role violation and the vulnerability hypothesis because gender role appropriate behaviors may be more salient for female subjects and the dangers of being in a vulnerable situation may also be more salient for female subjects (George et al., 1988).

## Method

### Subjects and Setting

Subjects were 266 students at Virginia Tech obtained from the introductory psychology pool. Subjects were recruited by means of a sign-up sheet placed in the fifth floor lobby of Derring Hall. The folder including the sign-up sheet was labeled: "Perceptions and Feelings When Interacting with Strangers" in order to avoid sensitizing subjects to the beverage condition in the vignette that they receive. All students who signed-up and attended an administration session completed the questionnaires. The questionnaires were administered by graduate and undergraduate students under the supervision of the author on various dates in one-hour sessions in groups of approximately 30 subjects per session in classrooms on campus. Each subject participated in one session of one hour or less and received one hour of introductory psychology credit.

### Design

A between-subjects 2 x 2 x 2 x 2 factorial design was employed. The four factors were sex of subject, sex of the target individual in the vignette, sex of the target's companion (same vs opposite), and the type of beverage consumed (mixed drinks vs coke).

## Procedure

Within each administration session, all 16 cells of the design were represented. Subjects were asked to read and sign a consent form explaining the content of questions to be asked and the nature of the study. Subjects were given a questionnaire requesting them to read the vignette (See Appendices B and C), and complete a questionnaire addressing their perceptions of the target individual. After turning in this questionnaire, subjects were asked to complete a second and final questionnaire addressing manipulation check issues and demographic questions. Subjects were asked to refrain from discussing the content of the material they read and the questions they answered with people other than the experimenter to avoid contaminating the subject pool.

## Independent Variables

The sex of target, sex of companion, and beverage consumed were varied within vignettes depicting a target person going out to a bar to meet the companion. The vignettes were approximately one page in length. Both male and female subjects were tested and sex of subject was one of the four factors.

### Dependent Variables

Each item of the dependent measures of alcohol expectancies was rated on a scale from 1 to 7, and a higher score on each item was coded to indicate greater amounts of the perceived scale construct. The items for each scale were averaged to create the scale score so that a high score on the social appeal scale would indicate higher perceived social appeal, and a higher score on the anxiety scale indicates higher perceived anxiety. Items for the scales were adapted from the George et al. (1988), Abrams and Wilson (1979), and Caudill et al. (1987) studies. The scales were refined in a series of pilot studies by retaining those items that contributed most to the internal consistency of the scales. The final measure presented to subjects included the retained items presented in scrambled order (See Appendix A for the unscrambled scales).

The anxiety scale is composed of six items describing behaviors and feelings indicative of anxiety (e.g. how calm is the target, how afraid of embarrassing herself is the target). The alpha coefficient of reliability for the anxiety scale was .84 measured from the data from the current study.

Measures of impairment, sexual disinhibition, social skillfulness, and social appeal are taken, in

part, from the George et al. study of 1988. The impairment scale is composed of five items (e.g. how quickly do you think the target was able to respond to questions, how clumsy did the target appear to be), and the alpha coefficient is .69. The sexual disinhibition scale is composed of six items (e.g. to what degree do you think the target was seductive during the evening, how sexually attractive do you think the target was) and the alpha coefficient is .80. The social skillfulness scale is composed of five items (e.g. how interesting do you think the target was, how easy do you think it was for the target to talk to the companion) with an alpha coefficient of .83. The social appeal scale is composed of ten items (e.g. how likeable do you believe the target was, how favorable was the impression the target made) with an alpha coefficient of .86. Another scale, extent of self-disclosure, was created by translating the behavioral observations made by Caudill, et al. (1987). The scale is composed of five items (e.g. how much revealing personal information did the target tell the companion, to what extent did the target talk about her own feelings) with an alpha coefficient for this scale of .84.

## Results

The data were analyzed using univariate four-way, beverage, sex of target, sex of subject, and sex of companion analysis of variance on scales representing the dependent variables of anxiety, sexual disinhibition, impairment, social appeal, social skill, and extent of self-disclosure and on variables used in the manipulation check. The Duncan multiple range test was used to investigate further the pattern of findings following a significant interaction of two or more factors. Additionally, main effects and interactions will be discussed only when not subsumed by higher order interactions.

### Manipulation Checks and Vignette Evaluation

Responses to the manipulation check questionnaire reveal that 14 subjects across eight vignette conditions failed to correctly identify the beverage consumed by the target. These subjects were distributed proportionately across beverage conditions. Additionally, four subjects reported that the target did not drink at all. These 18 subjects were dropped from subsequent data analyses, leaving 248 subjects.

Perceived level of target intoxication and number of drinks consumed were also measured. Subjects were asked how many drinks the target consumed and how

intoxicated he or she was on a scale from 0--"Not at all intoxicated" to 4--"Drunk". An analysis of subjects' estimations of the number of drinks the target consumed indicated that 31.9% of the subjects estimated that the target consumed 1 to 2 drinks, 59.7% estimated that the target had consumed 3 to 4 drinks, 6.5% estimated consumption of 5 to 6 drinks, and 1.6% estimated more than six drinks. Thus, the majority of subjects, 91.6%, estimated that the target consumed between 1 and 4 drinks.

The mean perceived intoxication rating of targets drinking coke was .00 (SD = .00) while the mean rating of targets drinking mixed drinks was 1.43 (SD = 1.18). This finding indicates that targets who drank alcohol were judged to be "a little" to "somewhat" intoxicated and that the manipulation of beverage condition was adequate in producing differences in intoxication ratings.

Vignette evaluation. Subjects evaluated how realistic and common the events described in the vignette were. Sex of companion main effects indicated that the situation was judged to be more common,  $F(1,247) = 71.52$ ,  $p < .001$ , when the companion was the opposite sex of the target. On the scale from 1--"Never occurs" to 5--"Very common", the mean for

opposite sex companion ratings was 4.46 ( $SD = .72$ ) and the mean for same sex pairings was 3.49 ( $SD = 1.01$ ). These results indicate that, although opposite sex pairings are perceived to be more common, both situations were perceived as typical or average.

A beverage by sex of target by sex of subject by sex of companion ANOVA on the item of situation realism revealed a three-way interaction of sex of target, sex of subject, and sex of companion,  $F(1,247) = 5.04$ ,  $p < .026$ , such that female subjects reported that situations in which a male target was paired with a male companion were less realistic than any other situation ( $p < .05$ ). Male subjects rated same sex pairings in general as less realistic than situations in which female targets were paired with male companions ( $p < .05$ ). Again, even the lowest mean ratings of typicality and realism were in the middle of the scale indicating that these situations were judged to be neither uncommon nor unrealistic.

#### Dimensions Typically Associated with Alcohol Effects

Anxiety. A three-way interaction effect for beverage by sex of target by sex of subject on the perceived anxiety scale was significant  $F(1,230) = 6.43$ ,  $p < .012$ . A Duncan multiple range test on individual means revealed that male subjects rated male

targets with alcohol and female targets with or without alcohol as less anxious than male targets without alcohol ( $p < .05$ ; see Table 1). There were no significant differences in the female subjects' ratings of anxiety in targets. Thus, male subjects seemed to expect alcohol to reduce anxiety in male targets but not necessarily in females. Whereas, female subjects did not expect differences in anxiety due to alcohol.

Sexual disinhibition. There were no interaction effects for sexual disinhibition. A significant main effect for beverage was found such that subjects rated targets drinking alcohol as more sexually disinhibited than targets not drinking alcohol  $F(1,228) = 9.44$ ,  $p < .002$ . The mean rating of targets in the alcohol condition was 3.94 ( $SD = .93$ ) while the mean rating of targets in the no alcohol condition was 3.62 ( $SD = .84$ ). This finding is consistent with the literature on alcohol expectancies.

A significant main effect for sex of target was found such that female targets were rated as more sexually disinhibited than male targets  $F(1,228) = 6.55$ ,  $p < .011$ . The mean rating of female targets was 3.92 ( $SD = .86$ ) while that of male targets was 3.65 ( $SD = .92$ ).

Table 1

Perceptions of Targets' Anxiety by Sex of Subject, Sex of Target and Beverage

Condition	Beverage	
	No Alcohol	Alcohol
Male subjects		
Male targets		
<u>M</u>	4.72	3.88
<u>SD</u>	.72	.69
Female targets		
<u>M</u>	4.23	4.03
<u>SD</u>	.96	.81
Female subjects		
Male targets		
<u>M</u>	3.93	4.21
<u>SD</u>	.74	.91
Female targets		
<u>M</u>	4.18	3.98
<u>SD</u>	1.02	.80

Note. M = mean; SD = standard deviation.

A significant main effect for sex of companion was found such that subjects rated targets with opposite sex companions as more sexually disinhibited than those with same sex companions  $F(1,228) = 22.92, p < .001$ . The mean of same sex pairings was 3.52 ( $SD = .92$ ) and that of opposite sex pairings was 4.04 ( $SD = .81$ ).

In general, targets were rated as significantly more sexually disinhibited if they were drinking alcohol, if they were female, and if their partner was of the opposite sex. The failure to find an interaction between sex of target and beverage does not support the prior finding that a woman drinking alcohol is perceived as becoming more sexually disinhibited than a man drinking alcohol.

Impairment. A two-way interaction effect for beverage by sex of subject was significant  $F(1,230) = 8.52, p < .004$  such that male subjects rated targets without alcohol as more impaired than female subjects rated targets without alcohol ( $p < .05$ ). Targets who consumed alcohol were not seen as differentially impaired by male versus female subjects (see Table 2).

Social appeal. A two-way interaction effect for beverage by sex of subject was significant,  $F(1,230) = 6.49, p < .012$ , such that male subjects rated targets without alcohol as significantly less appealing than

Table 2

Perceptions of Targets' Impairment by Sex of Subject  
and Beverage

Condition	Beverage	
	No Alcohol	Alcohol
Male subjects		
<u>M</u>	3.62	3.29
<u>SD</u>	.85	.77
Female subjects		
<u>M</u>	3.16	3.40
<u>SD</u>	.83	.82

Note. M = mean; SD = standard deviation.

female targets rated subjects without alcohol ( $p < .05$ ) (see Table 3). Like their expectations of impairment, male subjects seem to expect that targets not consuming alcohol are less socially appealing and more impaired relative to female subjects. When targets consume alcohol, the difference between male and female subjects ratings of social appeal and impairment was not significant.

Social skill. A three-way interaction effect for beverage by sex of target by sex of subject was significant,  $F(1,230) = 5.75$ ,  $p < .017$ . A Duncan multiple range test on individual means revealed that male subjects rated male and female targets with alcohol as more skillful than they rated both male and female targets without alcohol ( $p < .05$ ) (see Table 4). Female subjects rated male targets with alcohol as significantly less skillful than female targets with alcohol ( $p < .05$ ). Again, it seems that male subjects expect that alcohol will increase social skillfulness whereas female subjects do not expect such significant effects. In addition, female subjects seem to expect that male targets would not be as socially skillful as female target when drinking alcohol.

Table 3

Perceptions of Targets' Social Appeal by Sex of Subject  
and Beverage

Condition	Beverage	
	No Alcohol	Alcohol
Male subjects		
<u>M</u>	4.90	5.19
<u>SD</u>	.71	.72
Female subjects		
<u>M</u>	5.30	5.12
<u>SD</u>	.77	.77

Note. M = mean; SD = standard deviation.

Table 4

Perceptions of Targets' Social Skillfulness by Sex of Subject, Sex of Target and Beverage

Condition	Beverage	
	No Alcohol	Alcohol
Male subjects		
Male targets		
<u>M</u>	3.54	4.61
<u>SD</u>	.90	.79
Female targets		
<u>M</u>	3.89	4.47
<u>SD</u>	1.04	.90
Female subjects		
Male targets		
<u>M</u>	4.27	3.90
<u>SD</u>	.76	1.23
Female targets		
<u>M</u>	4.19	4.61
<u>SD</u>	1.16	.83

Note. M = mean; SD = standard deviation.

Extent of self disclosure. There were no significant main or interaction effects for extent of self disclosure.

### Discussion

The results of the first study support neither the vulnerability hypothesis nor the gender role violation hypothesis. The vulnerability hypothesis was not supported because there was no significant impact of sex of companion on any of the interactions between beverage and sex of target. A key assumption of this hypothesis is that being in a social situation with someone of the opposite sex is more anxiety producing than being with someone of the same sex. Addressing the vulnerability hypothesis more directly, female targets drinking alcohol with an opposite sex companion were not judged to be significantly more anxious, more impaired, more sexual disinhibited, or as expressing less self disclosure than female targets drinking alcohol with a same sex companion.

The gender role violation hypothesis was not supported because female targets drinking alcohol were not perceived as less appealing, more anxious, less socially skillful, or more sexually disinhibited than those not drinking alcohol regardless of sex of companion. Additionally, female subjects did not

perceive female targets as being significantly more anxious in situations involving alcohol than did male subjects.

There is, however, a pattern of results in the present study that is interesting in its own right. The beverage by sex of subject interactions indicate that male subjects expected alcohol to reduce impairment and increase social appeal relative to female subjects who tended to expect that consuming alcohol would decrease social appeal and increase impairment. In addition, male subjects expected alcohol to decrease anxiety and increase social skill while female subjects did not expect such an increase and, instead, expected a decrease in social skill in male targets drinking alcohol and no effect on anxiety.

The results of this study parallel those found by Rohsenow (1983). Rohsenow assessed alcohol expectancies directly by questionnaire and found that women expected less social pleasure, less physical pleasure, less relaxation, and more impairment than did men (Leigh, 1987; Rohsenow, 1983). The results of the current study also imply that women expect less anxiety reduction and less enhancement of social appeal and social skillfulness from drinking alcohol than do men. It is worth noting that these comparable findings

emerged from a different form of assessment with alcohol consumption embedded in a context and relying on the projection of personal beliefs on others. Consequently, the differences in alcohol expectancies for men and women found in literature seem to be quite robust.

There are several possible reasons why the vulnerability and gender role hypotheses were not supported. Because the current study used questionnaires and vignettes, it did not directly replicate the Wilson and Abrams (1977; 1979) studies in which a balanced placebo design was used to assess subject anxiety in a heterosexual situation. The differences in methodology might have hampered the ability to replicate the effect that Wilson and Abrams (1977; 1979) observed. It may be that the anxiety seen in women subjects in the Abrams and Wilson (1979) study may only occur if the subject is actually in the situation and would not occur if the subject is reading about another women in the situation. This may be particularly true because, although Abrams and Wilson (1979) found that both physiological and observational data supported the finding that the women were anxious in the situation, in their study the women subjects' self-reported to have less anxiety when they were

drinking alcohol in the laboratory situation. It follows that women reading about other women in a situation involving alcohol may not see the target women as anxious. However, some doubt is cast on this interpretation by the findings of differences in perceived anxiety in male subjects in the present study.

Another possible explanation is that the opposite sex companion alone will not facilitate the perceived change in anxiety in female targets. The George et al. (1988) study included more sexual overtones in vignettes depicting a date between a female target (e.g. the target was described as "since she wanted to make a good impression, she decided to wear her silk blouse and new black jeans") and male companion whereas there were no sexually suggestive cues in the stimulus vignettes of the current study. The need to include same sex pairings in the current study required a more neutral setting. It could be that while an opposite sex companion in and of itself will not produce the changes of higher perceived sexuality, impairment, lower social appeal, and lower social skillfulness, the added impact of a sexually charged situation may produce the effect because increased target sexuality

could increase the perceived vulnerability of the target.

It is also possible that vulnerability to sexual exploitation is not the most valid explanation of the Wilson and Abrams (1977; 1979) findings nor of the George et al. (1988) findings. A more parsimonious explanation is suggested by the present results. The motivation to impress another person was present in both the George et al. (1988) study and Wilson and Abrams (1977; 1979) studies. In the George et al. (1988) study the female target was described as "anxious to make everything go smoothly" and as "wanting to make a good impression" on her companion. In the Abrams and Wilson (1979) study the subject was told to make "as favorable an impression as possible" on her male companion. These motivational factors in combination with the finding that women do not expect as significant positive effects of alcohol as do men suggests that the motivation to impress someone under the effects of alcohol is what is stressful to women. Consequently, additional motivation to impress the companion in the vignette used in Study 1 may produce effects more similar to those found in the George et al. (1988) study.

It is also possible that, in the first study, individual differences may have masked what would have been effects for perceived vulnerability on social appeal and anxiety in a social situation. Leigh (1989), for one, suggests that individual differences may moderate expectancies. Women who are uncomfortable in situations involving activities not typically associated with or seem to threaten the traditional feminine gender role, such as drinking alcohol, might be more uncomfortable in a situation in which they are drinking alcohol. If this is true, these women may see the drinking target as less socially appealing and more anxious. Further, being sexually disinhibited is also incongruent with the traditional feminine gender role. The addition of a more sexually charged situation may further raise the perception of anxiety in this situation for women who are uncomfortable in performing behaviors outside the traditional feminine gender role.

The goals of the second study are to tease apart possible relationships that individual differences in gender role, sexual description of target, and additional motivation to impress the companion could have with feelings of anxiety and other alcohol expectancies in a situation in which both alcohol and being with an opposite sex companion are involved. The

described sexuality of the target will be manipulated in order to reconcile the findings from the previous study and those of George et al. (1988) and to investigate the relationship between the described sexuality of the target and the perceived social appeal and anxiety of the target. It is expected that subjects will perceive female targets as less socially appealing and more anxious in the situation in which the target is described more sexually and in which she is drinking alcohol. That finding would support the vulnerability hypothesis with increased sexuality in the situation added to the mere presence of a opposite sex companion as cues for vulnerability.

In addition, it is expected that the degree of comfortableness with performing behaviors outside the traditional feminine gender role will interact with sexuality in the situation such that women reporting being less comfortable with behaviors outside the traditional feminine gender role will perceive the target described more sexually as more anxious, more impaired, less socially skillful, and less appealing than will women more comfortable with those behaviors. Therefore, it is hypothesized that subjects uncomfortable with nontraditional behaviors for women will perceive more impairment, a decrease in social

skill and social appeal, and an increase in anxiety for targets in situations involving alcohol and particularly in situations in which the target sexuality is enhanced and alcohol is consumed than will subjects more comfortable with nontraditional behaviors for women.

The target's level of motivation to impress the companion will be manipulated to investigate the relationship of women's lower expectations of the anxiety reducing and social skill increasing effects of alcohol in combination with increased motivation to impress the companion. It is expected that subjects will perceive the target as more anxious and less socially skillful in the situation in which the target is very motivated to impress the companion and is drinking alcohol. That finding would support a motivational explanation to the Abrams and Wilson (1979) study and for the George et al. (1988) study.

The design for the second study is a 2 x 2 x 2 x 2 with the factors: degree of comfort associated with violating the feminine gender role, degree of target sexuality, degree of motivation to impress, and beverage consumed. All the subjects and targets will be female because the aim of the study is to further test hypotheses specific to women's beliefs about

alcohol rather than to distinguish differences between men and women.

## Study 2

### Method

#### Subjects and Setting

Subjects were 164 female students at Virginia Tech obtained from the undergraduate psychology pool. Subjects were recruited by means of a sign-up sheet placed in the fifth floor lobby of Derring Hall and from classes. The folder including the sign-up sheet was labeled: "Perceptions and Feelings When Interacting with Strangers" in order to avoid sensitizing subjects to the beverage condition in the vignette that they receive. All students who signed-up and attended an administration session completed the questionnaires. The questionnaires were administered by several undergraduate and graduate student experimenters who were trained in and followed the same protocol for administering questionnaires on various dates in one-hour sessions in classrooms on campus. Each subject participated in one session of one hour or less in which approximately 30 subjects were tested and received one hour of credit in her psychology class.

### Design

A between-subjects 2 x 2 x 2 x 2 factorial design was employed. The four factors were motivation of target, target sexuality, level of adherence to traditional gender role, and the type of beverage consumed (mixed drinks vs coke). Subjects were assigned randomly to groups.

### Procedure

Within each administration session, all 16 cells of the design were represented. Subjects were asked to read and sign a consent form explaining the content of questions to be asked and the nature of the study. Upon turning in the consent form to the experimenter, subjects were given a questionnaire requesting them to read the vignette depicting a woman going on a date with an unfamiliar man and approximately one page in length (See Appendix E and F) and complete questions addressing their perceptions of the target individual. After turning in this questionnaire, subjects were asked to complete questions addressing manipulation check issues and to answer demographic questions.. Subjects were also asked to complete an additional questionnaire containing the Feminine Gender Role Stress Scale (Gillespie & Eisler, 1990). The order of the vignette questionnaire and the personality measure

was counter balanced. Subjects were asked to refrain from discussing the content of the material they read and the questions they answered with people other than the experimenter to avoid contaminating the subject pool.

#### Independent Variables

The four factors examined were motivation to impress the companion, described target sexuality, beverage, and level of discomfort with behaviors outside the traditional feminine gender role. Motivation to impress was manipulated by adding a phrase stating that "Diane was anxious to make everything go smoothly, and she wanted to make a good impression on Cliff" to the vignette used in study one. Described target sexuality was increased by adding the phrase "On Friday, Diane decided to wear her silk blouse and new black jeans" to the vignette used in study one.

#### Dependent Variables

Dependent measures included the measures of alcohol expectancies used in the preceding study. These measures are perceived anxiety, impairment, sexual disinhibition, social skillfulness, social appeal, and extent of self-disclosure of the target.

The Feminine Gender Role Stress Rating Scale (FGRS, Gillespie & Eisler, 1990) was used to obtain a measure of reported degree of comfort in performing behaviors outside the traditional feminine gender role (see Appendix D). The FGRS is a measure of a woman's "cognitive tendency to appraise threats and challenges to femininity as stressful" (Gillespie & Eisler, 1990). As such, it measures the degree to which one perceives situations as stressful, not the degree to which one sees oneself as feminine or the degree to which one uses stereotypically feminine coping behaviors. Subjects answer the 39 items on a six-point Likert-type scale (5, being "extremely stressful" and 0, being "not at all stressful"). In the current study, a total score was computed by averaging response to all 39 items ( $\alpha = .91$ ). The mean score on the total FGRS was 3.50 ( $SD = .54$ ). The scores on the FGRS formed a normal distribution and were similar to scores obtained by Gillespie & Eisler (1990). In order to test the hypothesis that the FGRS would moderate alcohol expectancies, the subjects were divided into two groups based on their scores on the FGRS by performing a median split. The resultant groups had a mean of 3.06 ( $SD = .35$ ) for the group lower in feminine gender role stress and a mean of 3.95 ( $SD = .25$ ) for the group

higher in feminine gender role stress. The mean scores of the two groups were significantly different,  $F(1, 156) = 329.47, p < .001$ .

### Results

The data were analyzed using univariate four-way, beverage, motivation, target sexuality, and adherence to traditional gender role analysis of variance on scales representing the dependent variables of anxiety, sexual disinhibition, impairment, social appeal, social skill, and extent of self-disclosure and on variables used in the manipulation check. The Duncan multiple range test was used to investigate further the pattern of findings following a significant interaction of two or more factors. Additionally, main effects and interactions will be discussed only when not subsumed by higher order interactions.

#### Manipulation Checks and Vignette Evaluation

Responses to the manipulation check questionnaire reveal that 7 subjects across the eight vignette conditions failed to either correctly identify the beverage consumed by the target or reported that the target did not drink anything. These 7 subjects were dropped from subsequent data analyses, leaving 157 subjects.

As in Study 1, perceived level of target intoxication and number of drinks consumed were measured. An analysis of subjects' estimations of the number of drinks consumed by the target indicated that 36.9% of the subjects estimated that the target consumed 1 to 2 drinks, 58.6% estimated that the target had consumed 3 to 4 drinks, and 3.8% estimated target consumption at 5 to 6 drinks. Again, the majority of subjects, 95.5%, estimated that the target consumed between 1 and 4 drinks.

The mean perceived intoxication rating of targets drinking coke was .00 ( $SD = .00$ ) while the mean intoxication rating of targets drinking mixed drinks was 1.51 ( $SD = 1.17$ ). This finding indicates that subjects judged target who drank alcohol to be "a little" to "somewhat" intoxicated and that the manipulation of beverage condition was adequate in producing differences in intoxication ratings.

Vignette evaluation. Subjects evaluated how realistic and common the events described in the vignette were. There was an interaction between beverage condition and motivation,  $F(1, 141) = 4.23$ ,  $p < .04$ , to impress such that when the target was more motivated to impress her companion and was not drinking alcohol, the situation was rated as more common than

when she was not motivated to impress her date and was not drinking alcohol. The opposite effect occurred with drinking targets. That is, the situation in which targets were motivated to impress their companions and were drinking were rated as less common than when the drinking targets were not motivated to impress their companions. However, the differences between individual means for the two-way interaction were not significant. Mean ratings of how common the situation was ranged from 4.34 to 4.66 indicating that all situations were seen as quite common.

A four-way analysis of variance on situation realism revealed a main effect for adherence to traditional gender role and a two-way interaction of beverage by motivation to impress. In the main effect of adherence to traditional gender role,  $F(1, 141) = 5.15, p < .025$ ), those subjects reporting high adherence to traditional gender role reported that the situation presented was less realistic with a mean rating of 4.38 ( $SD = .74$ ) than did the low adherence subjects with a mean of 4.64 ( $SD = .70$ ). In the two-way interaction of beverage by motivation to impress,  $F(1, 141) = 4.53, p < .035$ , subjects rated the situation in which the target had lower motivation to impress and was not drinking alcohol as significantly

less realistic than the other conditions,  $p < .05$ . Again, the rating of situational realism ranged from 4.15 to 4.72 indicating that all the situations were seen as quite realistic.

#### Dimensions Typically Associated with Alcohol Effects

All scales range from 1 to 7, and a higher score on each scale indicates an increase in the perceived scale construct. For instance a high score on the social appeal scale would indicate higher perceived social appeal, and a higher score on the anxiety scale indicates higher perceived anxiety.

Anxiety. There was a main effect for motivation of target on perceived anxiety such that subject rated targets who were more motivated to impress their companion as more anxious than targets who were less motivated,  $F(1, 414) = 5.56$ ,  $p < .02$ . The mean anxiety rating of motivated targets was 4.29 ( $SD = .73$ ), and the mean rating of less motivated targets was 4.03 ( $SD = .83$ ).

Sexual disinhibition. There was a three-way interaction of beverage by motivation to impress by discomfort in performing behaviors that do not conform to traditional feminine gender role,  $F(1, 141) = 4.53$ ,  $p < .04$ , as well as a main effect of target sexuality,  $F(1, 141) = 20.40$ ,  $p < .001$ , on perceived target sexual

disinhibition. There were no significant mean differences for the interaction, and the pattern of effects was not readily interpretable.

The main effect of target sexuality indicated that targets higher in described sexuality were perceived as more sexually disinhibited,  $F(1,141) = 20.40$ ,  $p < .001$ , with a mean of 4.48 ( $SD = .72$ ) than targets described less sexually with a mean of 3.98 ( $SD = .74$ ).

Impairment. There were no beverage effects for perceived target impairment. However, there was a two-way interaction of target sexuality and motivation to impress,  $F(1, 141) = 4.41$ ,  $p < .04$ . There were no significant mean differences, and the pattern of effects were not readily interpretable

Social appeal. There were no significant effects on social appeal.

Social skill. There were no beverage effects on social skill. There was a two-way interaction of target sexuality and motivation to impress,  $F(1, 141) = 5.03$ ,  $p < .03$ . There was a tendency for targets high in motivation and described more sexually ( $M = 4.33$ ,  $SD = .78$ ) to be perceived as less socially skilled than those described as low in motivation and described more sexually ( $M = 4.62$ ,  $SD = .91$ ), those described as low in motivation and less sexually ( $M = 4.57$ ,  $SD = .80$ ),

and those described as highly motivated and less sexual ( $M = 4.51$ ,  $SD = .90$ ). In general, targets who were both motivated to impress and were described as dressing more seductively were perceived as less socially skillful than other targets.

Extent of self disclosure. There was a two-way interaction of beverage by motivation for perceived self disclosure of the target,  $F(1, 141) = 6.96$ ,  $p < .01$ , such that targets who did not drink alcohol and were not motivated to impress their companion were seen as significantly more self disclosing than target who either drank alcohol and were not motivated or did not drink alcohol but were motivated to impress ( $p < .05$ ; See Table 5).

### Discussion

The goals of the second study were to investigate the contributing factors of motivation to impress, described target sexuality, and adherence to traditional gender role to expectancies for alcohol effects in a heterosexual dyadic situation. The results indicate that, with the possible exception of motivation to impress, these factors did not interact with beverage conditions. In other words, described target sexuality, motivation to impress, and discomfort

Table 5

Perceptions of Targets' Extent of Self Disclosure by Beverage and Motivation to Impress Companion.

Condition	Beverage	
	No Alcohol	Alcohol
High motivation		
<u>M</u>	3.74	3.97
<u>SD</u>	1.05	.79
Low motivation		
<u>M</u>	4.19	3.64
<u>SD</u>	.69	1.05

Note. M = mean; SD = standard deviation.

with behaviors outside the traditional feminine gender role did not moderate alcohol expectancies.

First, subjects did not perceive the target as less appealing or more anxious when she was drinking alcohol and described sexually than when she was drinking coke and described sexually. The lack of an interaction effect of described sexuality and beverage condition does not support the vulnerability hypothesis as generated from the first study, in which the added component of described target sexuality was added to being with an opposite sex companion in order to produce more perceived vulnerability.

Second, there was no significant interaction of beverage condition and motivation to impress on perceived target anxiety or social skill. The second study does not support the hypothesis that motivation to impress the companion in combination with drinking alcohol produces perceived anxiety and lowered social skill in female targets.

Third, discomfort with behavior outside that of the traditional feminine gender role did not interact with beverage condition for any dependent variable. The results would indicate that this individual difference variable did not moderate alcohol expectancies. The lack of effect of the individual

difference variable shows that, at least in this instance, individual difference measures may not have the moderating influence on alcohol expectancies that has been proposed (Leigh, 1989).

The results of the second study do indicate that both the described target sexuality and target motivation to impress her companion were effective manipulations because both had main effects on dependent variables closely related to them. Target sexuality had a main effect on perceived sexual disinhibition, and motivation to impress had a main effect on perceived anxiety. Therefore, it can be concluded that the manipulation of motivation to impress and of target sexuality made an impact on subjects' perceptions of the situation.

The lack of findings regarding alcohol effects on negative dimensions in Study 2 are unexpected. Although the findings of the second study are consistent with the current literature on women's alcohol expectancies for positive dimensions (Leigh, 1987; Rohsenow, 1983), the findings are inconsistent with the findings in the current literature that women expect more in terms of negative alcohol effects. Given that many of the effects examined in Study 2 were negative, the lack of results for negative alcohol

expectancies in a sample composed of women is particularly surprising.

One possible explanation of the lack of interaction between the motivation and beverage variables may be that the level of intoxication was not portrayed to be high enough to affect the dependent variables. Higher levels of intoxication have been linked to expectancies of more impairment (George & McAfee, 1987; Southwick, Steele, Marlatt, & Lindell, 1981). It follows that the more impaired one thinks one is, the lower one will evaluate her or his socially skill and ability to impress her or his companion. Consequently, if one is motivated to impress the companion and evaluates her or his ability to do so as low, the person may feel anxious in the situation. However, because the number of drinks consumed in the current study was very similar to that of the George et al. (1988) study, the question of why these results did not appear similar to those found George et al. (1988) still remains.

Another possible reason that there was little significant interaction between beverage consumed and the other independent variables may have been the vignette methodology. The description may not have been salient enough to produce expectancies for alcohol

and for needing to impress another person although a similar design was used by George et al. (1988) with significant results quite dissimilar to those found here. Most importantly, there were significant interactions of beverage with contextual variables in the first study. These effects may, however, been produced by the male subjects included in Study 1.

Furthermore, the subject sample used in the current study may have affected the findings so that these findings do not parallel those found by George et al. (1988). It is possible that the college women tested in the current study had more egalitarian attitudes about alcohol and about behaviors appropriate for women in terms of drinking alcohol or that norms concerning women and alcohol were less negative in the present sample. Consequently, the women in the current study would be less likely to perceive women targets drinking alcohol as less socially appealing and as exhibiting less than favorable behaviors. However, such a significant change in societal norms regarding women drinking alcohol seems unlikely given that the George et al. (1988) study was published fairly recently.

The failure to find significant effects for the measures of discomfort with behaviors outside the

traditional feminine gender role may be accounted for in several ways. Negative attitudes toward drinking alcohol for women may not be as pervasive a phenomenon as has been hypothesized by previous authors (Blume, 1986; Morgan, 1987; Rohsenow, 1983). Even if the negative attitudes do exist, it is possible that the FGRS may not measure the relevant individual difference if negative expectancies about the effects of alcohol on women is not a salient part of the traditional feminine gender role.

Caudill et al. (1987) found that the observed self disclosure of female subjects decreased when alcohol was consumed. In the current study, when motivation to impress was high, there was no significant difference in perceived extent of self disclosure. However, when motivation to impress was lower, there was an effect similar to the one Caudill et al. (1987) found. The interpretation of this effect made by Caudill et al. (1987) was that the lowering of self disclosure by those subjects who expected that they drank alcohol reflected their increased anxiety in the heterosexual situation due to risk involved in vulnerability and gender role bias. Because there was no evidence of an effect of beverage on anxiety in the present study, the Caudill et al. (1987) explanation of these findings

does not appear to apply to the current study in that the perceived anxiety of targets did not change as a function of beverage condition. However, a study by Lang, Winiarski, and Curtin (in press) manipulated sex of target and level of drinking in vignettes in which the target talked about him or herself. Lang et al. (in press) found that sex of target did not significantly affect judgements about the target. However, these researchers did find that there was a general tendency for subjects to see targets who drank as having more fun than targets who did not drink. Although Lang et al. (in press) were assessing perceptions of target in terms of long standing traits and not situational perception, they did interpret the finding concerning target drinking having more fun as a situational variable. It is possible that subjects perceived targets drinking alcohol in the lower motivation to impress condition as expressing less information about themselves because they were less concerned with making a good impression on their companion and more interested in having a good time. This interpretation calls for more research into other expectancies not yet adequately assessed in the alcohol outcome expectancy literature--such as the use of alcohol when one wants to have fun.

### General Conclusions

Neither Study 1 nor Study 2 support the vulnerability or gender role hypotheses attempting to explain the George et al. (1988) and Abrams and Wilson (1979) studies. In study one, the vulnerability hypothesis was not supported because sex of companion had no significant effect on alcohol expectancies. Similarly, the gender role violation hypothesis was not supported because sex of target had little significant effect on alcohol expectancies. In study 2, the vulnerability hypothesis was further tested by adding the components of motivation to impress an opposite sex companion and increased described target sexuality. Again, motivation to impress and target sexuality had little effect on alcohol expectancies. Additionally, the gender role violation hypothesis was further tested in study 2 by investigating the effect of individual differences in discomfort in performing behaviors that are outside of or threaten the traditional feminine gender role on alcohol expectancies. Again, the gender role violation hypothesis was not supported because discomfort with behaviors outside the traditional feminine gender role had no significant effect on alcohol expectancies. Therefore, neither the

vulnerability hypothesis nor the gender role violation hypothesis are supported by the current studies.

The results of both Study 1 and 2 were consistent with current literature on alcohol expectancies in women. In Study 1, women's alcohol expectancies tended to be less positive than those of men. In Study 2 including only women subjects, the effects of the beverage manipulation were minimal. The current study supports the contention that alcohol expectancies concerning positive effects in women are less extreme in nature than they are in men.

The generalizability of the findings of the current studies is limited in that only college students were tested. It may be that the women in the college population have less negative expectations for alcohol because attitudes toward alcohol consumption are generally positive in a college population.

The methodology of the current study also limits the external validity of the results. Nonetheless, the vignette paradigm lends the experimenter the ability to manipulate and evaluate several factors at once and their potential interaction in relation to perceptions of alcohol effects. Use of the vignette methodology avoids the pitfall of direct assessment of alcohol expectancies, demand characteristics, while maintaining

the advantage of being able to test many variables at once and in having the ability to study dependent variables not amenable to study in the laboratory. Reading about a situation and actually being in the situation are two different scenarios entirely in that the saliency of cues in the environment might be different in vignettes versus naturalistic settings. Predictions of someone else's behavior in a situation and one's own actual behavior may also be quite different.

There have been no published replications of the Abrams and Wilson (1979) study in the literature, and the vulnerability hypothesis proposed to explain their findings was not supported in the current studies. It seems that a more stringent test of the Abrams and Wilson (1979) study may be in order. A balanced placebo design including the motivational manipulation used by Abrams and Wilson (1979) could be done in order to replicated their findings. In addition, a manipulation of subject sex and sex of the companion confederate within this design would test the vulnerability hypothesis more stringently than the vignette methodology presented here.

Regarding the George et al. (1988) findings, these results were not replicated in the current studies nor

have any replications of their findings been published. This is particularly important given that the vignettes used in Study 2, with the increase in motivation and described sexuality of the target, were very similar to the vignettes used by George et al. (1988). The possibility remains that the George et al. (1988) findings were not robust enough to be replicated in the present study despite the manipulation of discomfort with behaviors outside the traditional feminine gender role, motivation to impress the companion, and described sexuality of the target. This may be due to differences in subject sample with respect to the year the studies were done or with respect to the geographic area in which the studies were run.

The existence of and identification of alcohol expectancies is well documented. The question to answer at this point in the literature is why the expectancies occur as they do and how that relates to behavior. In the particular area of women's outcome expectancies for alcohol consumption, the next step of research would seem to be the study of the reasons why women have generally lower positive expectancies for alcohol compared to men and, furthermore, whether or not differences in expectancies among women differentiate amount of alcohol use.

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Appendix A

Expectancy Scale Items

ANXIETY

How calm is Diane?

1-----2-----3-----4-----5-----6-----7  
not calm totally calm

To what extent does Diane feel in control of the situation described?

1-----2-----3-----4-----5-----6-----7  
overwhelmed fully in control

How comfortable is Diane?

1-----2-----3-----4-----5-----6-----7  
very uncomfortable very comfortable

How relaxed is Diane?

1-----2-----3-----4-----5-----6-----7  
not relaxed totally relaxed

How tense is Diane during the evening?

1-----2-----3-----4-----5-----6-----7  
not tense very tense

How confident do you think Diane is?

1-----2-----3-----4-----5-----6-----7  
not confident very confident

SEXUAL DISINHIBITION

To what degree do you think Diane is seductive?

1-----2-----3-----4-----5-----6-----7  
very unsexy very sexy

How romantic do you think Diane is?

1-----2-----3-----4-----5-----6-----7  
very unromantic very romantic

How sexually attractive do you think Diane is?

1-----2-----3-----4-----5-----6-----7  
very sexually unattractive very sexually attractive

How promiscuous do you think Diane is?

1-----2-----3-----4-----5-----6-----7  
not promiscuous very promiscuous

To what extent do you think Diane is flirtatious?

1-----2-----3-----4-----5-----6-----7  
not flirtatious flirtatious

How sexy do you think Diane is?

1-----2-----3-----4-----5-----6-----7  
not sexy very sexy

#### SOCIAL SKILLFULNESS

To what extent is Diane good at making conversation?

1-----2-----3-----4-----5-----6-----7  
very bad very good

How interesting do you think Diane is during the evening?

1-----2-----3-----4-----5-----6-----7  
not interesting very interesting

How easy do you think it is for Diane to talk to Cindy?

1-----2-----3-----4-----5-----6-----7  
talks with difficulty talks easily

How awkward do you think the conversation is?

1-----2-----3-----4-----5-----6-----7  
not awkward very awkward

How boring do you think Diane is during the evening?

1-----2-----3-----4-----5-----6-----7  
not boring very boring

IMPAIRMENT

How clear is Diane's speech during the evening?

1-----2-----3-----4-----5-----6-----7  
hard to understand clear

What is Diane's level of concentration during the evening?

1-----2-----3-----4-----5-----6-----7  
poor concentration good concentration

How quickly do you think Diane is able to respond to questions?

1-----2-----3-----4-----5-----6-----7  
slow responses quick responses

How clumsy does Diane appear to be?

1-----2-----3-----4-----5-----6-----7  
not clumsy very clumsy

How coordinated does Diane appear to be?

1-----2-----3-----4-----5-----6-----7  
very uncoordinated very coordinated

SOCIAL APPEAL

How involved in the conversation do you think Diane is?

1-----2-----3-----4-----5-----6-----7  
uninvolved involved

How intelligent do you think Diane appears to be?

1-----2-----3-----4-----5-----6-----7  
not intelligent very intelligent

How pleasant do you think Diane is during the evening?

1-----2-----3-----4-----5-----6-----7  
unpleasant pleasant

How friendly does Diane appear to be?

1-----2-----3-----4-----5-----6-----7  
unfriendly friendly

To what extent do you think Diane is narrow-minded or open-minded?

1-----2-----3-----4-----5-----6-----7  
very narrow-minded very open-minded

How sociable is Diane during the evening?

1-----2-----3-----4-----5-----6-----7  
unsociable sociable

How polite do you think Diane is?

1-----2-----3-----4-----5-----6-----7  
not polite very polite

How emotionally stable do you think Diane appears to be?

1-----2-----3-----4-----5-----6-----7  
emotionally unstable emotionally stable

How likeable do you believe Diane is?

1-----2-----3-----4-----5-----6-----7  
very dislikeable very likeable

How favorable is the impression Diane makes during the evening?

1-----2-----3-----4-----5-----6-----7  
very unfavorable very favorable

#### EXTENT OF SELF-DISCLOSURE

How comfortable does Diane feel talking about herself?

1-----2-----3-----4-----5-----6-----7  
very uncomfortable very comfortable

To what extent does Diane talk about herself?

1-----2-----3-----4-----5-----6-----7  
not at all quite a bit

To what extent does Diane talk about her own feelings?

1-----2-----3-----4-----5-----6-----7  
not at all very much

How much does Diane talk about herself?

1-----2-----3-----4-----5-----6-----7  
none at all quite a bit

How much revealing personal information does Diane tell her companion?

1-----2-----3-----4-----5-----6-----7  
none very much

## Appendix B

### Study 1 Sample Vignette

#### Female target with same sex companion in the alcohol condition

Diane and Cindy, both in their mid-twenties, had met recently at a party given by a mutual friend. They spent a couple hours of the party talking with each other, and when the evening was over, they made plans to get together for a few drinks on Friday. Diane thought Cindy was pretty cool and was looking forward to seeing her again. It was fairly crowded when they arrived at the tavern, but they managed to find a booth towards the back. Initially, they both seemed a little uneasy and made a lot of small talk about the weather and the day's happenings. When the waitress came, Diane and Cindy both ordered mixed drinks. Over the course of a couple hours, Diane and Cindy had a few mixed drinks and talked about movies, school, and friends.

## Appendix C

### Study 1 Sample Vignette

Male target with opposite sex companion in the no alcohol  
condition

Cliff and Diane, both in their mid-twenties, had met recently at a party given by a mutual friend. They spent a couple hours of the party talking with each other, and when the evening was over, they made plans to get together for a few drinks on Friday. Cliff thought Diane was pretty cool and was looking forward to seeing her again. It was fairly crowded when they arrived at the tavern, but they managed to find a booth towards the back. Initially, they both seemed a little uneasy and made a lot of small talk about the weather and the day's happenings. When the waitress came, Cliff and Diane both ordered cokes. Over the course of a couple hours, Cliff and Diane had a few cokes and talked about movies, school, and friends.



Not At All Stressful Extremely Stressful  
 0-----1-----2-----3-----4-----5

- 14. Having to move to a new city or town alone. \_\_\_\_\_
- 15. Bargaining with a sales person when buying a car. \_\_\_\_\_
- 16. Negotiating the price of car repairs. \_\_\_\_\_
- 17. Being heavier than your mate. \_\_\_\_\_
- 18. Being unusually tall. \_\_\_\_\_
- 19. Supervising older and more experienced employees at work. \_\_\_\_\_
- 20. Feeling that you are being followed by someone. \_\_\_\_\_
- 21. Being considered promiscuous. \_\_\_\_\_
- 22. Hearing a strange noise while you are home alone. \_\_\_\_\_
- 23. Having to deal with unwanted sexual advances. \_\_\_\_\_
- 24. Losing custody of your children after divorce. \_\_\_\_\_
- 25. Your mate is unemployed and cannot find a job. \_\_\_\_\_
- 26. Feeling pressured to engage in sexual activity. \_\_\_\_\_
- 27. Talking with someone who is angry with you. \_\_\_\_\_
- 28. Turning middle-aged and being single. \_\_\_\_\_
- 29. Having your car breakdown on the road. \_\_\_\_\_
- 30. Having multiple sex partners. \_\_\_\_\_
- 31. Having to "sell" yourself at a job interview. \_\_\_\_\_
- 32. Hearing that a dangerous criminal has escaped nearby. \_\_\_\_\_

33. Receiving an obscene phone call. \_\_\_\_\_
34. Having someone else raise your children. \_\_\_\_\_
35. Trying to get your spouse to take responsibility for childcare. \_\_\_\_\_
36. Returning to work soon after your child is born. \_\_\_\_\_
37. A very close friend stops speaking to you. \_\_\_\_\_
38. Your mate will not discuss your relationship problems. \_\_\_\_\_
39. Finding that you have gained 10 pounds. \_\_\_\_\_

## Appendix E

### Study 2 Sample Vignette

Target described more sexually, more motivated to impress in  
the alcohol condition

Diane and Cliff, both in their mid-twenties, had met recently at a party given by a mutual friend. They spent a couple hours of the party talking with each other, and when the evening was over, they made plans to get together for a few drinks on Friday. She thought Cliff was pretty cool and was looking forward to seeing him again. When Friday finally came, Diane was anxious to make everything go smoothly. She wanted to make a good impression on Cliff so she decided to wear her silk blouse and new black jeans. It was fairly crowded when they arrived at the tavern, but they managed to find a cozy booth towards the back. Initially, they both seemed a little uneasy and made a lot of small talk about the weather and the day's happenings. When the waitress came, Diane and Cliff both ordered mixed drinks. Over the course of a couple hours, Diane and Cliff had a few mixed drinks and talked about movies, school, and friends.

## Appendix F

### Study 2 Sample Vignette

Target is motivated to impress and is in no alcohol condition

Diane and Cliff, both in their mid-twenties, had met recently at a party given by a mutual friend. They spent a couple hours of the party talking with each other, and when the evening was over, they made plans to get together for a few drinks on Friday. Diane thought Cliff was pretty cool and was looking forward to seeing him again. When Friday finally came, Diane was anxious to make everything go smoothly, and she wanted to make a good impression on Cliff. It was fairly crowded when they arrived at the tavern, but they managed to find a booth towards the back. Initially, they both seemed a little uneasy and made a lot of small talk about the weather and the day's happenings. When the waitress came, Diane and Cliff both ordered cokes. Over the course of a couple hours, Diane and Cliff had a few cokes and talked about movies, school, and friends.

VITA

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Birth Date: March 17, 1967  
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EDUCATION

Ursinus College, Collegeville, PA 1985-1989  
Major Area: Psychology  
Degree: Bachelor of Science May 1989  
Honors: Graduated Cum Laude  
Graduated with Departmental Honors  
Women's Honor Society, President 1989

Title of Honor's Project: Potential reactions  
to an HIV positive diagnosis in prison inmates  
versus college students by self-report.

Virginia Polytechnic Institute  
and State University 1989-present  
Blacksburg, Virginia

Graduate Student  
Major Area: Clinical Psychology

RESEARCH POSITIONS

Drug and Alcohol Assessment Study.  
Commonwealth of Virginia, \$15,000,  
Co-Principial Investigator 1990-present

Research Assistant, Department of Psychology  
Virginia Polytechnic Institute  
and State University 1990-present

#### TEACHING POSITIONS

Department of Psychology, Virginia Tech  
Blacksburg, Virginia (Teaching Assistant)  
Introductory Psychology course 1989

Department of Psychology, Ursinus College  
Collegeville, Pennsylvania (Teaching Assistant)  
Introductory Psychology Laboratory courses 1988-1989

#### CLINICAL POSITIONS

St. Albans Psychiatric Hospital  
Radford, Virginia  
Externship, 480 hours 1991-present

Inpatient assessment and individual and  
group treatment of adults  
Supervisor: G. Camp, Ph.D.

Psychological Services Center, Virginia Tech  
Blacksburg, Virginia  
Practicum, 330 hours 1990-1991

Outpatient assessment and treatment of children and adults  
Supervisors: T. Ollendick, Ph.D.; R. Jones, Ph.D.  
Outpatient group treatment of adults  
Supervisors: R. Eisler, Ph.D.; C. Pickett, Ph.D.

Psychological Services Center, Virginia Tech  
Blacksburg, Virginia  
Practicum, 180 hours 1989-1990

Outpatient assessment and treatment of children and adults  
Supervisors: L. Clark, Ph.D.; R. Greene, Ph.D.

Crisis Intervention, Helen Stevens Community Mental Health  
Center  
Carlisle, Pennsylvania  
Crisis Clinician, Full-time position (Employment),  
three months 1988  
Supervisor: J. Rosie, M. A.

Outpatient assessment, inpatient commitment, consult  
to medical staff.

Harrisburg State Hospital, Harrisburg Pennsylvania  
Half-time position (Undergraduate internship),  
three months 1988  
Supervisors: E. Krohn, M. A.; J. Cohen, Ph.D.

Norristown State Hospital, Norristown, Pennsylvania  
Volunteer, eight months 1987-1988  
Supervisor: C. Chambliss, Ph.D.

Group therapy with schizophrenic inpatients

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

American Psychological Association, Division 12  
(Student Member)

Association for the Advancement of Behavior Therapy  
(Student Member)

PUBLICATIONS

Chambliss, C. A., Wertz, J. S., & Hartl, A. J. (1990) HIV  
positivity in inmates. Hospital and Community  
Psychiatry, 41(10), 1143.

GOALS

Finish work on Master's degree and complete requirements for  
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Signature: \_\_\_\_\_

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