EFFECTS OF ALCOHOL AND EXTREME GENDER ROLE ADHERENCE ON PERCEPTION OF SOCIAL CUES

by

ANNE DOMINIQUE BARTOLUCCI

(Under the Direction of Amos Zeichner)

ABSTRACT

Sexual coercion and alcohol abuse are prevalent problems on this nation's college campuses that often occur together. The purpose of this study was to clarify the link between the two by determining whether alcohol and the personality variable of extreme gender role adherence affect an individual's ability to correctly recall and interpret social cues. Two studies were conducted, one to validate the stimulus video and questionnaires designed specifically for the study, and one in which half the participants were given alcohol, watched the video, and answered questions about what they specifically recalled in the video, what they thought would happen next, and what they would do if they were in that situation. Results were analyzed using a 2x2x2 MANOVA. Several main and interaction effects were found for alcohol, hypermasculinity, hyperfemininity, and gender on accuracy, bias, and the perceived likelihood of future sexual activity for the couple portrayed in the video.

INDEX WORDS: Sexual Coercion, Alcohol, Perception, Recall, Hypermasculinity, Hyperfemininity

EFFECTS OF ALCOHOL AND EXTREME GENDER ROLE ADHERENCE ON PERCEPTION OF SOCIAL CUES

by

ANNE DOMINIQUE BARTOLUCCI

B.A., Huntingdon College, 1999

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

ATHENS, GEORGIA

2002

EFFECTS OF ALCOHOL AND EXTREME GENDER ROLE ADHERENCE ON PERCEPTION OF SOCIAL CUES

by

ANNE DOMINIQUE BARTOLUCCI

Approved:

Major Professor: Amos Zeichner

Committee: Nader Amir
Lily D. McNair

Electronic Version Approved:

Gordhan L. Patel
Dean of the Graduate School
The University of Georgia
August 2002

DEDICATION

I would like to thank my parents, my sister, and my friends for their loving support through this whole process. I would like to dedicate this document to the memory of Nicholas Ogle, who would have appreciated the irony in the results.

ACKNOWLEDGEMENTS

I would like to acknowledge my major professor, Amos Zeichner, for his patience and guidance, as well as my committee for their understanding and flexibility.

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

INTRODUCTION

Alcohol has been found to be present in half of acquaintance rapes and sexual coercion events on college campuses (Abbey, McAuslan, & Ross, 1998) and has been identified as a risk variable in a research-driven model of sexual coercion (Koss & Dinero, 1989). It has been theorized (Abbey, 1991) that alcohol consumption may increase the likelihood of such crimes by contributing to the misperception of sexually-encouraging and discouraging cues. This project was designed to accomplish two main objectives: to determine whether alcohol interferes with the processing of sexual cues and to determine whether the extreme gender role adherence interacts with alcohol consumption by interfering with the perceptual process. Although several studies have examined perception of interactions as a whole and sexual cues in particular, this project is unique in that participants were presented with a stimulus and then made both specific ratings of cues in the stimulus video as well as predictions based on global impressions relative to the likelihood of dating and sexual activity. No previous study has examined effects of alcohol consumption or personality variables such as hypermasculinity and sexual coerciveness on perception of specific social cues in heterosexual interactions.

Gender and Perception

Several studies (i.e., Abbey, 1982; Abbey & Melby, 1986; Harnish, Abbey, & DeBono, 1990; Johnson, Stockdale, & Saal, 1991; Shotland & Craig, 1988) have examined gender differences in perception of social cues and found that men tend to view interactions between men and women as more sexual across stimulus type (e.g. written

vignette, live performance, videotaped interactions, etc.). For example, Abbey (1982) found that when men and women were paired to either observe or participate in an unscripted interaction, in which two participants who had never met before discussed neutral topics while others observed through a one-way mirror, male actors and observers rated both male and female actors higher on seductiveness and promiscuity than female actors and observers did. Harnish, Abbey, and DeBono (1990) also found that in an unscripted interaction, men who participated in the interaction rated themselves and the female participant higher than female participants did on sexual variables such as flirtatiousness, seductiveness, promiscuity, and level of "sexiness." Similar results have been obtained using videotaped stimuli that presented a professor interacting with a student of the opposite sex at mild, moderate, or severe levels of harassment (Johnson, Stockdale, & Saal, 1991). Participants were asked to rate the level of "sexiness" of each actor. Male participants consistently rated the female actor higher on sexual characteristics regardless of whether she was in the superior or subordinate role.

It could be hypothesized that the difference in perception of the sexual levels of the female actors' behavior could be attributed to women being more accurate at perceiving the emotional states of others. Buck, Miller, and Caul (1974) found that women seem to be more effective than men at portraying emotion, but that men and women are equally accurate at perceiving emotion. Accordingly, it would seem that if the female actors in the above-mentioned studies were, indeed, behaving in a more sexual manner, female observers would have given the same ratings as would have male observers. Furthermore, female actors in unscripted interactions rated themselves as behaving less sexually. Consequently, it appears that, across studies, men tend to view

heterosexual interactions as being more sexual. It is also important to note that valid results have been obtained using different kinds of stimuli, one of which was a videotaped interaction similar to that which was used in the present project.

What specific behaviors do male participants interpret as sexual, seductive, or flirtatious? Few studies have been published on situational factors or cues construed as sexually encouraging. Muehlenhard (1988) presented participants with vignettes describing a couple on a date under different conditions relative to who initiated the date, who paid for what, and where the pair went. The researcher assessed to what degree each participant thought that the woman in the vignette desired sex, and how justified the man in the vignette was to force the woman to engage in sex. Participants were divided into traditional and nontraditional groups in terms of how much they agreed with different statements about the rights of women. This study was similar to others in that men's ratings were higher than the women's ratings in both traditional and nontraditional groups. Traditional men were most likely to report that rape would be justifiable across all conditions, but especially when the man paid for both tickets to a concert. All traditional persons' ratings of rape justifiability increased when the woman in the vignette initiated the date or hinted that she wanted a date and the man paid for the ticket. Both situational factors, particularly assertiveness by the woman in initiating the date and the man's role of provider in the date, and personality variables of the participants contributed to the justification of rape ratings.

Abbey and Melby (1986) tested the effects of the interpersonal distance, eye contact, and touch on the perception of friendship, romantic involvement, and sexual attraction by presenting slides of a man and a woman sitting in a cafeteria under these

interpersonal variables. Men rated the couple higher on friendship, romantic involvement, and sexual attraction than women did across distance, eye contact, and touch conditions. Shotland and Craig (1988) examined whether men and women could discriminate between friendly and behaviors which convey sexual interest. As with previous studies, male participants rated both actors higher on sexual interest, and female actors were perceived as more seductive and flirtatious than were men. These findings are particularly important to the present study because Shotland and Craig (1988) included a list of cues that could be considered friendly or indicative of sexual interest. Many of these were included in the interaction portrayed in the stimulus video for the present study.

Because men tend to view heterosexual interactions in a more sexualized manner, one would expect men to make errors in recalling cues from a stimulus video in which the nature of the interaction between male and female actors is vague. The interesting question is whether this error rate will increase under the conditions of intoxication, high hypermasculinity, and prior experience with sexual coercion.

Alcohol and Perception

Several studies have determined that alcohol has a significant effect on visual and spatial processes. Although several studies have found differences in various perceptual processes as the result of alcohol consumption, individual differences in response to alcohol have been pronounced. For example, Heier et al. (1999) found that performance on a visual tracking task of some participants improved under the alcohol condition, and that of others did not.

Many of the studies attempted to determine which part of the visual field is the most affected by alcohol consumption. Moskowitz and Sharma (1974) found that when participants were required to divide their attention between the activation of a stimulus in the center of the visual field and one in the periphery, intoxicated participants made more errors in detecting the peripheral stimulus. Hamilton and Copeman (1970) also found that attention directed toward stimuli in peripheral vision was negatively impacted by small doses of alcohol as well as by noise. It was also determined that alcohol slows the rate of information processing. The importance of the central field of vision was also demonstrated by Gustafson (1987), who found that the reaction time in response to both salient and nonsalient cues was not significantly different. Although this conclusion would appear to contradict the hypothesis that intoxicated participants will make more mistakes than sober ones, it is important to remember that in social situations, cues are simultaneously processed through many parts of the visual field (as well as through other sensory channels). Alcohol has been shown to selectively impair the process of rapidly shifting attention from one cue to another (Post, Lott, Maddock, & Beede, 1996) and to interfere with short-term visual memory (Wegner & Fahle, 1999). Sustained attention is also negatively impacted in intoxicated individuals (Rorhbaugh et al., 1988), a finding particularly pertinent for the present study because social interactions (e.g. conversations) typically involve sustained attention directed toward another person or a group of people. Finally, George, Raynor, and Nochajski (1992) found that when intoxicated participants received constant feedback and were told to focus attention on a tracking task, they made significantly fewer errors than intoxicated individuals who were not given feedback and/or instructions to focus. In social interactions, however, individuals do not receive

instruction how they should allocate their attention, and any feedback they receive may be nonverbal and may be interpreted in a different manner from which it was intended.

As Rohrbaugh et al. (1988) hypothesized, alcohol could affect the processing of visual and other input requiring attention allocation via changes in central information processing. Steele and Josephs (1990) labeled this effect "alcohol myopia" and described it as "a state of shortsightedness in which superficially understood, immediate aspects of experience have a disproportionate influence on behavior and emotion" (page 923). They also state that moderate doses of alcohol can significantly and consistently reduce psychological distress by "screening out" (page 929) the thoughts that cause the distress, particularly when the intoxication is paired with a distraction. This conclusion applies to the current study in that when an intoxicated individual is faced with sexually-encouraging and discouraging cues, alcohol may cause the individual to focus on encouraging cues and ignore discouraging cues. This could lead to subjective distress (e.g., thoughts of rejection, negative self-evaluation, etc). Interestingly, when Zeichner, Allen, Petrie, Rasmussen, and Giancola (1993) tested the process of attention allocation in social drinkers under varying conditions of threat, they found that under the condition of high threat, intoxicated participants allocated more attention to salient information, which was thought to cause of psychological arousal. While social situations are not usually perceived as threatening, cues which may cause social situations to be perceived as such may be blocked by alcohol consumption. In the case of social anxiety, O'Hare (1990) found that social anxiety predicted that alcohol consumption would reduce tension and augment social assertiveness, but not that it would produce social or physical pleasure. This finding is consistent with the model of alcohol myopia. Individuals who

are socially anxious and who consume alcohol may expect a more positive interaction and may be particularly attentive to positive or encouraging cues after imbibing. Carey (1995) found that alcohol increased the likelihood of self-focused answers on a stem-completion task and remarked that when an individual is intoxicated, "information would be processed in terms of its self-relevance" (page 251).

One can infer from the concept of alcohol myopia and the findings of the O'Hare (1990) and Carey (1995) studies, that, in a social situation, an intoxicated individual would process information that is directly related to him or her (e.g., cues indicating sexual interest from others), and alcohol would screen out the distress-causing information (discouraging cues), leaving the individual with only the encouraging cues. This conclusion would be consistent with the hypothesis that intoxicated participants will have an attentional bias toward "positive," prosexual cues.

Although alcohol has been shown to be present in a significant percentage of date rapes and incidents of sexual coercion (Abbey, McAuslan, & Ross, 1998), other factors may interact with alcohol consumption to produce even more errors in perception and a stronger bias toward "positive" cues. One such factor could be extreme gender role adherence, a characteristic imbedded in hypermasculinity and hyperfemininity traits.

Hypermasculinity and Perception

Hypermasculinity is defined as a complex of personality characteristics typical of an overly "macho" male (Mosher & Sirkin, 1984). These characteristics include "(a) calloused sex attitudes toward women, (b) a conception of violence as "manly," and (c) a view of danger as "exciting" (page 151). Mosher and Tomkins (1988) theorize that hypermasculine individuals behave according to "scripts" which are described as

principles used to "...interpret and understand, to predict and produce, to direct and manage, and to explain and evaluate the family of scenes governed by the script" (p. 76). A scene is an incident in one's life with an observable commencement and end that involves observation, thinking, and acting, and the object of the processes. In other words, hypermasculine men act according to the three principles mentioned above (i.e., attitudes toward sex, violence, and danger), particularly in situations that involve sex, violence, and danger. The goal of most scenes for the hypermasculine man is excitement, and they achieve excitement through physical action, particularly the domination of those who would challenge their authority and "masculinity" (Mosher & Sirkin, 1984).

With the "calloused-sex" attitude in mind, it is easy to see how sexually coercing or raping a woman would be invigorating to a hypermasculine man, especially because scores on the Calloused Sexual Beliefs scale of the Hypermasculinity Inventory were found to be significantly correlated with levels of aggression and assaultiveness evinced by men (Mosher & Sirkin, 1984). Indeed, Koss, Leonard, Beezly, and Oros (1985) found that men who display sexual aggression were characterized by several hypermasculine-like traits such as having rape-supportive attitudes and viewing the combination of sexuality and aggression as "typical." O'Donohue, McKay, and Schewe (1996) found that hypermasculinity was correlated with lowered expectation of negative consequences associated with rape. As fraternities and athletic teams seem to encourage situations where hypermasculine behavior is practiced, it appears that involvement in fraternities or athletics would be predictors of sexual aggression. However, Koss and Gaines (1993) found that although fraternity membership and athletic participation were positively correlated with sexual aggression, the correlation was not significant.

Although it has not been formally tested, hypermasculinity may have an effect on perception of sexually-encouraging and discouraging cues in a social situation. To date, one study examined the effect of hypermasculinity on perception of social interactions (Ray & Gold, 1996). The researchers found that hypermasculine men were more likely to feel verbally abused by their significant others. As hypermasculine individuals organize their perceptions according to scripts that involve domination of the other, they would likely scan for cues that would enable them to accomplish their goal of sexual conquest. Searching for cues would be inherent in the first two parts of the "4-F" philosophy of "find them" and "fool them" (Mosher & Tomkins, 1988, page 72; the last two parts are "f--k them, and forget them"). Lack of empathy is also part of the hypermasculine script (Mosher & Sirkin, 1984). Dean and Malamuth (1997) found that men who had a characteristic such as hostile masculinity that classified them as high risk for sexual aggression were more likely to aggress if they were described as self-centered instead of sensitive to the emotions of others. Lack of empathy is another characteristic which would preclude the observance of sexually-discouraging cues. The hypermasculine man would be less inclined to process cues that are outside the script, in this case, the woman's communication that his advances are undesirable to her.

Alcohol and hypermasculinity have been found to interact. Hypermasculine individuals are more likely to abuse different substances, particularly alcohol, and to engage in risky or aggressive behaviors after consuming alcohol (Mosher & Sirkin, 1984). Hypermasculinity has been found to interact with alcohol to affect the experience of empathy for a rape victim (Norris, George, Davis, Martell, & Leonesio, 1999). Hypermasculine participants who were intoxicated rated the woman in a written vignette

as being less upset after a rape than did sober participants. Also, higher self-reported hypermasculinity was associated with a higher likelihood that participants would behave like the rapist in a similar situation. Alcohol consumption appeared to magnify the already-existing degree of empathy. For a participant who was low on hypermasculinity and who scored higher on empathy, alcohol may have increased empathic expression. In contrast, for a participant who was high on hypermasculinity and lower on empathy, alcohol could have further decreased the expression of empathy. Although situational cues, such as choice of beverage for the woman, were presented in the written vignettes in previous studies, the present study used cues in a video format. It is felt that such a format better approximates real social situations in which cues are not explicitly stated.

Sexual Experience and Perception

Previous research has shown that sexually-coercive individuals tend to have deficits processing social information. In a review article, Ward, Hudson, and Johnston (1997) conclude that rapists and other sex offenders have "selective attention processes" which:

> ...allow the social perceiver to focus on expectancy-consistent information and, in doing so, gather supportive evidence for his/her behavior. The rapist who does not attend to negative cues from his victim may truly believe that the woman 'enjoyed it,' since he has no evidence to the contrary. Similarly, if friendly cues are interpreted as seductiveness the offender has support for his belief that 'she asked for it' (p. 492).

Ward, Hudson, and Johnston (1997) mention that the offender has many characteristics such as feelings of entitlement about sex and power and lack of empathy that fit the

hypermasculine constellation. These authors also state that research on whether the offender is making his judgements before, during, or after the attack is still required. The present study aimed to answer this question, in part, by targeting the cues of a social situation prior to any sexual contact. Johnston and Ward (1996) similarly conclude that the beliefs of the offender affect his perception of environmental cues. Pre-existing beliefs not only determine what information about an encounter will be remembered, but also to which information a perpetrator will attend. Therefore, when an offender believes that he is entitled to have sexual contact with a woman, he will not attend to sexually-discouraging cues she may display.

Sexually-coercive experience and hypermasculinity appear to contain many overlapping characteristics such as lack of empathy and hostility toward women. Previous studies have shown that hostility toward women and adversarial sexual beliefs typify men who commit sexual aggression (Malamuth, 1988; Koss & Dinero, 1988). One study found that hypermasculinity itself is a significant predictor of rape (O'Donohue, McKay, & Schewe, 1996). Malamuth (1988) found that lack of empathy and hostility toward women were less likely to be characteristics of men who do not evince sexual aggression but may imagine themselves aggressing.

Hyperfemininity

The construct of "hyperfemininity" is relatively new and has not yet been sufficiently researched in conjunction with alcohol and alcohol expectancy effects. Murnen and Byrne (1991) define it as an "exaggerated adherence to a stereotypic feminine gender role" (page 480) and, further, clarify it as holding the belief that a woman should use her sexuality as a tool in the development and maintenance of a

relationship with a man. They found that hyperfemininity was correlated with acceptance of adversarial sexual behavior, a milder reaction to coercion, and more victim-directed blame in coercive situations. Hyperfeminine women were also found to hold more traditional attitudes about family, marriage, career, and the desirability of having a spouse who has a lucrative career (Murnen & Byrne, 1991). One may expect that women who score high on the hyperfemininity scale would be looking for cues that confirm female sexuality results in sexual interest by the man, and would thus recognize more encouraging than discouraging cues in a stimulus video. The alcohol myopia phenomenon may promote even further bias.

Conclusion and Further Directions

Because date rape is a grave concern on college campuses, prevention programs are being incorporated into the experience of students all over the United States. The present study may have implications for such programs through the identification of male characteristics that women could consider as being "danger signs" in men and by illuminating biases that occur in social perception as the result of alcohol consumption. This study will contributes to the literature on the effects of alcohol on sexual coercion by identifying attentional processes that may occur in the initial stage of a social interaction, possibly setting the stage for sexual victimization.

The present study has heuristic value in that it tested the two factors of alcohol consumption and extreme gender role adherence, both of which may contribute to a sexual coercion situation. However, sexual victimization involves more than just two factors. Further studies could, then, investigate the role of alcohol expectancies on

perception as well as specific processes by which alcohol consumption, hypermasculinity, and previous sexual coercion influence social perception.

Hypotheses

1. Intoxicated individuals were expected to be less accurate in recalling which cues were present in a stimulus video and were expected to express predictions of later sexual activity in their ratings of the video than their sober counterparts would.

    a. Intoxicated individuals were expected to make more mistakes than sober participants.

    b. Intoxicated individuals were expected to state that more encouraging cues were present than discouraging ones even though the number of each in the video is equal.

    c. Intoxicated individuals were expected to be more likely to predict that the encounter would result in a sexual act even though it is deliberately presented as being vague.

2. Individuals with high scores (defined below) on the measures of extreme gender role adherence were expected to be less accurate in recalling which cues were present in a stimulus video and to be more likely to predict further sexual activity between the actors than their non-high hyperfeminine and hypermasculine counterparts would.

    a. High hyperfeminine and hypermasculine (HM/HF) individuals were expected to make more perceptual errors than non-HM/HF individuals.

    b. High HM/HF individuals were expected to be more likely to behave in a sexually coercive manner or be sexually coerced than Low HM/HF individuals, as were indicated by scores on the Likert-scale-type question

"How likely would you be to force this woman to have sexual intercourse?" or "How likely would you be to be sexually coerced by this man?"

3. The interaction of alcohol consumption with extreme gender role adherence were expected to result in the greatest number of perceptual errors.

EXPERIMENT 1

As the videotape of the social interaction and cues questionnaire were specifically designed for this study, a pilot study was conducted in order to validate both instruments, to determine whether sexual coerciveness and hypermasculinity are redundant variables (c.f. O'Donahue, McKay, & Schewe, 1996), and whether hyperfemininity and previous sexual victimization are redundant variables (c.f. Murnen & Byrne, 1991).

Method

Participants

Sixty-two men and women were recruited from the departmental research participant pool and were compensated with 0.5 research credits toward a required total. The mean age of the sample was 21.1 due to outliesr of ages 50 and 64 (SD = 7.13**)**. Without the outliers, the mean age was 19.88 (SD = 2.39). With the exception of two women who identified themselves as bisexual and two men who refused to disclose their sexual preference, the sample was composed entirely of individuals who identified themselves as heterosexual. With the exception of two individuals who identified themselves as divorced, individuals in the sample were either single and not dating or single and dating. The mean socioeconomic status was 6.7 (SD = 2.77), defined as "middle-class."

Instruments

Stimulus Video. Each participant viewed a stimulus video that was designed to be sexually "neutral" (i.e., included equal numbers of sexually-encouraging and discouraging behaviors). The interaction in the video is between two college-age

individuals in the lobby of the woman's dormitory. In the interaction, they have just returned from studying for a test, and they engage in conversation. The ending is ambiguous as to whether the woman will accept the man's invitation to join him and his friends later for pizza. The interaction was filmed with a split-screen technique so that the participant can see the body language and facial expressions of both the man and the woman.

Cues Questionnaire. The Cues Questionnaire consisted of a list of cues that were present in the video as well as "filler" items that were not present in the video. Both actual cues and filler items are intended to be either sexually encouraging or discouraging verbal and nonverbal behaviors. For example, a sexually encouraging cue would be "she smiled at him," and a sexually discouraging one would be, "he turned away." Female participants were asked to indicate which cues were performed by the target man, and male participants were asked to indicate which cues were performed by the target woman. The Cues Questionnaire also included four Likert-type scales on which the participants rate a) the perceived likelihood that target individuals would go on a date b) the target individuals' perceived likelihood of having sexual intercourse, c) the target man's perceived likelihood of forcing the woman to have sexual intercourse or the target woman's perceived likelihood of being forced by the man to have sexual intercourse, d) the perceived likelihood that if the participant were in a similar situation, he or she would date the opposite-sex target, and e) the perceived likelihood that if the participant were in a similar situation, he would force the woman to have sexual intercourse, or that the woman would be forced by the man to have sexual intercourse. The Likert-scale ranges from "1" (not likely at all) to "7" (extremely likely) with "4" being "not enough information to tell." The overall error score for the cues portion was determined by summing the number of correctly identified cues (see Appendix 1).

Demographics. On the Demographics form, participants provided information about their sexual orientation, marital status, age, and socioeconomic status (see Appendix 2).

Sexual Experiences Survey. The Sexual Experiences Survey (SES) was developed by Koss and Oros (1982) to assess participants' past sexual victimization experience. There are two versions of the survey, one in which women indicate whether they have been sexually victimized, and one on which men indicate whether they have committed sexual victimization. The internal consistency of this instrument has reached a Cronbach alpha = .74 (women) and Cronbach alpha = .89 (men) (Koss & Gidycz, 1985). Test-retest reliability has reached a mean item agreement of 93%. Validity was established by correlating the responses to the questionnaire with responses to the same questions asked by an interviewer. The Pearson correlations between the two types of administration were $r=.73$ ($p<.001$) for women and $r=.61$ ($p<.001$) for men.

Hypermasculinity Inventory. The Hypermasculinity Inventory was developed by Mosher and Sirkin (1984) to assess overly machismo attitudes in men. It assesses this type of attitude on three scales: 1) calloused sex attitude, 2) violence as being "manly," and 3) danger as being "exciting." The internal consistency of this instrument has reached a Cronbach alpha = .89. Its construct validity was established by correlating answers on this questionnaire with self-report measures of drug use, behavior that would be considered aggressive, drunk driving, and delinquency during high school (see Appendix 3).

Hyperfemininity Scale. The Hyperfemininity Scale (Murnen & Byrne, 1991) was developed to measure the degree to which women hold traditional beliefs about the role

of women and the ways in which women can manipulate men. In the original study, this scale achieved an internal consistency of Cronbach alpha=.76, but with later samples, the level of internal consistency reached a Cronbach alpha above .80. It was found to be uncorrelated with measures of femininity or masculinity (Murnen & Byrne, 1991; see Appendix 4).

Procedure

Research participants were met by the researcher at the psychophysiology laboratory. At that time, participants were given instructions about the experimental procedure and signed a consent form (see Appendix 5). The experimenter explained that the participants would be watching a video of an interaction between a man and woman student and then would answer questionnaires about their impressions of the interaction. The researcher started the video and left the participant to watch the video in private. Following the video presentation, the researcher returned to the room and administered the Cues Questionnaire, Demographics form, Sexual Experiences Survey, and Hyperfemininity or Hypermasculinity Scales. Participants were then debriefed, thanked, and dismissed.

Results

Mean ratings of cues present in the video were $\underline{M} = 0.1022$ and $\underline{M} = 0.1226$ for men and women, respectively. The means' proximity to 0 indicates that participants perceived the video as being sexually "neutral." In order to ascertain that, in general, the actions performed by both actors were not rated differently, the summary scores of the ratings of behavioral cues performed by the actors (i.e. smiling, taking their jackets off,

etc.) were compared by gender and were not found to be significantly different (t = -.528, p>.05).

Independent sample t-tests revealed that men and women did not differ significantly on the accuracy of their recall of cues or on overall ratings of sexual content of the stimulus interaction. Pearson product-moment correlations were computed within gender among scores on the Hypermasculinity Inventory, Hyperfemininity Scale, accuracy, and scores on the Sexual Experiences Survey. Accuracy was defined as the number of cues correctly identified as being in the video. Hyperfemininity was not related to accuracy, but hypermasculinity was negatively correlated with the number of correctly identified cues (r = -.362, p<.05; see Table 1). Scores on the Sexual Experience Survey were not significantly correlated with any of the dependent measures or with the extreme gender role adherence measures for both genders. Because neither hyperfemininity nor hypermasculinity were significantly correlated with sexual coercion scores on the SES, it was deemed permissible to treat extreme gender role adherence as a separate variable.

Table 1: Pearson Product-Moment Correlations for Men on Sexual Experiences Survey, Hypermasculinity, Accuracy, and Perceived Likelihood of Sexual Behavior

		1	2	3	4	5	6	7	8
1	SES	-	r=.221	r=.043	r=-.031	r=-.080	r=-.093	r=.339	[a]
2	HI		-	r=-.362*	r= .314	r= .012	r=-.134	r= .124	[a]
3	Accuracy			-	r= .065	r=-.064	r=.296	r=-.005	[a]
4	Targets Date				-	r=.405*	r=.280	r=.330	[a]
5	Targets Sex					-	r=.090	r=.291	[a]
6	Participant Date						-	r=.421*	[a]
7	Participant Sex							-	[a]
8	Participant Coerce								[a]

* $p<.05$

[a] Lack of variation in the coercion responses precluded computation of coefficients.

Global ratings of likelihood of having sex with the opposite-gender target were compared using a student's t-test. These ratings differed significantly between gender, with men reporting that they would be significantly more likely to have sex with the target woman ($M=2.677$, $SD=1.661$) than the women would be to have sex with the target man ($M=1.774$, $SD=1.175$; $t=2.472$, $p<.05$). Global ratings of coercion also differed, with women being significantly more likely to expect to be coerced by the target man in a similar situation ($M=1.354$, $SD=.755$) than men expected to coerce the woman ($M=1.000$, $SD=0.000$; $t=2.617$, $p<.05$). Within-gender Pearson product-moment coefficients were computed among global likelihood ratings, hyperfemininity and hypermasculinity scales, and accuracy. Results revealed that the likelihood of the target persons dating was significantly correlated with the likelihood that they would have sex

(see Table 2 for women), and that the likelihood of the participant dating the opposite-sex target person was significantly related to the likelihood of the participant having sex with the opposite-sex target person. For women, the likelihood of dating the target man was significantly related to the likelihood that the target man would have sex with the target woman. Also, the likelihood of having sex with the target man was significantly correlated with the likelihood of being coerced by him.

Table 2: Pearson Product-Moment Correlations for Women on Accuracy, Sexual Experiences Survey, Hyperfemininity and Perceived Likelihood of Sexual Behavior

		1	2	3	4	5	6	7	8
1	SES	-	r=-.100	r=-.091	r=-.043	r=.139	r=.239	r=.251	r=.109
2	HS		-	r=.014	r=-.150	r=-.064	r=.231	r=-.046	r=.006
3	Number Correct			-	r=-.042	r=.106	r=.075	r=.069	r=.142
4	Targets Date				-	r=.521**	r=.312	r=.126	r=.132
5	Targets Sex					-	r=.484**	r=.349	r=.149
6	Participant Date						-	r=.401*	r=.339
7	Participant Sex							-	r=.544**
8	Participant Coerced								-

* p<.05
** p<.01

Discussion

Contrary to expectations, gender and previous sexual coercion experience did not affect participant accuracy in identification of cues. Consequently, previous sexual coercion experience was not included as an independent variable in the main study. Hypermasculinity was significantly and negatively correlated with accuracy, which confirms research to date. The fact that hyperfemininity was not correlated with

accuracy may reflect that hyperfemininity is not yet a well-established or clarified construct, or that individuals with more extreme gender-role identifications may be more likely to reflect the previous findings. That is, women are more accurate than men in identifying cues in social situations. Hyperfemininity may interact with alcohol to reduce accuracy.

The findings of this pilot study could reflect the expectancies held by college-age men and women in dating situations. Clearly, in today's culture, when two people date, the possibility of engaging in sexual behavior exists. The findings that pertain to the women are intriguing. With respect to the relationship between dating the target man and his likelihood of having sex with the target woman, it could be speculated that young women acknowledge that they are likely to be approached by young men who desire sexual activity to a higher degree than they do. The finding that is more disturbing is that the likelihood of having sex with the target man is positively correlated with the likelihood of being coerced by him. It is possible that young women have the expectation that sexual encounters may begin with some sort of pressure by men, and that they interpret this pressure as coercion. In order to evaluate these two possibilities, a question was added to the global ratings about likelihood of initiation of sexual contact in the main study.

EXPERIMENT 2

Effects of alcohol, extreme gender role adherence, and gender were examined on the same dependent variables in the second experiment.

Method

Participants and Experimental Design

Participants were 25 men and 25 women between the ages of 21 and 25 (M=21.7, SD=1.0) recruited through advertisements placed in local and student newspapers. The sample was 86% white (n=43), 8% African American (n=4, one Alcohol/Low HF, one Sober, high HF, two sober Low HM), 2% Asian (n=1, Sober High HF), and 4% Hispanic (n=2, one Sober high HF, one Sober low HF). Forty-eight percent of the participants described themselves as "single, not dating," 46% as "single, dating," 2% as "living together," and 4% as "married." The sample was comprised of 98% heterosexual and 1% bisexual participants.

Respondents were screened by telephone for past or present drug- or alcohol-related problems or psychiatric diagnoses, and those who had a history of drug or alcohol addiction or a current psychiatric diagnosis were excluded from participation. During the telephone screening, all participants were assessed for alcoholism using the Brief Michigan Alcohol Screening Test (B-MAST; Pokorny, Miller, & Kaplan, 1972; see Appendix 6). Participants who scored 6 or more on the B-MAST, abstainers from alcohol, or those who reported that they may not consume alcohol due to medical concerns were excluded from participation in the alcohol condition (see Table 3 for

sample characteristics on screening variables). Participants were also selected according to their scores on the Hypermasculinity Inventory or the Hyperfemininity Scale to ensure a similar number of participants in each of the high and low groups. The Demographics questionnaire was also administered at the screening to ensure that the participants fell within the advertised age range. Participants were told not to drink alcohol for 24 hours and to refrain from eating for four hours prior to the testing.

The present study involved 8 groups corresponding to a 2 (alcohol vs. sober) x 2 (high vs. low HI/HF score) design (gender comprised the other 2 groups). Participants were randomly assigned to one of two beverage groups. Participants in the Alcohol condition received a dose of 0.90 g/kg of body weight of 95% ethanol USP mixed in a 1:5 ratio with Kroger brand orange juice. The beverage was then poured into two plastic glasses in equal volumes. Participants in the Sober condition received orange juice of corresponding volume and presentation.

For the purposes of this study, hypermasculinity and hyperfemininity are referred to generally as HM/HF. Participants were classified as high or low HM/HF based on their scores on the Hypermasculinity Inventory (HI; Mosher & Sirkins, 1984) and Hyperfemininity Survey (HS; Murnen & Byrne, 1991). HM/HF scores were split by excluding participants within one half standard deviation above or below the mean. Those who scored above one-half a standard deviation above the mean were identified as high HM/HF and those who scored below one-half a standard deviation from the mean were identified as low HM/HF. When referring to single genders, the labels "hypermasculine" (HM), "non-hypermasculine" (NHM), "hyperfeminine" (HF), and "non-hyperfeminine" (NHF) were applied. For the purposes of this study, the means and

standard deviations from the pilot study were used to determine the exclusion criteria (HI: M = 9.548, SD = 6.687; HS: M = 7.354, SD = 3.411) because the Hypermasculinity Scale does not have an established mean or standard deviation from a standardized population. However, due to difficulty recruiting participants, the exclusion criteria were narrowed. Participants who scored between 6 and 12 on the Hypermasculinity Inventory or between 6 and 8 on the Hyperfemininity Scale were excluded.

Table 3: Descriptive statistics for age, SES, B-MAST, and hypermasculinity and hyperfemininity scores.

	N	Mean	Standard Deviation	Range
Age	50	21.7	1.00	21-25
SES	50	5.9 (approx. $50,000/yr)	3.28	$5,000-$70,000+
B-MAST	50	2.12	1.91	0-6
High HM	12	15.2	3.54	12-25
Low HM	13	3.2	1.82	1-5
High HF	11	11.7	2.69	9-17
Low HF	14	3.07	1.44	1-5

Instruments

B-MAST. The B-MAST is an abbreviated form of the MAST, which was developed to aid in diagnosing alcoholism (Selzer, 1971). The B-MAST has been shown to have high Pearson r correlations with the full MAST of .95 for diagnosed alcoholics and .96 for nonalcoholics (Pokorny, Miller, & Kaplan, 1972). A score of "6" is the identified lowest score for which an alcoholism diagnosis would be given per the B-MAST. Consequently, participants scoring 6 or higher were excluded from participation in the alcohol group.

Stimulus Video. The stimulus video is an 8-minute long video of a scripted interaction between a target man and woman. The interaction was filmed in a room with a sofa and is intended to appear as though it occurs in the lobby of the woman's

dormitory. The interaction is presented as deliberately vague concerning whether the targets are sexually interested in each other. The video contains cues displayed by the man and woman that have been shown to indicate sexual interest and discouragement. The video ends with the man asking the woman on a date and with her replying noncommitally.

Demographics. On the Demographics form, participants provided information about their sexual orientation, marital status, age, and socioeconomic status.

Cues Questionnaire. The Cues Questionnaire (see Appendix 7) consists of a list of cues that were present in the video as well as "filler" items that were not present in the video. Both actual cues and filler items are intended to be either sexually-encouraging or discouraging verbal and nonverbal behaviors. For example, a sexually-encouraging cue would be "short smiles," and a sexually-discouraging one would be, "sitting away." Female participants were asked to indicate which cues were performed by the target man, and male participants were asked to indicate which cues were performed by the target woman. In order to allow for comparison between gender, behaviors performed by both actors are included in the same order on both questionnaires. Behaviors that are different are matched in valence. The Cues Questionnaire also includes 7 Likert-type scales on which the participants rate a) the perceived likelihood that the target individuals will go on a date b) the target individuals' perceived likelihood of having sexual intercourse, c) the target man's perceived likelihood of forcing the woman to have sexual intercourse or the target woman's perceived likelihood of being forced by the man to have sexual intercourse, d) the perceived likelihood that if the participant were in a similar situation, he or she would date the opposite-sex target, and e) the perceived likelihood that if the

participant were in a similar situation, he would initiate sexual activity with the target woman or agree if the target man were to initiate sexual activity, f) the participants' perceived likelihood that they would have sexual intercourse with the opposite-gender target, or g) the perceived likelihood that the target man would force female participants to have sexual intercourse, or that male participants would force the target woman to have sexual intercourse. The Likert-scale ranges from "1" (not likely at all) to "7" (extremely likely) with "4" being "not enough information to tell." The overall accuracy score for the cues portion was determined by subtracting the number of incorrectly identified cues (cues that were marked as present in the video but were not) from the number of correctly identified cues (cues that were missed but were present in the video). Thus, participants' scores were penalized for both missing cues that were presented and for marking cues that were not. The bias score was determined by subtracting the total number of negative cues marked by each participant (correctly and incorrectly) from the total number of positive cues marked by each participant. Participants who saw the same number of positive and negative cues received a bias score of zero, those who saw more positive cues received a positive score, and those who saw more negative cues received a negative score.

Hypermasculinity Inventory. Please refer to the pilot study and Appendix 4 for more information about this instrument.

Hyperfemininity Scale. Please refer to the pilot study and Appendix 5 for more information about this instrument.

Blood-Alcohol Concentration. Blood-alcohol concentration (BAC) was measured using the Alco-Sensor IV breathalyzer (Intoximeters, Inc., St. Louis, MO). Participants'

subjective level of intoxication was assessed using the specially-designed "How Drunk" scale. The "How Drunk" scale is a Likert scale ranging from 0 ("not drunk at all") to 11 ("drunk as I have ever been"; see Appendix 8 for scale and means for Alcohol and Sober groups).

Procedure

Research participants were met by the researcher at the psychophysiology laboratory. At that time, participants were given instructions about the experimental procedure and signed a consent form (see Appendix 9). The participants' BAC was assessed with a breathalyzer to ascertain that the participant's BAC was zero and that they complied with the instructions not to consume alcohol prior to the experiment. Participants were weighed and then waited alone in the experimental chamber while the experimenter went into another room to prepare the beverage. Participants in the Alcohol condition were informed that they were to drink 95% ethanol mixed with orange juice equal to strength of four regular mixed drinks. Participants in the Sober group received corresponding amounts of orange juice in order to standardize the procedure across conditions. Twenty minutes were allowed for alcohol absorption, after which the BAC was measured to ascertain that participants in the Alcohol condition had reached a BAC of .08. The mean BAC of the participants in the Alcohol condition before the video was M=0.088, SD=0.012, and the mean BAC of the same participants after the questionnaires were administered was M=0.092, SD=0.015. Participants were also administered the "How Drunk" scale at this time to obtain a subjective rating of intoxication and ensure that members of the Sober group were not feeling intoxicated. After participants had reached the appropriate intoxication level, the experimenter explained that the

participants would watch a video of an interaction between a man and woman student and then would complete some questionnaires. The exact nature of the questionnaires was not disclosed. The researcher then started the video and left the participants to watch the video in private. Following the video presentation, the researcher returned to the room and administered the Cues Questionnaire. Sufficient time had elapsed since the telephone screening that the extreme gender role adherence scales did not prime the participants to look for sexual cues. Participants were then debriefed (see Appendix 10) and thanked. As a precaution, participants in the Alcohol condition were only allowed to leave under the conditions that an escort has arrived to collect them and their BAC had decreased to .04.

Results

Data Reduction

The following variables were used in the analyses:

Independent Variables

High HM/HF. Individuals scoring at or above one-half a standard deviation above the mean on the hypermasculinity and hyperfemininity measures were classified as hypermasculine or hyperfeminine.

Low HM/HF. Individuals scoring at or below one-half a standard deviation below the mean on the hypermasculinity measure were classified as non-hypermasculine or hyperfeminine.

Dependent Variables

Accuracy. number of incorrect responses subtracted from the number of correct responses

Bias. number of negative cues identified subtracted from the number of positive cues identified

The following dependent variables, collectively referred to as the "likelihood measures," were scored on a 7-point Likert-type scale with 1 being equal to "not likely at all" to 7 being "extremely unlikely." A score of 4 indicates that there is not enough information to determine perceived likelihood.

T -Dating. perceived likelihood that the opposite-gender target would go on a date with the same-gender target

T-Sex. perceived likelihood that the opposite gender target would have sex with the same-gender target

T-Coerce. perceived likelihood that the opposite gender target would sexually coerce or be sexually coerced by the same-gender target

S-Date. perceived likelihood that the participant would go on a date with the opposite gender target under similar circumstances

S-Sex. perceived likelihood that the participant would have sex with the opposite gender target

S-Initiate. perceived likelihood that the participant would initiate sex with the opposite-gender target

S-Coerce. perceived likelihood that the participant would force the female target to have sexual intercourse (male participants only) or perceived likelihood that the participant would be forced by the male target to have sexual intercourse (female participants only)

Analyses

Due to the categorical nature of the independent variables, results were analyzed using a 2x2x2 Multivariate Analysis of Variance (MANOVA) on all dependent variables. The beverage condition (Alcohol, Sober) was contrasted with HM/HF scores (High HM/HF and Low HM/HF) and gender (male, female). An omnibus MANOVA was conducted on the different dependent variables listed above to determine whether subsequent analyses were warranted. The following table shows the means for all eight cells:

Table 4: Means, standard deviations, and number of participants for each cell on bias:

	Men	Women
ETOH- HI HM/HF	N=6, M= -2.33, SD=1.63	N=5, M= 2.6, SD=2.19
LOW HM/HF	N=7, M= -0.14, SD=1.95	N=7, M= 2.57, SD=1.27
SOBER HI HM/HF	N=6, M= -0.33, SD=0.52	N=6, M= -0.33, SD=1.97
LOW HM/HF	N=6, M= -1.0, SD=2.19	N=7, M= 1.14, SD=2.48

The omnibus MANOVA revealed main and interaction effects for alcohol , HM/HF, and gender on several of the dependent variables (see Appendix 11 for MANOVA results and all other dependent variable means). Independent t-tests and 2x2 ANOVAs were performed to determine what the specific effects were.

Effects of Alcohol

Main effects were found in the MANOVA for alcohol on accuracy ($F_{(7,42)} = 6.89$, $p<0.05$) and the likelihood measures that the characters in the video will have sex (T-Sex; $F_{(7,42)} = 5.92$, $p<0.05$), that the man will force the woman to have sex (T-Coerce; $F_{(7,42)} = 6.94$, $p<0.05$), and that the participant would initiate sex or agree if sex were initiated (S-Initiate; $F_{(7,42)} = 12.23$, $p<0.01$). An independent samples t-test confirmed Hypothesis 1a (see above) and revealed that sober participants were significantly more accurate in recalling cues than intoxicated participants ($M_{sober}= 9.0$, $SD_{sober}= 2.84$, $M_{alcohol}= 7.4$,

$SD_{alcohol}$= 2.87, $t_{(1,48)}$ = 2.08, p<.05; see Table 5). Contrary to Hypothesis 1b, there was no difference between participants in the alcohol and sober conditions on bias. Sober participants were less likely to predict that the actors would have sex (M_{sober}= 2.8, SD_{sober}= 1.20, $M_{alcohol}$= 3.6, $SD_{alcohol}$= 1.58, $t_{(1,48)}$ = -2.12, p<.05; see Table 5), that the man would force the woman to have sex (M_{sober}= 1.8, SD_{sober}= 1.33, $M_{alcohol}$= 2.8, $SD_{alcohol}$= 1.40, $t_{(1,48)}$ = -2.79, p<.01; see Table 6), and that the man would initiate sex (M_{sober}=1.8, SD_{sober}= 1.25, $M_{alcohol}$=3.2, $SD_{alcohol}$= 1.83, $t_{(1,48)}$ = -3.16, p<.01; see Table 5). There was a trend toward a difference in the likelihood rating that participants would have sex with the opposite-gendered actor if they were in a similar situation (S-Sex; M_{sober}= 1.8, SD_{sober}= 1.36, $M_{alcohol}$= 2.5, $SD_{alcohol}$= 1.56, $t_{(1,48)}$ = -1.84, p = .07; see Table 5). The results of the analyses on the likelihood ratings confirm Hypothesis 1c (see above).

Table 5: Independent-samples t-test results for Sober vs. Alcohol on Accuracy, T-Sex, T-Coerce, S-Initiate, and S-Sex

	Sober M	Sober SD	Alcohol M	Sober M	t	p
Accuracy	9.8	2.84	7.4	2.87	2.08	<.05
T-Sex	2.8	1.20	3.6	1.58	-2.12	<.05
T-Coerce	1.8	1.33	2.8	1.40	-2.79	<.01
S-Initiate	1.8	1.25	3.2	1.83	-3.16	<.01
S-Sex	1.8	1.36	2.5	1.56	-1.84	=.07

Alcohol x Gender. A significant interaction was found for alcohol and gender on bias ($F_{(7,42)}$ = 7.088, p<.05). While sober men and intoxicated men did differ significantly in their bias scores (M_{sober}= -.04, SD_{sober}= 1.21, $M_{alcohol}$= -1, $SD_{alcohol}$= 2.09, $t_{(1,23)}$ = .883, p=0.39), intoxicated women had a significantly higher bias score than sober women (M_{sober}= 0.5, SD_{sober}= 2.30, $M_{alcohol}$ = 2.5, $SD_{alcohol}$= 1.43, $t_{(1,23)}$ = -2.46, p<.05).

Effects of HM/HF

Main effects were found for HM/HF on S-Initiate ($F_{(7,42)} = 6.32$, $p<0.05$) and S-Sex ($F_{(7,42)} = 13.73$, $p<0.01$). Independent samples t-tests showed that individuals with high HM/HF scores were significantly more likely to predict that they would initiate sexual activity or that they would agree if sexual activity would be initiated by the male actor ($M_{high}= 3.1$, $SD_{high}= 1.83$, $M_{low}= 2.1$, $SD_{low}= 1.47$, $t_{(1,48)} = -2.17$, $p<.05$; see Table 6) and that they would have sex with the opposite-gender actor ($M_{high}= 2.8$, $SD_{high}= 1.70$, $M_{low}= 1.6$, $SD_{low}= 1.01$, $t_{(1,48)} = -3.27$, $p<.01$; see Table 6).

Table 6: Independent Samples t-test results for Low vs. High HM/HF on S-initiate and S-Sex

	Low M	Low SD	High M	High SD	t	p
S-Initiate	2.1	1.47	3.1	1.83	-2.17	<.05
S-Sex	1.6	1.01	2.8	1.7	-3.27	<.01

Alcohol x HM/HF. Contrary to Hypothesis 3, there was no significant interaction of Alcohol x HM/HF scores on accuracy. Hower, significant interactions were found for alcohol and HM/HF scores on the likelihood scores that the target characters in the video would have sex if they were to go out ($F_{(7,42)} = 4.45$, $p<.05$), that participants would go out with the opposite-gender actor ($F_{(7,42)} = 6.66$, $p< .02$), and that the participants would have sex with the opposite-gender actor ($F_{(7,42)} = 5.66$, $p< .05$). High HM/HF individuals who were intoxicated were significantly more likely to predict that the target characters in the video would have sex ($M_{sober}= 2.2$, $SD_{sober}= 1.27$, $M_{alcohol} = 3.8$, $SD_{alcohol}= 1.40$, $t_{(1,21)} = -2.97$, $p<.01$). There was not a significant difference between sober and intoxicated low HM/HF individuals on t-sex, s-date or s-sex. However, intoxicated high HM/HF participants were significantly more likely to predict that they would go out with the actor of the opposite gender than sober ones ($M_{sober}= 3.7$, $SD_{sober}=$

1.30, $\underline{M}_{alcohol}$ = 4.8, $\underline{SD}_{alcohol}$= 1.17, $\underline{t}_{(1,21)}$ = -2.22, $\underline{p}$<.05). Intoxicated participants with high HM/HF scores were also more likely to indicate that they would have sex with the opposite-gender actor than were sober participants ($\underline{M}_{sober}$= 2.0, $\underline{SD}_{sober}$= 1.60, $\underline{M}_{alcohol}$ = 3.7, $\underline{SD}_{alcohol}$= 1.35, $\underline{t}_{(1,21)}$ = -2.79, $\underline{p}$<.05).

Effects of Gender

Main effects were found for gender on bias ($\underline{F}_{(7,42)}$ = 22.42, $\underline{p}$<0.001), accuracy ($\underline{F}_{(7,42)}$ = 15.69, $\underline{p}$<.001), and likelihood of forcing sex or being forced ($\underline{F}_{(7,42)}$ = , $\underline{p}$<0.05). Bias was calculated by subtracting the number of negative cues identified from the number of positive cues identified. Independent t-tests revealed that women recalled more positive cues than negative, whereas the pattern was the opposite for the men ($\underline{M}_{women}$= 1.5, $\underline{SD}_{women}$= 2.16, $\underline{M}_{men}$= -0.9, $\underline{SD}_{men}$= 1.82, $\underline{t}_{(1,48)}$ = -4.24, $\underline{p}$<.001; see Table 7), although both were fairly neutral (i.e., close to 0, overall $\underline{M}$=0.28, $\underline{SD}$=2.32). In terms of accuracy, or number of correctly identified cues minus the number of incorrectly identified cues, men were more accurate than women in recalling what was presented in the video ($\underline{M}_{women}$= 6.9, $\underline{SD}_{women}$= 3.07, $\underline{M}_{men}$=9.6 , $\underline{SD}_{men}$= 2.12, $\underline{t}_{(1,48)}$ = 3.642, $\underline{p}$<.001; see Table 7). The result for the likelihood of being forced to have sex or the likelihood of forcing someone to have sex should be interpreted cautiously, as there was no variation in the scores for the men ($\underline{M}_{women}$= 1.6 , $\underline{SD}_{women}$= 1.16 , $\underline{M}_{men}$= 1.0, $\underline{SD}_{men}$= 0, $\underline{t}_{(1,48)}$ = -2.419 , $\underline{p}$<.02; see Table 7).

Table 7: Independent-Samples t-test results for Women vs. Men on Accuracy, Bias, and S-Coerce

	Women $\underline{M}$	Women $\underline{SD}$	Men $\underline{M}$	Men $\underline{SD}$	$\underline{t}$	$\underline{p}$
Accuracy	6.9	3.07	9.6	2.12	3.64	<.001
Bias	1.5	2.16	-0.9	1.82	-4.24	<.001
S-Coerce	1.6	1.16	1.0	0.0	-2.419	<.02

Within-Gender Analyses. As stated in hypothesis 2, the main effect of HM/HF was tested for significance within gender groups. Contrary to prediction, no significant effects were found for accuracy for either men or women. The only main effect in this analysis was for men on the variable s-sex ($F_{(1,23)} = 8.96$, $p<.01$). Non-HM men were significantly less likely to indicate that they would have sex with the target woman ($M=1.54$, $SD=1.13$) than were High-HM men ($M=3.4$, $SD=1.78$, $t_{(1,23)}=-3.177$, $p<.01$).

Discussion

The present pattern of results both confirmed and contrasted the proposed hypothesis. The results regarding the effects of intoxication on the dependent variables were as predicted with the exception of the bias scores. Sober participants were more accurate in recalling cues than intoxicated ones, which is consistent with previous research concerning the effects of alcohol on memory (Wegner & Fahle, 1999) and sustained attention (Rorhbaugh et al., 1998). Although there were no differences between the bias scores of intoxicated and sober participants, the differences in the likelihood measures support the model of alcohol myopia. The effect may not occur in the recall of cues, but rather somewhere between the encoding process and the utilization of the information to determine what will happen next or how one should act in a given situation. In other words, all the cues may be processed in memory, but the cues that are used as evidence for confirmatory interpretation may be biased under the effects of alcohol. It may be more parsimonious to surmise that watching a video of an interaction did not sufficiently engage the participants and activate the alcohol myopia effect. The information may not have been processed in terms of self-relevance, but rather as a

memory task even though the participants were not instructed that they would be asked to recall what happened in the video.

The findings regarding the main effects of the HM/HF are consistent with previous research. Individuals who are high in hypermasculinity or hyperfemininity appear to be more open to engaging in sexual activity as a form of establishing dominance and power. For example, hypermasculine men follow the script that a man should take advantage of any opportunity to have sex to prove his sexual prowess and machismo (Mosher & Tomkins, 1988). Hyperfeminine women, on the other hand, use their sexuality as a tool to manipulate men (Murnen & Byrne, 1991). Ironically, women are more attracted to men who are similar in their levels of adherence to traditional gender roles (Smith, Byrne, & Fielding, 1995), and high hyperfeminine women are more likely to date men who are high in hypermasculinity (Maybach & Gold, 1994). As can be seen by the interaction effects of alcohol and HM/HF, alcohol may serve to augment the propensity of such individuals to engage in sexual activity or at least expect it.

Contrary to expectation, women were less accurate in recalling cues and tended to notice more sexually encouraging cues than did men. This finding is also different from that found in the pilot study, in which men and women did not differ on accuracy scores. Perhaps the difference between this and previous studies is that in this study, measures of recall and interpretation were separated. In previous studies, the variable of interest was the level of flirtatiousness and sexuality attributed to the persons in the interaction (e.g. Harnish, Abbey, & DeBono, 1990), not necessarily "accuracy." The finding regarding bias is interesting in that women seemed to notice more sexually encouraging cues than

discouraging ones, but this finding should be interpreted cautiously because both the means for men and women were close to 0.

Women and men did not differ on their scores on likelihood ratings with the exception of S-Coerce, but as was stated above, this finding should be interpreted cautiously due to the lack of variation in the men's scores (i.e., none of the men endorsed any likelihood of coercing the target woman if he were in that situation). Six women of 25 (12%) indicated choices other than "not likely at all." Perhaps the women responded more honestly than the men and acknowledged that men may attempt to go further than they wish.

The interaction between alcohol and gender on bias is interesting. Intoxicated and sober men did not differ on bias, but intoxicated women recalled significantly more sexually encouraging cues than sober women. Admittedly, the sample was drawn from a college population, in which going to bars and flirting is commonplace, and alcohol expectancies are most likely involved. This finding is congruent with previous research that shows that women who drink are at higher risk for sexual victimization (e.g. Testa & Dermen, 1999; Ullman, Karabatsos, & Koss, 1999). Women in such situations may experience the alcohol myopia effect and notice the cues that are sexually encouraging while ignoring or failing to process anxiety-provoking cues such as those that indicate the man is potentially dangerous.

This study has several potential limitations that should be kept in mind while interpreting the data. First, although a pilot study was conducted to refine the stimulus video and cues questionnaires, they are not well-established research techniques. Second, due to subject recruitment difficulties, the sample size is small, and the high

hyperfeminine alcohol cell is particularly lacking. Third, the bias scores, even those that showed differences between groups, were close to 0, so very few subjects perceived many more or less than an equal number of sexually encouraging and discouraging cues.

In spite of these limitations, this study has some significant strengths. Overall, the results indicated that the number and type of cues recalled do not necessarily determine how a situation will be interpreted. Further research should be done to determine exactly where the bias to interpret a situation sexually enters the cognitive process, particularly for men. The tendency of women to perceive more sexually encouraging than discouraging cues while drinking alcohol may be a helpful area to target in sexual assault prevention programs.

REFERENCES

Abbey, A. (1982). Sex differences in attribution for friendly behavior: Do males misperceive females' friendliness? Journal of Personality and Social Psychology, 42, 830-838.

Abbey, A. (1991). Acquaintance rape and alcohol consumption on college campuses: How are they linked? Journal of American College Health, 39, 165-169.

Abbey, A., McAuslan, P., & Ross, L. T. (1998). Sexual assault perpetration by college men: The role of alcohol, misperception of sexual intent, and sexual beliefs and experiences. Journal of Social and Clinical Psychology, 17, 167-195.

Abbey, A., & Melby, C. (1986). The effects of nonverbal cues on gender differences in perceptions of sexual intent. Sex Roles, 15, 283-298.

Buck, R., Miller, R. E., & Caul, W. F. (1974). Sex, personality, and physiological variables in the communication of affect via facial expression. Journal of Personality and Social Psychology, 30, 587-596.

Carey, K. B. (1995). Effects of alcohol intoxication on self-focused attention. Journal of Studies on Alcohol, 56, 248-252.

Dean, K. E., & Malamuth, N. M. (1997). Characteristics of men who aggress sexually and of men who imagine aggressing: Risk and moderating variables. Journal of Personality and Social Psychology, 72, 449-455.

Faul, F., & Erdfelder, E. (1992). GPower: A prior, post-hoc, and compromise power analyses for MS-DOS. [Computer Program]. Bonn, FRG: Bonn University, Department of Psychology.

George, W. H., Raynor, J. O., & Nochajski, T. H. (1992). Resistance to alcohol impairment of visual-motor performance: Does it help to pay attention? Journal of Studies on Alcohol, 53, 507-513.

Giancola, P. R. & Zeichner, A. (1995). An investigation of gender differences in alcohol-related aggression. Journal of Studies on Alcohol, 56, 573-579.

Giancola, P. R., Zeichner, A., Yarnell, J. E., & Dickson, K. E. (1996). Relation between executive cognitive functioning and the adverse consequences of alcohol use in social drinkers. Alcoholism: Clinical and Experimental Research, 20, 1094-1098.

Gustafson, R. (1987). Reaction time as a function of alcohol and selective attention. Journal of Social Behavior and Personality, 2, 515-522.

Hamilton, P., & Copeman, A. (1970). The effect of alcohol an noise on components of a tracking and monitoring task. British Journal of Psychology, 61, 149-156.

Harnish, R. J., Abbey, A., & DeBono, K. G. (1990). Toward an understanding of "the sex game": The effects of gender and self-monitoring on perceptions of sexuality and likability in initial interactions. Journal of Applied Social Psychology, 20, 1333-1344.

Heier, R. J., Schandler, S. L., MacLachlan, A., Soderling, E., Buchsbaum, M. S., & Cohen, M. J. (1999). Alcohol induced changes in regional cerebral glucose metabolic rate during divided attention. Personality and Individual Differences, 26, 425-439.

Johnson, C. B., Stockdale, M. S., & Saal, F. E. (1991). Persistence of men's misperception of friendly cues across a variety of interpersonal encounters. Psychology of Women Quarterly, 13, 463-475.

Johnston, L., & Ward, T. (1996). Social cognition and sexual offending: A theoretical framework. Sexual Abuse: A Journal of Research and Treatment, 8, 55-80.

Koss, M. P., & Dinero, T. E. (August 1988). Predictors of sexual aggression among a national sample of male college students. Annals of the New York Academy of Medicine, 528, 133-147.

Koss, M. P., & Dinero, T. E. (1989). Discriminant analysis of risk factors for sexual victimization among a national sample of college women. Journal of Consulting and Clinical Psychology, 57, 242-250.

Koss, M. P., & Gaines, J. A. (1993). The prediction of sexual aggression by alcohol use, athletic participation, and fraternity affiliation. Journal of Interpersonal Violence, 8, 94-108.

Koss, M. P., & Gidycz, C. A. (1985). Sexual Experiences Survey: Reliability and validity. Journal of Consulting and Clinical Psychology, 53, 422-423.

Koss, M. P., Leonard, K. E., Beezly, D. A., & Oros, C. J. (1985). Nonstranger sexual aggression: A discriminant analysis of the psychological characteristics of undetected offenders. Sex Roles, 12, 981-992.

Koss, M. P., & Oros, C. J. (1982). Sexual Experiences Survey: A research instrument investigating sexual aggression and victimization. Journal of Consulting and Clinical Psychology, 50, 455-457.

Malamuth, N. M. (August 1988). A multidimensional approach to sexual aggresssion: Combining measures of past behavior and present likelihood. Annals of the New York Academy of Sciences, 528, 123-132.

Maybach, K.L., & Gold, S.R. (1994). Hyperfemininity and attraction to macho and non-macho men. The Journal of Sex Research, 31, 91-98.

Mosher, D. L., & Sirkin, M. (1984). Measuring a macho personality constellation. Journal of Research in Personality, 18, 150-163.

Mosher, D. L., & Tomkins, S. S. (1988). Scripting the macho man: Hypermasculine socialization and enculturation. The Journal of Sex Research, 25, 60-84.

Moskowitz, H., & Sharma, S. (1974). Effects of alcohol on peripheral vision as a function of attention. Human Factors, 16, 174-180.

Muehlenhard, C. P. (1988) Misinterpreted dating behaviors and the risk of date rape. Journal of Social and Clinical Psychology, 6, 20-37.

Murnen, S.K., & Byrne, D. (1991) Hyperfemininity: Measurement and initial validation of the construct. Journal of Sex Research, 28, 479-489.

Norris, J., George, W. H., Davis, K. C., Martell, J., & Leonesio, R. J. (1999). Alcohol and hypermasculinity as determinants of men's empathic responses to violent pornography. Journal of Interpersonal Violence, 14, 683-700.

O'Donohue, W., McKay, J. S., & Schewe, P. A. (1996). Rape: The Roles of outcome expectancies and hypermasculinity. Sexual Abuse: A Journal of Research and Treatment, 8, 133-141.

O'Hare, T.M. (1990). Alcohol expectancies and social anxiety in male and female undergraduates. Addictive Behavior, 15, 561-566.

Pokorney, A. D., Miller, B. A., & Kaplan, H. B. (1972). The brief MAST: A shortened version of the Michigan Alcoholism Screening Test. American Journal of Psychiatry, 129, 342-345.

Post, R. B., Lott, L. A., Maddock, R. J., & Beede, J. I. (1996). An effect of alcohol on the distribution of spatial attention. Journal of Studies on Alcohol, 57, 260-266.

Ray, A. L., & Gold, S. R. (1996). Gender roles, aggression, and alcohol use in dating relationships. The Journal of Sex Research, 33, 47-55.

Rohrbaugh, J. W., Stapleton, J. M., Parasuarman, R., Frowein, H. W., Adinoff, B., Varner, J. L., Zubovic, E. A., Lane, E. A., Eckardt, M. J., & Linniola, M. (1988). Alcohol intoxication reduces visual sustained attention. Psychopharmacology, 96, 442-446.

Selzer, M. L. (1971) The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. American Journal of Psychiatry, 127, 1653-1658.

Smith, E. R., Byrne, D., & Fielding, P. J. (1995). Interpersonal attraction as a function of extreme gender role adherence. Personal Relationships, 2, 161-172.

Shotland, R. L., & Craig, J. M. (1988). Can men and women differentiate between friendly and sexually interested behavior? Social Psychology Quarterly, 51, 66-73.

Steele, C. M., & Josephs, R. A. (1990). Alcohol myopia: Its prized and dangerous effects. American Psychologist, 45, 921-933.

Testa, M., & Dermen, K.H. (1999). The differential correlates of sexual coercion and rape. Journal of Interpersonal Violence, 14, 548-561.

Ullman, S.E., Karabatsos, G., & Koss, M.P. (1999). Alcohol and sexual assault in a national sample of college women. Journal of Interpersonal Violence, 14, 603-626.

Ward, T., Hudson, S. M., & Johnston, L. (1997). Cognitive distortions in sex offenders: An integrative review. Clinical Psychology Review, 17, 407-507.

Wegner, A. J., & Fahle, M. (1999). Alcohol and visual performance. Progressive Neuro-Psychopharmacology & Biological Psychiatry, 23, 465-482.

Zeichner, A., Allen, J. D., Petrie, C. P., Rasmussen, P. R., & Giancola, P. R. (1993). Attention allocation: Effects of alcohol and information salience on attentional processes in male social drinkers. Alcoholism: Clinical and Experimental Research, 17. 727-732.

Zeichner, A., Giancola, P.R., & Allen, J.D. (1995). Effects of Hostility on Stress-Response Dampening. Alcoholism: Clinical and Experimental Research, 19, 977-983.

APPENDICES

Appendix 1: Experiment 1 Cues Questionnaires

Cues List/Rating Sheet for Male Participants

1. Please indicate which of the following behaviors you observed the female perform in the interaction you just watched with a check or "x" in the spot beside it. The behaviors only refer to the female in the interaction.

__ leaning back
__ Long (over 10 word) answers
__ frowning
__ changing the subject to more "comfortable" topics
__ not immediately accepting an invitation
__ interrupting
__ suggesting a game of cards
__ offering loan of book
__ looking away/breaking eye contact
__ raising an eyebrow
__ not remembering being in class together
__ putting jacket on
__ sitting far away
__ offering/giving phone number
__ being helped off with coat
__ wearing short skirt
__ discussing favorite sports
__ touching his hand
__ being helpful
__taking jacket off
__ placing hand on his arm
__ mentioning being on a diet
__ wearing high-heeled shoes
__not being first to break pause
__ asking about his plans
__ sitting closer
__ long eye contact
__ acting nervous
__ running hand through hair
__ sighing wistfully
__ laughing at his jokes
__ belching
__ wearing a bulky sweater
__ talking about family
__ being distracted by other people
__ rushing away/escaping from situation
__ short smiles
__ mentioning previous significant other
__ moving away
__ offering a seat
__ disagreeing with statements
__ leaning in
__ anticipating/looking forward to future contact
__ remembering/bringing up embarrassing info
__ paying attention to inanimate objects
__ being polite
__ agreeing with other's comments
__ fluttering her eyelashes
__ complaining
__ admitting she had noticed him before
__ speaking first after a pause
__ accepting offer of a drink
__ not being enthusiastic about his career choice
__ tossing hair

2. How likely do you think she will be to go out with him?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

3. If they do meet later and go on a date, how likely will she be to engage in sexual intercourse with him at the end of the date?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

4. For each item, please indicate whether you think the following behaviors are "positive," (encouraging or indicative of sexual interest) by writing "S" in the space beside it, "negative," (sexually discouraging or indicative of not being sexually interested) by writing "N" in the space beside it, or "neutral," (neither encouraging nor discouraging) by writing "O" in the space beside it.

__ long (over 10 word answers)
__ girl putting her jacket back on
__ complaining (ex. About the library)
__ remembering/bringing up embarrassing info (Ex. about the rubber gloves)
__ offering/giving phone number
__ disagreeing with his statements
__ being distracted by other people
__ moving away
__ displaying short smiles
__ offering a seat
__ asking about his plans
__ speaking first after a pause
__ not remembering being in class with him
__ agreeing with his comments
__ looking away/breaking eye contact
__ hesitating before accepting his invitation
__ engaging in long eye contact
__ acting nervous
__ leaning back
__ frowning
__ letting other break pause
__ leaning in
__ concentrating on inanimate objects (ex. book, drink)
__ wearing a short skirt
__ being helpful
__ sitting far away
__ expressing discouragement about his career choice
__ saying she had noticed him before
__ laughing at his jokes
__ wearing a bulky sweater
__ taking jackets off
__ being polite/thanking
__ saying she's looking forward to future contact
__ changing subject to more "comfortable" topics

5. Disregarding physical appearance, if you were in this situation, how likely would you be to…

a) ask a woman on a date under these circumstances?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

b) have sexual intercourse with this woman?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

c) force this woman to have sexual intercourse?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Force

Cues List/Rating Sheet for Female Participants

1. Please indicate which of the following behaviors you observed the male perform in the interaction you just watched with a check or "x" in the spot beside it. The behaviors only refer to the male in the interaction.

__ leaning back
__ Long (over 10 word) answers
__ frowning
__ keeping focus of conversation on schoolwork
__ making her write her number
__ interrupting
__ suggesting a game of cards
__ being courteous/chivalrous
__ looking away/breaking eye contact
__ raising an eyebrow
__ sending her for book after she just sat down
__ looking at clock
__ saying will call
__ helping her off with her coat
__ offering a drink
__ discussing favorite sports
__ touching her hand
__ being glad to study with her
__taking jacket off
__ running a hand through his hair
__ offering a tour of the lab
__ placing a hand on her arm
__ remembering/bringing up embarrassing info about her
__ asking loan of book
__ sighing impatiently
__ making jokes
__ short smiles
__ belching
__ not looking at her # before putting it away
__ expressing future plans different from hers
__ being distracted by other people
__ speaking first after a pause
__ mentioning previous significant other
__ agreeing with other's comments
__ disagreeing with statements
__ paying attention to inanimate objects
__ saying he will see her later
__ shyly asking for a date
__ long eye contact
__ accepting a seat
__ showing interest in her future plans
__not being first to break pause

2. How likely do you think he will be to go out with her alone (not in a group)?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

3. If they do split off from the group and go on a date, how likely will he be to engage in sexual intercourse with her at the end of the date?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

4. For each item, please indicate whether you think the following behaviors are "positive," (encouraging or indicative of sexual interest) by writing "S" in the space beside it, "negative," (sexually discouraging or indicative of not being sexually interested) by writing "N" in the space beside it, or "neutral," (neither encouraging nor discouraging) by writing "O" in the space beside it.

__ long (over 10 word answers)
__ frowning
__ not looking at her phone # before putting it away
__ saying he will call later
__ making her write her own number
__ concentrating on inanimate objects (ex. book, drink)
__ sending her for a book after she just sat down
__leaning away
__ displaying short smiles
__ accepting offer to take a seat
__ offering a drink
__ saying had noticed her before
__ making jokes
__ agreeing with her comments
__ saying he'll see her later
__ keeping conversation topic on schoolwork
__ engaging in long eye contact
__ looking at clock
__ being distracted by other people
__ letting other break pause
__ disagreeing with her statements
__ being courteous/chivalrous
__ sitting far away
__ expressing having different future plans
__ asking about her plans
__ speaking first after a pause
__ taking jacket off
__ looking away/breaking eye contact
__ shyly asking for a date
__ acting nervous

5. Disregarding physical appearance, how likely would you be to…

a) go out with a man on a date under these circumstances?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

b) have sexual intercourse with this man if you were to go on a date with him under these or similar circumstances?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

c) give in under these circumstances (i.e the man is nice) if he were to pressure you to have sexual intercourse?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Be Forced

Appendix 2: Demographics Form

Demographics

1. Gender (circle one): male female

2. Sexual orientation: heterosexual homosexual bisexual

3. Marital status:
   __ single (never married, not dating)
   __ single (never married, dating)
   __ committed relationship (living together but not married)
   __ married
   __ separated
   __ divorced
   __ widowed
   __ other

4. Age: ___

5. Race:
   __ Caucasian
   __ African
   __ Asian
   __ Hispanic
   __ Other (Please specify _____)

6. YOUR average yearly income if you support yourself OR YOUR PARENTS' average yearly income if they support you (please check one):

___ $0 - $5000
___ $5,000 - $10,000
___ $10,000 - $20,000
___ $20,000 - $30,000
___ $30,000 - $40,000
___ $40,000 - $50,000
___ $50,000 - $60,000
___ $60,000 - $70,000
___ $70,000+

Appendix 3: Hypermasculinity Inventory

HI

Please circle the letter before the statement in each pair that best describes you.

1. a. After I've been through a really dangerous experience, my knees feel weak and I shake all over.
   b. After I've been through a really dangerous experience, I feel high.

2. a. I'd rather gamble than play it safe.
   b. I'd rather play it safe than gamble.

3. a. Call me a name, and Ill pretend not to hear you.
   b. Call me a name, and Ill call you another.

4. a. Fair is fair in love and war.
   b. All is fair in love and war.

5. a. I like wild, uninhibited parties.
   b. I like quiet parties with good conversation.

6. a. I hope to forget past unpleaseant experiences with male aggression.
   b. I still enjoy remembering my first real fight.

7. a. Some people have told me I take foolish risks.
   b. Some people have told me I ought to take more chances.

8. a. So-called effeminate men are more artistic and sensitive.
   b. Effeminate men deserve to be ridiculed.

9. a. Get a woman drunk, high, or hot, and she'll let you do whatever you want.
   b. It's gross and unfair to use alcohol and drugs to convince a woman to have sex.

10. a. I like fast cars and fast women.
    b. I like dependable cars and faithful women.

11. a. So-called prick teasers should be forgiven.
    b. Prick teasers should be raped.

12. a. When I have a few drinks under my belt, I mellow out.
    b. When I have a few drinks under my belt, I look for trouble.

13. a. Any man who is a man needs to have sex regularly.
    b. Any man who is a man can do without sex.

14. a. All women, even women's libbers, are worthy of respect.
    b. The only woman worthy of respect is your own mother.

15. a. You have to fuck some women before they know who's boss.
    b. You have to love some women before they know you don't want to be boss.

16. a. When I have a drink or two, I feel ready for whatever happens.
    b. When I have a drink or two, I like to relax and enjoy myself.

17. a. Risk has to be weighed against possible maximum loss.
    b. There is no such thing as too big a risk, if the payoff is large enough.

18. a. I win by not fighting.
    b. I fight to win.

19. a. It's natural for men to get into fights.
    b. Physical violence never solves an issue.

20. a. If you're not prepared to fight for what's yours, then be prepared to lose it.
    b. Even if I feel like fighting, I try to think of alternatives.

21. a. He who can, fights; he who can't, runs away.
    b. It's just plain dumb to fist fight.

22. a. When I'm bored I watch TV or read a book.
    b. When I'm bored I look for excitement.

23. a. I like to drive safely avoiding all possible risks.
    b. I like to drive fast, right on the edge of danger.

24. a. Pick-ups should expect to put out.
    b. So-called pick-ups should choose their men carefully.

25. a. Some women are good for only one thing.
    b. All women deserve the same respect as your own mother.

26. a. I only want to have sex with women who are in total agreement.
    b. I never feel bad about my tactics when I have sex.

27. a. I would rather be a famous scientist than a famous prizefighter.
    b. I would rather be a famous prizefighter than a famous scientist.

28. a. Lesbians have chosen a particular lifestyle and should be respected for it.
    b. The only thing a lesbian needs is a good, stiff cock.

29. a. If you are chosen for a fight, there is no choice but to fight.
    b. If you are chosen for a fight, it's time to talk your way out of it.

30. a. If you insult me, be prepared to back it up.
    b. If you insult me, I'll try to turn the other cheek.

Appendix 4: Hyperfemininity Survey

HS

1. a. These days men and women should each pay for their own expenses on a date.
   b. Men should always be ready to accept the financial responsibility for a date.

2. a. I would rather be a famous scientist than a famous fashion model.
   b. I would rather be a famous fashion model than a famous scientist.

3. a. I like a man who has some sexual experience.
   b. Sexual experience is not a relevant factor in my choice of a male partner.

4. a. Women should never break up a friendship due to interest in the same man.
   b. Sometimes women have to compete with one another for men.

5. a. I like to play hard-to-get.
   b. I don't like to play games in a relationship.

6. a. I would agree to have sex with a man if I thought I could get him to do what I want.
   b. I never use sex as a way to manipulate a man.

7. a. I try to state my sexual needs clearly and concisely.
   b. I sometimes say "no" but really mean "yes."

8. a. I like to flirt with men.
   b. I enjoy an interesting conversation with a man.

9. a. I seldom consider a relationship with a man as more important than my friendship with women.
   b. I have broken dates with female friends when a guy has asked me out.

10. a. I usually pay for my expenses on a date.
    b. I expect the men I date to take care of my expenses.

11. a. Sometimes I cry to influence a man.
    b. I prefer to use logical rather than emotional means of persuasion when necessary.

12. a. Men need sex more than women do.
    b. In general, there is no difference between the sexual needs of men and women.

13. a. I never use my sexuality to manipulate men.
    b. I sometimes act sexy to get what I want from a man.

14. a. I feel anger when men whistle at me.
b. I feel al little flattered when men whistle at me.

15. a. It's okay for a man to be a little forceful to get sex.
b. Any force used during sex is sexual coercion and should not be tolerated.

16. a. Effeminate men deserve to be ridiculed.
b. So-called effeminate men are very attractive.

17. a. Women who are good at sports probably turn men off.
b. Men like women who are good at sports because of their competence.

18. a. A "real" man is one who can get any woman to have sex with him.
b. Masculinity is not determined by sexual success.

19. a. I would rather be the president of the United States than the wife of the president.
b. I would rather be the wife of the president of the United States than the president.

20. a. Sometimes I care more about my boyfriend's feelings than my own.
b. It is important to me that I am as satisfied with a relationship as my partner is.

21. a. Most women need a man in their lives.
b. I believe some women lead happy lives without partners.

22. a. When a man I'm with gets really sexually excited, it's no use trying to stop him from getting what he wants.
b. Men should be able to control their sexual excitement.

23. a. I like to have a man "wrapped around my finger."
b. I like relationships in which both partners are equal.

24. a. I try to avoid jealousy in a relationship.
b. Sometimes women need to make men feel jealous so they will be more appreciative.

25. a. I sometimes promise to have sex with a man to make sure he stays interested in me.
b. I usually state my sexual intentions honestly and openly.

26. a. I like to feel tipsy so I have an excuse to do anything with a man.
b. I don't like getting too drunk around a man I don't know very well.

Appendix 5: Pilot Consent

Consent to Participate in an Experimental Study

I, _____, agree to participate in a research study titled, "Perception of Social Cues" conducted by Anne D. Bartolucci and Dr. A. Zeichner in the department of Psychology at the University of Georgia (both may be reached at 542-1173). I understand that my participation is voluntary and that I can withdraw my consent at any time, have results of my participation removed from the records, or destroyed. The benefits that I can expect are: I will receive 0.5 research credits for my participation in the experiment, even if I choose to withdraw before the study is completed. In addition, I will become familiarized with the process of psychological experimentation.

The purpose of this research is to gain an understanding of gender and perception of cues in a social interaction. As a part of this project, I shall be asked to view a brief (seven minute) video of a social interaction. After I have viewed the video, I will be asked some questions about the interaction, and then I will complete some questionnaires. The entire session should last no more than half an hour.

Risks
There are no risks foreseen in this research.

Discomforts
I will be answering questionnaires, some of which contain sexually explicit questions about my past experiences. I understand that these questionnaires have been used in research before, and that they have caused no lasting psychological distress. If I do experience distress as the result of these questionnaires, I understand that I can either make an appointment at the Psychology Clinic (542-1173), which will involve me paying out of pocket, or I can receive help at the Mental Health Clinic at the Student Health Center, which is contingent on me paying the requisite student fees.

The results of my participation will be held confidential and will not be released without my prior consent, unless required by law. Therefore, the data will be collected anonymously, and neither my name nor social security number will be recorded on my responses. I will also not be contacted to come back for further participation or follow-up.

I understand that if I have any questions about the experiment, I can call Anne Bartolucci or Dr. Zeichner at 542-1173.

PLEASE SIGN BOTH COPIES. SIGN ONE, AND RETURN THE OTHER TO THE INVESTIGATOR.

_____	_____	_____
Signature of Investigator	Signature of Participant	Date

Appendix 6: B-MAST

B-MAST

Questions	Scoring	
1. Do you feel you are a normal drinker? (Indicate yes if you feel you drink **more** than normal)	Yes	**No** (2)
2. Do friends or relatives think you are a normal drinker?	Yes	**No** (2)
3. Have you ever attended a meeting of Alcoholics Anonymous? (concerning your own alcohol use, not someone else's)	**Yes**	No (5)
4. Have you ever lost friends or girlfriends/boyfriends because of drinking?	**Yes**	No (2)
5. Have you ever gotten into trouble at work because of drinking?	**Yes**	No (2)
6. Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking?	**Yes**	No (2)
7. Have you ever had delirium tremens (DT), severe shaking, heard voices, or seen things that weren't there after heavy drinking?	**Yes**	No (2)
8. Have you ever gone to anyone for help about your drinking?	**Yes**	No (5)
9. Have you ever been in a hospital because of drinking?	**Yes**	No (5)
10. Have you ever been arrested for drunk driving after drinking?	**Yes**	No (2)

Appendix 7: Experiment 2 Cues Questionnaires

Cues Questionnaire (Male Participants)

1. Please indicate which of the following behaviors you observed the woman perform in the interaction you just watched with a check or "x" in the spot beside it. The behaviors *only* refer to the *woman* in the interaction.

__ long (over 10 word) answers

__ frowning

__ interrupting

__ expressing future plans different from his

__ suggesting a game of cards

__ looking away/breaking eye contact

__ raising an eyebrow

__ discussing favorite sports

__ touching his hand

__ taking jacket off

__ placing a hand on his arm

__ not being first to break pause

__ long eye contact

__ belching

__ being distracted by other people

__ short smiles

__ mentioning previous significant other

__ sitting away from him

__ disagreeing with his statements

__ agreeing with his comments

__ speaking first after a pause

__ paying attention to inanimate objects

__ saying she had noticed him before

__ putting her jacket back on

__ discussing family issues

__ wearing a long skirt

__ giving him her phone number

__ not remembering being in class with him

__ fluttering her eyelashes

__ moving away from him

Questions 2, 3, and 4 refer to the characters in the video interaction you just watched.

2. How likely do you think she will be to go out with him?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

3. If they do meet later and go on a date, how likely will she be to engage in sexual intercourse with him at the end of the date?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

4. If they meet later and go on a date, how likely will he be to force her to have sexual intercourse?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Force

Question 5 is regarding what you would do if you were in this or a similar situation.

5. Disregarding physical appearance, if you were in this situation, how likely would you be to…

a) ask a woman on a date under these circumstances?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

b) initiate sexual activity with this woman?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Initiate

c) have sexual intercourse with this woman?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

d) force this woman to have sexual intercourse?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Force

Cues Questionnaire (Female Participants)

1. Please indicate which of the following behaviors you observed the man perform in the interaction you just watched with a check or "x" in the spot beside it. The behaviors *only* refer to the *man* in the interaction.

__ long (over 10 word) answers

__ frowning

__ interrupting

__ expressing future plans different from hers

__ suggesting a game of cards

__ looking away/breaking eye contact

__ raising an eyebrow

__ discussing favorite sports

__ touching her hand

__ taking jacket off

__ placing a hand on her arm

__ not being first to break pause

__ long eye contact

__ belching

__ being distracted by other people

__ short smiles

__ mentioning previous significant other

__ sitting away from her

__ disagreeing with his statements

__ agreeing with her comments

__ speaking first after a pause

__ paying attention to inanimate objects

__ saying he had noticed her before

__ looking at his watch

__ discussing family issues

__ wearing a turtleneck

__ saying he will call her later

__ sending her for a book after she just sat

__ being nervous

__ moving away from her

Questions 2, 3, and 4 refer to the characters in the video interaction you just watched.

2. How likely do you think he will be to go out with her (not in a group)?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

3. If they do meet later and go on a date, how likely will he be to engage in sexual intercourse with her at the end of the date?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

4. If they meet later and go on a date, how likely will he be to force her to have sexual intercourse with him?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Force

Question 5 is regarding what you would do if you were in this or a similar situation.

5. Disregarding physical appearance, if you were in this situation, how likely would you be to…

a) go out with a man on a date under these circumstances?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Date

b) agree if this man were to initiate sexual activity?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Agree

c) have sexual intercourse with this man?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Have Sex

d) be forced by this man to have sexual intercourse?

1	2	3	4	5	6	7
Not Likely At All			Not Enough Info			Definitely Will Be Forced

Appendix 8: How Drunk? Scale

How drunk do you feel right now with 0 being not drunk at all and 11 being as drunk as you can imagine being?

1 2 3 4 5 6 7 8 9 10 11

Alcohol group:
Pre-questionnaire How Drunk: M=6.4, SD=2.71
Post-questionnaire How Drunk: M=6.1, SD=2.74
Pre-quest BAC: M = 0.088, SD = 0.12
Post-quest BAC: M = 0.092, SD = 0.15

Sober group:
Pre-questionnaire How Drunk: M= 0, SD= 0
Post-questionnaire How Drunk: M= 0, SD= 0
Pre- and Post-quest BAC: M= 0.00, SD= 0

Appendix 9: Experimental Consent Forms

CONSENT FORM (Large Group)

I, _____, agree to participate in the research study titled "Personality and Alcohol", which is being supervised by Dr. Amos Zeichner, Ph.D. and conducted by Anne Bartolucci. I understand that my participation is entirely voluntary; I can withdraw my consent at any time and have the results of my participation, to the extent that it can be identified as mine, returned to me, removed from the research records, or destroyed.

The following points have been explained to me:

1) The purpose of this research project is to examine how various attitudes and personality variables are related to alcohol use. I understand that this is a screening session and that I may be asked to participate in a behavioral assessment sometime in the future. If I am selected, the procedures will be explained to me at that time. The benefits of the participation are one research credit per hour of participation, access to a written description of the study, and familiarization with the process of experimental research.

2) The procedures to be followed for this study are as follows: The experimenter will administer questionnaires concerning my alcohol use and thoughts and attitudes in general. This portion of the experiment should take approximately 30 minutes to complete. If I am selected for the assessment phase, following my consent, I understand that I shall participate in this additional session of approximately 2-4 hours. I will receive **1/2 research credit** for the current session. I understand that whether or not I am selected will depend upon how many individuals with similar responses to mine have already completed the assessment phase of the experiment. There are only a specified number of individuals with particular experiences and/ or attitudes needed for the study. Prior to beginning the study, I will be assigned a random four-digit number by which I will be identified during my participation on this experiment. I understand that any information obtained from me will be identified by this number and will not be associated with my name.

3) The discomforts or stresses that may be faced during this research may include that I feel uncomfortable while asked to reveal information about my social thoughts, attitudes, and alcohol use. I may also experience discomfort due to the explicit language used in some of the questionnaires. However, I understand that my participation is entirely voluntary and that I can withdraw from the study at any time and have questionnaires that I have completed withdrawn from the study.

4) I realize that no physical risks are anticipated. Any possible social risk will be controlled by keeping the results for this participation confidential. In order to ensure confidentiality, all data will be coded with a random four-digit number assigned to me. Information linking my identity with my data (i.e., name, telephone number) will be destroyed by the end of the current academic term (i.e., at the end of the semester).

5) The results of this participation will be confidential, and will not be released in any identifiable form without my prior consent, unless otherwise required by law.

6) The investigator will answer any further questions about the research, now or during the course of the project. The contact number for the investigator (Ms. Bartolucci) and advisor (Dr. Zeichner) is 706-542-1173.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____ _____

Signature of Investigator Signature of Participant Date

PLEASE SIGN BOTH COPIES. KEEP ONE AND RETURN THE OTHER TO THE INVESTIGATOR

Research at the University of Georgia which involves human participants is carried out under the oversight of the Institutional Review Board. Questions or problems regarding these activities should be addressed to Dr. Chris Joseph, Institutional Review Board, Office of the V.P. for Research, The University of Georgia, 606A Graduate Studies Research Center, Athens, GA 30602-7411.

Consent to Participate in an Experimental Study (C-Lab)

I, _____, agree to participate in a research study titled "Effects of Alcohol on the Perception of Social Cues" conducted by Anne D. Bartolucci and Dr. A. Zeichner in the Department of Psychology at the University of Georgia (both may be reached at 542-1173). I understand that my participation is voluntary and that I can withdraw my consent at any time, have results of my participation removed from the records, or destroyed. The benefits that I can expect are: I shall receive ten dollars ($10) for my participation in the experiment, even if I choose to withdraw before the study is completed. In addition, I shall become familiarized with the process of psychological experimentation.

The purpose of this research is to gain an understanding of the effect of alcohol on perception of behaviors in heterosexual social situations. As a part of this project, I may consume one of two beverages: a .99g/kg body weight dose of alcohol mixed with orange juice (equal to 4 standard mixed drinks); or plain orange juice. Next, I shall be asked to view a brief (seven minute) video of a social interaction. After I have viewed the video, I shall complete some questionnaires. Furthermore, I understand that I must remain in the laboratory until my blood alcohol concentration has dropped to 0.04% (or 0.02% if driving a car) unless other arrangements have been made to drive me home. In order to ensure that I do not leave while still intoxicated, I understand that the researcher will hold my driver's license until my blood-alcohol level drops to the desired level. I understand that the local police shall be notified if I leave the laboratory before my blood alcohol reaches these levels if I have not arranged for someone to drive me home. Blood alcohol shall be measured using a breath test.

The experiment will last approximately 1 hour if I do not receive alcohol and approximately 2-4 hours if I receive alcohol.

Risks
There are no risks foreseen in this research.

Discomforts
The discomforts, if any, associated with this study are: Discomfort associated with alcohol intoxication (e.g., increased heart rate, decreased coordination skills, light-headedness, nausea, etc.), in rare cases.

The results of my participation will be held confidential and will not be released without my prior consent, unless required by law. Neither my name nor social security number will be associated with any of my responses.

I understand that if I have any questions about the experiment, I can call Anne Bartolucci or Dr. Zeichner at 542-1173.

By signing this form, I acknowledge that I am not a problem drinker or an alcoholic, that I have not consumed any drugs or alcohol within the last 12 hours, that I have not consumed food within the last four hours, and that I have reviewed the information on my "Medical History Form" and do not have any condition indicating that I should avoid alcohol consumption listed on that form. Furthermore, I understand that should I meet any of these aforementioned conditions that I should not participate.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

PLEASE SIGN BOTH COPIES. SIGN ONE, AND RETURN THE OTHER TO THE INVESTIGATOR.

_____ _____ _____

Signature of Investigator *Signature of Participant* *Date*

Research at the University of Georgia which involves human participants is carried out under the oversight of the Institutional Review Board. Questions or problems regarding these activities should be addressed to Dr. Cris Joseph, Institutional Review Board, Office of the V.P. for Research, the University of Georgia, 606A Graduate Studies Research Center, Athens, GA 30602-7411.

Consent to Participate in an Experimental Study (RP-Lab)

I, _____, agree to participate in a research study titled "Effects of Alcohol on the Perception of Social Cues" conducted by Anne D. Bartolucci and Dr. A. Zeichner in the Department of Psychology at the University of Georgia (both may be reached at 542-1173). I understand that my participation is voluntary and that I can withdraw my consent at any time, have results of my participation removed from the records, or destroyed. The benefits that I can expect are: I shall receive two research credits for my participation in the experiment, even if I choose to withdraw before the study is completed. In addition, I shall become familiarized with the process of psychological experimentation.

The purpose of this research is to gain an understanding of the effect of alcohol on perception of behaviors in heterosexual social situations. As a part of this project, I shall consume one of two beverages: a .99g/kg body weight dose of alcohol mixed with orange juice (equal to 4 standard mixed drinks); or plain orange juice. Next, I shall be asked to view a brief (seven minute) video of a social interaction. After I have viewed the video, I shall complete some questionnaires. Furthermore, I understand that I must remain in the laboratory until my blood alcohol concentration has dropped to 0.04% (or 0.02% if driving a car) unless other arrangements have been made to drive me home. In order to ensure that I do not leave while still intoxicated, I understand that the researcher will hold my driver's license until my blood-alcohol level drops to the desired level. I understand that the local police shall be notified if I leave the laboratory before my blood alcohol reaches these levels if I have not arranged for someone to drive me home. Blood alcohol shall be measured using a breath test.

The experiment will last approximately 1 hour if I do not receive alcohol and approximately 2-4 hours if I receive alcohol.

Risks
There are no risks foreseen in this research.

Discomforts
The discomforts, if any, associated with this study are: Discomfort associated with alcohol intoxication (e.g., increased heart rate, decreased coordination skills, light-headedness, nausea, etc.), in rare cases.

The results of my participation will be held confidential and will not be released without my prior consent, unless required by law. Neither my name nor social security number will be associated with any of my responses.

I understand that if I have any questions about the experiment, I can call Anne Bartolucci or Dr. Zeichner at 542-1173.

By signing this form, I acknowledge that I am not a problem drinker or an alcoholic, that I have not consumed any drugs or alcohol within the last 12 hours, that I have not consumed food within the last four hours, and that I have reviewed the information on my "Medical History Form" and do not have any condition indicating that I should avoid alcohol consumption listed on that form. Furthermore, I understand that should I meet any of these aforementioned conditions that I should not participate.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

PLEASE SIGN BOTH COPIES. SIGN ONE, AND RETURN THE OTHER TO THE INVESTIGATOR.

_____	_____	_____
Signature of Investigator	Signature of Participant	Date

Research at the University of Georgia which involves human participants is carried out under the oversight of the Institutional Review Board. Questions or problems regarding these activities should be addressed to **Dr. Cris Joseph**, Institutional Review Board, Office of the V.P. for Research, the University of Georgia, 606A Graduate Studies Research Center, Athens, GA 30602-7411.

Appendix 10: Debriefing Statement

Debriefing Statement

Thank you for participating in this study conducted by Anne Bartolucci and Dr. Amos Zeichner. The purpose of this study was to determine whether alcohol intoxication and strict gender role adherence would affect perception of verbal and nonverbal cues in a social interaction between a man and a woman. It has been well established that the consumption of alcohol by university students is quite prevalent, and, at times, is practiced to an excessive level. It has also been shown that alcohol consumption interferes with portions of the perceptual and information processing processes. A study of 6000 college students by the American Medical Association found that 73% of men who perpetrated sexual assault and 55% of the victims had been under the influence of alcohol or other drugs prior to the assault. We are trying to further clarify the link between alcohol, perception, and sexual coercion by determining whether alcohol intoxication and extreme gender role adherence leads to individuals missing certain verbal and nonverbal behaviors performed by a member of the opposite gender.

Your consent form will be held separately from your data, all the information you have given us is completely confidential, and it is unlikely that we will be able to link your name to your data in the future.

Should you have any concerns of a psychological nature, are distressed, or would like to talk about these concerns with a counselor, you may contact the Psychology Clinic at 542-1173 and make an appointment or receive appropriate referral information. However, no free services may be available. If you have any further questions or would like to know the results of the study, please feel free to call Ms. Bartolucci or Dr. Zeichner at 542-1173. Thank you.

Appendix 11: Means and Omnibus MANOVA Results

Means, Standard Deviations, and Number of Participants on:

Accuracy:

	Men	Women
ETOH- HI HM/HF	N=6, M=8.3, SD=1.63	N=5, M=6.8, SD=3.56
LOW HM/HF	N=7, M=9.3, SD=2.69	N=7, M=5.1, SD=1.95
SOBER HI HM/HF	N=6, M=11.2, SD=1.47	N=6, M=6.5, SD=3.78
LOW HM/HF	N=6, M=9.7, SD=1.75	N=7, M=9.0, SD=2.16

T-Date:

	Men	Women
ETOH- HI HM/HF	N=6, M=4.5, SD=1.38	N=5, M=5.6, SD=0.89
LOW HM/HF	N=7, M=4.1, SD=1.77	N=7, M=4.4, SD=0.79
SOBER HI HM/HF	N=6, M=4.5, SD=1.87	N=6, M=3.8, SD=1.84
LOW HM/HF	N=6, M=4.5, SD=1.38	N=7, M=4.9, SD=1.35

T-Sex:

	Men	Women
ETOH- HI HM/HF	N=6, M=3.7, SD=1.75	N=5, M=4.0, SD=1.00
LOW HM/HF	N=7, M=2.4, SD=1.13	N=7, M=4.4, SD=1.72
SOBER HI HM/HF	N=6, M=2.5, SD=1.23	N=6, M=1.8, SD=1.33
LOW HM/HF	N=6, M=3.3, SD=0.82	N=7, M=3.3, SD=0.95

T-Coerce:

	Men	Women
ETOH- HI HM/HF	N=6, M=3.2, SD=1.33	N=5, M=2.8, SD=0.45
LOW HM/HF	N=7, M=2.4, SD=1.99	N=7, M=3.0, SD=1.41
SOBER HI HM/HF	N=6, M=2.0, SD=1.10	N=6, M=2.0, SD=2.00
LOW HM/HF	N=6, M=1.7, SD=1.21	N=7, M=1.4, SD=1.13

S-Date:

	Men	Women
ETOH- HI HM/HF	N=6, M=4.3, SD=1.37	N=5, M=5.4, SD=0.55
LOW HM/HF	N=7, M=4.0, SD=1.83	N=7, M=3.3, SD=1.70
SOBER HI HM/HF	N=6, M=3.5, SD=1.05	N=6, M=3.8, SD=1.60
LOW HM/HF	N=6, M=4.5, SD=0.84	N=7, M=4.7, SD=1.89

S-Initiate:

	Men	Women
ETOH- HI HM/HF	N=6, M=4.3, SD=1.86	N=5, M=4.0, SD=1.58
LOW HM/HF	N=7, M=3.0, SD=2.00	N=7, M=2.0, SD=1.16
SOBER HI HM/HF	N=6, M=2.5, SD=1.52	N=6, M=1.7, SD=1.21
LOW HM/HF	N=6, M=1.7, SD=1.21	N=7, M=1.6, SD=1.13

S-Sex:

	Men	Women
ETOH- HI HM/HF	N=6, M=4.0, SD=1.55	N=5, M=3.4, SD=1.14
LOW HM/HF	N=7, M=1.6, SD=1.13	N=7, M=1.6, SD=0.79
SOBER HI HM/HF	N=6, M=2.8, SD=1.94	N=6, M=1.2, SD=0.41
LOW HM/HF	N=6, M=1.5, SD=1.23	N=7, M=1.6, SD=1.13

S-Coerce:

	Men	Women
ETOH- HI HM/HF	N=6, M=1.0, SD=0.00	N=5, M=2.2, SD=1.30
LOW HM/HF	N=7, M=1.0, SD=0.00	N=7, M=1.4, SD=1.13
SOBER HI HM/HF	N=6, M=1.0, SD=0.00	N=6, M=1.7, SD=1.63
LOW HM/HF	N=6, M=1.0, SD=0.00	N=7, M=1.1, SD=0.38

Results of Omnibus MANOVA:

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Significance	Partial Eta Squared
Corrected Model	Accuracy	170.994	7	24.428	3.983	.002	.399
	T-Date	10.518	7	1.503	.702	.671	.105
	T-Sex	33.523	7	4.789	2.879	.015	.324
	T-Coerce	18.105	7	2.586	1.257	.295	.173
	S-Date	19.496	7	2.785	1.282	.282	.176
	S-Initiate	49.206	7	7.029	3.167	.009	.345
	S-Sex	46.510	7	6.644	4.394	.001	.423
	S-Coerce	7.375	7	1.054	1.542	.180	.204
Intercept	Accuracy	3335.483	1	3335.483	543.859	.000	.928
	T-Date	1020.807	1	1020.807	476.578	.000	.919
	T-Sex	501.094	1	501.094	301.271	.000	.878
	T-Coerce	263.965	1	263.965	128.323	.000	.753
	S-Date	869.895	1	869.895	400.505	.000	.905
	S-Initiate	332.038	1	332.038	149.608	.000	.781
	S-Sex	239.541	1	239.541	158.413	.000	.790
	S-Coerce	84.119	1	84.119	123.080	.000	.746
GENDER	Accuracy	90.769	1	90.769	14.800	.000	.261
	T-Date	.894	1	.894	.417	.522	.010
	T-Sex	2.024	1	2.024	1.217	.276	.028
	T-Coerce	8.578E-04	1	8.578E-04	.000	.984	.000
	S-Date	.625	1	.625	.288	.594	.007
	S-Initiate	3.950	1	3.950	1.780	.189	.041
	S-Sex	3.721	1	3.721	2.461	.124	.055
	S-Coerce	4.589	1	4.589	6.715	.013	.138
ETOH	Accuracy	37.165	1	37.165	6.060	.018	.126
	T-Date	.743	1	.743	.347	.559	.008
	T-Sex	9.848	1	9.848	5.921	.019	.124
	T-Coerce	14.275	1	14.275	6.940	.012	.142
	S-Date	.172	1	.172	.079	.780	.002
	S-Initiate	27.136	1	27.136	12.227	.001	.225
	S-Sex	9.304	1	9.304	6.153	.017	.128
	S-Coerce	.518	1	.518	.758	.389	.018

Omnibus MANOVA Results, Continued

HM/HF	Accuracy	.165	1	.165	.027	.871	.001
	T-Date	.197	1	.197	.092	.763	.002
	T-Sex	1.682	1	1.682	1.012	.320	.024
	T-Coerce	1.607	1	1.607	.781	.382	.018
	S-Date	.248	1	.248	.114	.737	.003
	S-Initiate	14.024	1	14.024	6.319	.016	.131
	S-Sex	20.762	1	20.762	13.730	.001	.246
	S-Coerce	1.295	1	1.295	1.895	.176	.043
GENDER * ETOH	Accuracy	2.397E-02	1	2.397E-02	.004	.950	.000
	T-Date	2.219	1	2.219	1.036	.315	.024
	T-Sex	7.171	1	7.171	4.311	.044	.093
	T-Coerce	.151	1	.151	.074	.787	.002
	S-Date	2.943E-02	1	2.943E-02	.014	.908	.000
	S-Initiate	.126	1	.126	.057	.812	.001
	S-Sex	.765	1	.765	.506	.481	.012
	S-Coerce	.518	1	.518	.758	.389	.018
GENDER * HM/HF	Accuracy	1.156	1	1.156	.189	.666	.004
	T-Date	3.389E-02	1	3.389E-02	.016	.900	.000
	T-Sex	4.034	1	4.034	2.425	.127	.055
	T-Coerce	.378	1	.378	.184	.670	.004
	S-Date	2.787	1	2.787	1.283	.264	.030
	S-Initiate	3.939E-03	1	3.939E-03	.002	.967	.000
	S-Sex	4.221	1	4.221	2.791	.102	.062
	S-Coerce	1.295	1	1.295	1.895	.176	.043
ETOH * HM/HF	Accuracy	1.826	1	1.826	.298	.588	.007
	T-Date	5.030	1	5.030	2.348	.133	.053
	T-Sex	7.397	1	7.397	4.447	.041	.096
	T-Coerce	.104	1	.104	.050	.823	.001
	S-Date	14.466	1	14.466	6.660	.013	.137
	S-Initiate	4.465	1	4.465	2.012	.163	.046
	S-Sex	8.554	1	8.554	5.657	.022	.119
	S-Coerce	4.734E-02	1	4.734E-02	.069	.794	.002

Omnibus MANOVA Results, Continued

GENDER * ETOH * HM/HF	Accuracy	35.450	1	35.450	5.780	.021	.121
	T-Date	2.608	1	2.608	1.218	.276	.028
	T-Sex	.847	1	.847	.509	.479	.012
	T-Coerce	1.068	1	1.068	.519	.475	.012
	S-Date	2.132	1	2.132	.982	.327	.023
	S-Initiate	1.524	1	1.524	.686	.412	.016
	S-Sex	1.000	1	1.000	.661	.421	.016
	S-Coerce	4.734E-02	1	4.734E-02	.069	.794	.002
Error	Accuracy	257.586	42	6.133			
	T-Date	89.962	42	2.142			
	T-Sex	69.857	42	1.663			
	T-Coerce	86.395	42	2.057			
	S-Date	91.224	42	2.172			
	S-Initiate	93.214	42	2.219			
	S-Sex	63.510	42	1.512			
	S-Coerce	28.705	42	.683			
Total	Accuracy	3807.000	50				
	T-Date	1122.000	50				
	T-Sex	609.000	50				
	T-Coerce	369.000	50				
	S-Date	976.000	50				
	S-Initiate	465.000	50				
	S-Sex	339.000	50				
	S-Coerce	118.000	50				
Corrected Total	Accuracy	428.580	49				
	T-Date	100.480	49				
	T-Sex	103.380	49				
	T-Coerce	104.500	49				
	S-Date	110.720	49				
	S-Initiate	142.420	49				
	S-Sex	110.020	49				
	S-Coerce	36.080	49				