

# Club Drug Use and Intentionality in Perceptions of Rape Victims

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**Abstract** The purpose of the present study was to examine whether intentionality of alcohol or club drug use would affect observer attributions of a victim and a perpetrator after a sexual assault. Participants were 198 male and female college students sampled from a small college located in the United States. In general, participants attributed less blame to the victim, more guilt to the perpetrator, and were more likely to define the assault as rape and convict the perpetrator when the substance use was involuntary as opposed to voluntary. Participants also attributed more blame to the victim and less pleasure to the perpetrator when the sexual assault involved GHB as opposed to Everclear. Implications of these findings are discussed.

**Keywords** GHB · Perceptions · Sexual assault · Intentionality

## Introduction

This study examined whether intentionality (voluntary use vs. involuntary use) of alcohol (Everclear) or gamma hydroxybutyrate (GHB) would affect observers' percep-

tions of a victim and a perpetrator involved in a sexual assault. Under the guise of a study about memory, observers were asked to read a brief vignette in which a woman uses a substance causing her to feel sleepy and unable to resist an unwanted sexual experience. After reading this scenario, participants responded to a 33-item measure used to tap a variety of constructs thought to be associated with blame. Although involuntary substance use, particularly club drugs such as GHB, may be relevant for college-aged women, there is a paucity of research examining the influence of such factors on attributions about sexual assault situations using quantitative research methodology.

Since the early 1980s research has highlighted the pervasiveness of sexual victimization within American society (Koss 1988; Koss et al. 1987; Muchlenhard and Linton 1987; Spitzberg 1999). In addition, researchers have noted that sexual victimization experiences can lead to many negative consequences on the psychological and physical well-being of a victim of such acts (Boudreaux et al. 1998; Burnam et al. 1988; Humphrey and White 2000; Koss and Dinero 1989; White-Kress et al. 2003). Although these consequences can have major long term debilitating affects, most women who have experienced an act of sexual victimization do not report such acts or seek treatment (Coker et al. 2000; Kimerling and Calhoun 1994; Koss et al. 1987, 1988).

One reason for the underreporting of sexual victimization experiences is that many victims fear that they will be blamed for their experience. In fact, these fears are not entirely groundless given that people generally attribute more negative attributes to rape victims than other crimes (e.g., believe rape victims are more responsible for the act). In addition, confidantes or authorities tend to blame victims for somehow causing or at least contributing to unwanted

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sexual experiences (Brownmiller 1975; Campbell et al. 1999). Further, for those victims that do come forth, very few cases are actually prosecuted, and of those prosecuted only a minority are incarcerated (Frazier and Haney 1996).

Accordingly, researchers have attempted to explicate the factors that are associated with victim blaming by using scenario methodology to address attributions about victims and perpetrators of unwanted sexual experiences. Understanding the factors that may affect attributions about sexual victimization can be relevant for understanding the decision making process of third parties (e.g., law enforcement, judicial) where these individuals must determine whether or not sexual victimization has occurred (Hurt et al. 1999).

One branch of research into the factors influencing rape victim blaming has focused on the characteristics of the observers reacting to the victim. With regard to participant gender and attributions about rape, several patterns have emerged in the research literature. First, male participants attribute greater responsibility to a victim of rape than female participants judging the same vignette (Bell et al. 1994; Brems and Wagner 1994). Second, male participants are more likely to rate the victim as provoking the assault (Szymanski et al. 1993), and inviting the sexual behavior (Schult and Schneider 1991) than female participants.

A second branch of research into the factors influencing victim blaming has focused on the characteristics of the victim. This line of research has found that female rape victims are held more responsible for their assault if they are dressed provocatively, attractive, sexually promiscuous, acquainted with the offender, or have dated the offender (Bell et al. 1994; Deitz and Byrnes 1981; Whatley 2005). In addition, this line of research suggests that intoxication at the time of the assault also increases attributions of rape victim blame. Hammock and Richardson (1997) found that victim intoxication was significantly associated with attributions about victim responsibility. Similarly, Johnson et al. (1997) found that compared to the sober condition, participants who read a vignette involving victim intoxication assigned greater responsibility to the victim, believed the victim experienced less trauma, felt the perpetrator should receive less punishment, and were less certain sexual victimization had occurred.

Although there has been much research examining the effects of alcohol intoxication on attributions about sexual assault, few studies have compared a rape victim's alcohol intoxication versus drug intoxication on observers' perceptions of rape. Also, few studies have compared a rape victim's voluntary versus involuntary alcohol/drug use on observers' perceptions of rape. The former topic is important because recent data suggests that there is considerable drug use among young women (Substance Abuse and Mental Health Services Administration 2006). The latter topic is important because potential perpetrators

may use intoxication to more easily coerce a victim and/or to decrease a victim's ability to effectively resist forced sexual activity. Further, the use of intoxication by the perpetrator may decrease the level of perceived responsibility for the perpetrator by observers. In addition, observers may be less likely to view unwanted sexual activity with an intoxicated victim as a sexual assault, even though most state laws consider such activity with an intoxicated or incapacitated individual to be rape (Kahn 2004; Kahn et al. 2003; Ouimette et al. 2000).

Over the last decade, there have been increased reports in the media about the recreational use of "club drugs," such as lysergic acid diethylamide (LSD), ketamine (special K), gamma hydroxybutyrate (GHB), and 3,4-methylenedioxy-methamphetamine (MDMA or "ecstasy"), among youth in the United States. Club drugs represent a fairly diverse class of chemical substances (e.g., sedatives, stimulants, or hallucinogens) grouped because of their frequent use in specific social settings, such as, nightclubs, bars, "raves," and private parties (Simons et al. 2005; Uys and Niesink 2005). Recently, researchers have begun to investigate the incidence and prevalence rates of such drugs among specific populations. Although club drug use has not reached "epidemic proportions" as some media sources have implied, the numbers warrant concern. Recent data from large scale nationally representative surveys suggest that up to 8% of high school seniors had used a club drug in the previous 12 months (Yacoubian et al. 2003) and that at least 18% of college students have tried a club drug at least once during their lifetime (Simons et al. 2005).

Because of GHB's sedating, opioid, and euphoric properties, the drug has been used to facilitate sexual assault and is often considered a "date rape" drug. Recreational users of GHB report a general feeling of relaxation, anxiety reduction, and an increased sense of sociability after using the drug (Uys and Niesink 2005). While these effects are similar to alcohol, users of GHB report more frequent and unpredictable loss of consciousness, lasting upwards of 5 h (Freese et al. 2002). In addition, rapid intoxication and anterograde amnesia can occur after ingesting less than one teaspoon of the colorless, odorless liquid (Hensley 2002). Since the salty taste can be masked relatively easy after it is dissolved in any kind of liquid, perpetrators of sexual assault may find it easy to "spike" a potential victim's drink without their knowledge. The above stated consequences of GHB intoxication often render a potential victim more vulnerable to sexual assault and less able to recall the details of the precipitating events. In fact, 7–12% of women who were victims of rape where drugs were involved tested positive for GHB in their urine within 48 to 72 h of alleged ingestion (Hindmarch and Brinkmann 1999).

Alcohol or drug use is an important factor in most college rapes (Mohler-Kuo et al. 2004). This may be because women

who are under the influence of substances are less able to perceive risky situations and may be less likely to actively resist an assault than nonintoxicated women (Davis et al. 2004; Gidycz et al. 2006). Given that intoxication can severely limit a woman's ability to consent to sexual intercourse and the increased use of club drugs in young adults, the potential influence of club drugs on decision-making during rape trials should be an important area of focus.

In fact, researchers from the United Kingdom recently conducted a qualitative study to address whether the voluntary or involuntary use of alcohol, Ecstasy, or Rohypnol (a drug indicated for treatment of insomnia and as an anesthetic premedication) can influence juror's attributions of blame and responsibility in rapes involving intoxication (Finch and Munro 2005). Despite the warning that the study was "small-scale," the researchers report a high level of participant consensus among several key themes. Self-administration of a substance led to a reluctance to label the event as rape, a higher burden of responsibility on the victim, and a lessening of responsibility for the defendant. Also, for situations involving surreptitious administration by another, participants maintained the belief that the victim held a high level of responsibility, believing that she should have taken greater care about what she was drinking. Relatedly, the influence of "spiking" a potential victim's drink only became important to the decision-making when the defendant's motivation was sexual. That is, interfering with the victim's drink only increases perceptions of defendant responsibility if the surreptitious administration was intended to facilitate sexual intercourse. Finally, compared to alcohol and Ecstasy, surreptitious administration of Rohypnol led participants to an adamant belief that any intercourse constituted rape. Citing popular beliefs, it was believed that Rohypnol produces immediate unconsciousness and that the only reason to administer Rohypnol was to commit rape.

The present study evaluated the influence of GHB use (vs. alcohol use) and intentionality (voluntary or involuntary consumption) on observers' reactions to a victim and a perpetrator in a male–female rape vignette. Although GHB use seems relevant for college-aged women who may be most at risk for sexual assault, to date, there is a lack of research examining perceptions of sexual assault situations that include club drug use. Following from the Finch and Munro (2005) pilot study, we attempted to elucidate the factors that may influence attributions about rape situations using a quantitative research methodology. Also, given the potential confounding influence of popular beliefs of Rohypnol as the quintessential date rape pill, a similar alternative (i.e., GHB) was used. Although GHB has similar physiological effects as Rohypnol and can be used for similar clandestine purposes, it is also widely embraced as a

club drug and perhaps serves as a better match to alcohol since it is likely for certain women to self-administer GHB in some real world situations. Thus, in line with previous research, it was predicted that male participants would be more lenient toward the perpetrator and demonstrate greater victim blaming, than female participants. Given the exploratory and novel nature of this project, no specific directional hypotheses were made for substance type or intentionality on attributions about the victim and perpetrator.

## Method

### Participants

Two hundred and fifteen participants were recruited for the study. Seventeen participants were dropped from the data set because they failed the memory test manipulation check. There were no differences between the participants dropped and the remaining participants on the following demographic variables: age, sex, or ethnicity. The final data set included 198 undergraduate students from a small North-eastern college located in the U.S. The sample consisted of 68 males (34%) and 130 females, ranging in age from 18 to 48 years ( $M=19.9$ ,  $SD=3.0$ ). About 79.3% of the participants self-identified as Caucasian ( $n=157$ ), 6.1% identified themselves as African American ( $n=12$ ), 5.6% as Asian ( $n=11$ ), 6.1% as Latino ( $n=12$ ), and 3% as other ( $n=6$ ). Most participants ( $n=172$ ) were recruited through a sampling system established at the college. These participants received extra credit toward a psychology course for their voluntary participation. Also, a small portion of the participants ( $n=27$ ) was chosen using a clustered sampling of the resident halls on campus. Four dormitories were selected at random and depending on dormitory size, one to three floors were randomly selected to be sampled. Research assistants collected data from people who voluntarily wanted to participate in the study. Compensation in the form of candy was given. Although minimal, any missing data for individual items were replaced using the mean score of all other participants for that item. Analyses revealed no significant differences between participants recruited from the college sampling system and the cluster sample (i.e., demographic variables, all dependent measures, and missing data); therefore, all analyses represent a combination of these samples.

### Measure

#### *Vignette Stimulus*

The vignette was developed specifically for the purpose of this study. Participants were asked to read one of four

sexual assault scenarios describing an interaction between a man and a woman in which the type of substance used (alcohol vs. GHB) and intentionality of the woman's substance use (voluntary vs. involuntary) was manipulated (see [Appendix](#)). The vignette describes a situation involving a 19-year-old, single female undergraduate student attending a college party. After pouring herself a cup of fruit juice, she was approached by a male resident of the house. While the conversation ensued, the victim either voluntarily added Everclear or GHB into her own drink, or the perpetrator poured Everclear or GHB into the victim's drink without her knowledge. After the victim began showing signs of sleepiness, the perpetrator invited her into his bedroom. The victim attempted to verbally resist the assault and ultimately felt too groggy to physically resist. After reporting the incident to the police the following day, the offender was identified as a 21-year-old student who claimed that the sexual intercourse was consensual.

#### *Poststimulus Questionnaire*

In order to investigate the influence of substance type and intentionality on male and female participants' attributions of blame, a 33-item measure, based on George and Martinez (2002), was developed. A 10-point Likert scale was used for each question in order to assess participant attributions about the sexual assault situation. Several of the items had been used elsewhere (George and Martinez 2002) while others had been developed specifically for this study. In accord with these researchers, we assessed a variety of constructs potentially associated with assignment of blame including: Was it rape? (one item), victim culpability (nine items), perpetrator culpability (nine items), and victim credibility (10 items). In addition, several individual questions were developed by the current researchers to address additional potential factors associated with blame including: victim pleasure (one item), victim trauma (one item), perpetrator guilt (one item), and likelihood to convict (one item).

#### *Was it Rape?*

This item assessed the degree to which the participants viewed the described incident as rape.

#### *Victim Culpability and Perpetrator Culpability*

Eighteen items assessed the culpability of the victim and the perpetrator. These questions evaluated the degree of blame and responsibility attributed to each party as well as the degree to which each party could be held accountable

for the incident. Responsibility was measured in terms of the ability to have acted differently, having a choice to do so, understanding that the behavior is wrong and foreseeing consequences, and intentionality toward causing the incident. There were a total of nine questions that assessed victim culpability and nine questions that assessed perpetrator culpability.

#### *Victim Credibility*

Ten items assessed the credibility of the victim's report. Four questions assessed participants' opinion on the victim's refusal (e.g., the extent to which she meant it when she said no, how much did she want the perpetrator to stop, how much did she want to have sex with him, and to what extent did the victim say no in order to not appear easy). Three questions assessed participants' opinions regarding the definitiveness of the victim's refusal.

#### *Victim Pleasure, Victim, Trauma, and Perpetrator Pleasure*

Two items assessed the degree to which the victim and the perpetrator received pleasure from the incident. Another item assessed the degree to which the victim experienced trauma from the incident.

#### *Perpetrator Guilt and Likelihood to Convict*

Two items assessed the degree to which the participants thought the perpetrator experienced guilt following the incident and the extent to which the perpetrator was likely to be convicted.

#### *Memory Test*

Immediately following the poststimulus questionnaire, a five item multiple-choice memory test was administered as a manipulation check. This test assessed the degree to which participants could remember important details from the story. Participants were asked to: (a) describe the female student; (b) recall the type of beverage the female student was drinking; (c) recall where the incident occurred; (d) describe the actions taken by the female student following the incident; (e) recall what the male student told the police upon questioning. Participants who were unable to answer all five questions correctly were dropped from further analyses.

#### *Marlowe–Crowne Social Desirability Scale*

The Marlowe–Crowne Social Desirability Scale is a 33-item true/false measure that assesses an individual's tendency to present in a socially desirable manner (Crowne



and Marlowe 1960). The scale was included in the study to control for the effects of participants' tendencies to distort their self-presentation by presenting themselves in a positive light. An example of an item is, "No matter who I'm talking to, I'm always a good listener." Higher scores on the scale indicate greater socially desirable responding (Crowne and Marlowe 1960).

### Design and Procedure

The study was presented to participants under the guise of a project on memory for sexual assaults. This deception was used to minimize socially desirable responding. Participants read through the sexual assault description and then completed the above described questionnaires. Male and female participants were randomly assigned to receive packets describing the sexual assault of a woman who used Alcohol or GHB either voluntarily or involuntarily. Thus, three bi-level independent variables were factorially crossed: gender of participant, type of substance used (alcohol or GHB), and intentionality of consumption (voluntary or involuntary).

All participants from the psychology sampling system were run through the procedure in small groups of mixed gender. Prior to inception of the experiment, participants were seated in separate desks in a classroom in a way that others could not read their responses. Next, participants were given verbal and written directions and then asked to read the assigned vignette scenarios. After reading the vignette, participants were asked to complete the poststimulus questionnaire. Next, participants were asked to complete the memory test, which assessed the ability of participants to recall basic details from the scenario. Finally, the participants completed the Marlowe–Crowne Social Desirability questionnaire to control for socially desirable responding. After completing these measures, participants were asked to place them in a designated envelope to ensure confidentiality. Prior to leaving, participants received research credit and were debriefed. For the participants from the cluster sample, all procedural elements were identical; however, participants completed the questionnaires individually in their dorm room while research assistants waited outside. Also, participants received candy as compensation for their participation in this research study.

### Results

In accord with George and Martinez (2002), we developed scale scores for all multi-item dependent measures. Scales were constructed by utilizing principal component analyses with varimax rotation, factor eigenvalues greater than one, an item loading cutoff criterion of 0.50, and acceptable

internal consistency. In addition, several individual questions tapping independent constructs served as additional dependent measures. Using social desirability as a covariate, a series of 2 (participant gender)  $\times$  2 (substance type)  $\times$  2 (intentionality) between groups ANOVAs were performed on all dependent measures (scale scores and individual questions) and are highlighted below.

### Attributions About the Victim

#### *Victim Culpability*

Principal component analysis of the nine items that assessed victim culpability revealed two components accounting for 59.4% of the variance. Four items loaded on the first component: selfishness, foresight or awareness of the consequences, intent, and blame ( $\alpha=.78$ ) forming a victim blame scale. Three items loaded on the second component: capability to have changed what happened, having a choice, and overall responsibility ( $\alpha=.76$ ) forming a victim responsibility scale.

For the victim blame scale, the ANOVA revealed a main effect for participant gender,  $F(1,189)=6.64$ ,  $p=.011$ ,  $\eta=.18$ . Male participants ( $M=2.3$ ,  $SD=1.5$ ) rated the victim as more to blame than female participants ( $M=1.9$ ,  $SD=1.0$ ). For the victim responsibility scale, the ANOVA revealed a main effect for substance type,  $F(1,189)=6.00$ ,  $p=.015$ ,  $\eta=.24$  and a main effect for intention,  $F(1,189)=11.11$ ,  $p<.001$ ,  $\eta=.24$ . Participants rated the victim as more responsible when she used GHB ( $M=4.9$ ,  $SD=2.2$ ) than when she used Everclear ( $M=4.1$ ,  $SD=2.0$ ). Also, participants rated the victim as more responsible when she voluntarily used a substance ( $M=5.1$ ,  $SD=2.3$ ) than when she involuntarily used a substance ( $M=4.0$ ,  $SD=1.9$ ).

#### *Victim Credibility*

Principal component analysis of the ten items that assessed credibility of the victim's refusal revealed three components accounting for 61.6% of the variance. Four items loaded on the first component: did she mean it when she said no, how much did she really want him to stop, how much did she want to have sex with him and how likely is it that she said no to not seem loose or easy ( $\alpha=.86$ ) forming the credibility of victim intentions scale. Three items loaded on a second component: how definite was her refusal, how likely the perpetrator understood that she meant no, and how credible was the refusal ( $\alpha=.79$ ) forming the credibility of victim refusal scale. In addition, two items loaded on a less reliable third component that was dropped from further analyses. Scores on the credibility of victim intentions scale were skewed positively toward seeing the victim as relatively high on credibility for her intentions,

while scores on the credibility of victim refusal scale were skewed negatively toward seeing the victim as relatively low on credibility for her refusal.

For the credibility of victim intentions scale, the ANOVA revealed a main effect for participant gender,  $F(1,189) = 4.90$ ,  $p = .028$ ,  $\eta = .16$ . Male participants ( $M = 3.6$ ,  $SD = .6$ ) believed the victim's intentions was less credible than female participants ( $M = 3.4$ ,  $SD = .5$ ). There were no significant effects for the credibility of victim refusal scale.

#### Victim Pleasure

Responses to this item were positively skewed toward relatively low ratings of victim pleasure. The ANOVA revealed a significant main effect for participant gender  $F(1,189) = 8.60$ ,  $p = .004$ ,  $\eta = .21$ . Male participants ( $M = 2.2$ ,  $SD = 1.5$ ) believed the victim experienced more pleasure than female participants ( $M = 1.7$ ,  $SD = 1.0$ ).

#### Victim Trauma

Responses to this item were negatively skewed toward relatively high ratings of victim trauma. The ANOVA revealed a significant main effect for participant gender  $F(1,189) = 4.50$ ,  $p = .035$ ,  $\eta = .15$ . Female participants ( $M = 9.0$ ,  $SD = 1.4$ ) believed the victim experienced more trauma than male participants ( $M = 8.7$ ,  $SD = 1.3$ ).

#### Attributions About the Perpetrator

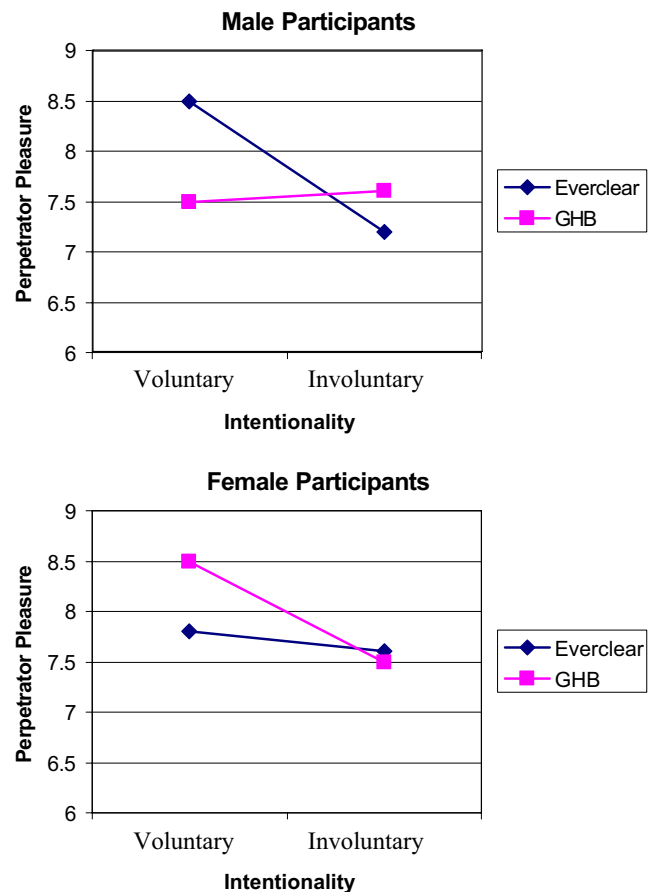
##### Perpetrator Culpability

Principal component analysis of the nine items that assessed perpetrator culpability revealed three components accounting for 61.9% of the variance. Four items loaded on the first component: selfishness, blame, cause, and overall responsibility ( $\alpha = .77$ ) forming the perpetrator culpability scale. Components two and three proved unreliable and were dropped from further analyses. In general, scores on the perpetrator culpability scale were skewed negatively toward seeing the perpetrator as relatively high in culpability.

The ANOVA performed on the perpetrator culpability scale revealed only a main effect for participant gender,  $F(1,189) = 4.12$ ,  $p = .044$ ,  $\eta = .14$ . Female participants ( $M = 9.5$ ,  $SD = .8$ ) rated the perpetrator as more culpable than male participants ( $M = 9.2$ ,  $SD = .9$ ).

##### Perpetrator Pleasure

Responses to this item were negatively skewed toward relatively high ratings of perpetrator pleasure. The ANOVA revealed a significant main effect for substance type,  $F(1,189) = 4.60$ ,  $p = .033$ ,  $\eta = .15$ . Participants perceived the



**Fig. 1** Graphic depiction of the three-way interaction between perpetrator pleasure, intentionality, and type of substance.

perpetrator to experience more pleasure when the victim imbibed Everclear ( $M = 8.0$ ,  $SD = 1.8$ ) than when the victim imbibed GHB ( $M = 7.5$ ,  $SD = 1.8$ ). There was also a three-way interaction between gender, substance type, and intention  $F(1,189) = 3.98$ ,  $p = .047$ ,  $\eta = .14$  (see Fig. 1). Male participants believed the perpetrator experienced more pleasure when the victim voluntarily imbibed Everclear ( $M = 8.5$ ,  $SD = 2.0$ ) than involuntary use of Everclear ( $M = 7.5$ ,  $SD = 2.2$ ), involuntary use of GHB ( $M = 7.6$ ,  $SD = 1.5$ ), and voluntary use of GHB ( $M = 7.2$ ,  $SD = 2.0$ ). Female participants believed the perpetrator experienced more pleasure when the victim involuntarily imbibed Everclear ( $M = 8.5$ ,  $SD = 1.2$ ), than voluntary use of Everclear ( $M = 7.8$ ,  $SD = 1.9$ ), voluntary use of GHB ( $M = 7.6$ ,  $SD = 1.8$ ), and involuntary use of GHB ( $M = 7.5$ ,  $SD = 1.9$ ).

##### Perpetrator Guilt

Responses on this item were negatively skewed toward rating the perpetrator as “very guilty.” The ANOVA revealed significant main effects for participant gender,  $F(1,189) = 5.01$ ,  $p = .026$ ,  $\eta = .16$  and intention,  $F(1,189) = 4.65$ ,  $p = .032$ ,

$\eta=.15$ . Female participants ( $M=9.2$ ,  $SD=1.4$ ) rated the perpetrator as more guilty of committing rape than male participants ( $M=8.8$ ,  $SD=1.7$ ). For all participants, the perpetrator was rated as more guilty when the rape involved involuntary imbibing of a substance ( $M=9.2$ ,  $SD=1.1$ ) than rapes involving voluntary imbibing of a substance ( $M=8.8$ ,  $SD=1.8$ ).

#### *Was it Rape?*

Responses on this item were negatively skewed toward rating the vignette as “definitely rape.” The ANOVA revealed significant main effects for participant gender,  $F(1,189)=9.77$ ,  $p=.002$ ,  $\eta=.22$  and intention,  $F(1,189)=8.51$ ,  $p=.004$ ,  $\eta=.21$ . Female participants ( $M=9.3$ ,  $SD=1.1$ ) were more likely to view the incident as rape than male participants ( $M=8.7$ ,  $SD=1.7$ ). For all participants, rapes involving involuntary imbibing of a substance ( $M=9.3$ ,  $SD=1.0$ ) were rated higher than rapes involving voluntary imbibing of a substance ( $M=8.9$ ,  $SD=1.6$ ).

#### *How Likely to Convict?*

Responses on this item were negatively skewed toward a relatively high likelihood rating of convicting the perpetrator for sexual assault. The ANOVA revealed significant main effects for participant gender,  $F(1,189)=8.76$ ,  $p=.003$ ,  $\eta=.21$  and intention,  $F(1,189)=3.72$ ,  $p=.055$ ,  $\eta=.14$ . Female participants ( $M=8.8$ ,  $SD=1.5$ ) were more likely to convict the perpetrator of sexual assault than male participants ( $M=8.1$ ,  $SD=2.1$ ). All participants were more likely to convict the perpetrator of sexual assault when the rape involved involuntary imbibing of a substance ( $M=8.8$ ,  $SD=1.6$ ) than rapes involving voluntary imbibing of a substance ( $M=8.4$ ,  $SD=1.9$ ). There was also a substance type by intention interaction that approached significance,  $F(1,189)=3.5$ ,  $p=.06$ ,  $\eta=.13$ . Compared to rapes involving imbibing of Everclear (voluntary,  $M=8.6$ ,  $SD=1.7$ ; involuntary,  $M=8.5$ ,  $SD=1.8$ ), participants were less likely to convict the perpetrator of sexual assault when the victim used GHB voluntarily ( $M=8.1$ ,  $SD=2.1$ ) and more likely to convict the perpetrator of sexual assault when the victim used GHB involuntarily ( $M=9.0$ ,  $SD=1.2$ ).

## Discussion

The present study compared male and female observers’ reactions to acquaintance rape victims and perpetrators that had either voluntarily or involuntarily ingested Everclear or GHB. Overall, participants perceived the assault as rape, and perceived the perpetrator as responsible for the assault regardless of the substance ingested and regardless of the

voluntary or involuntary nature of the substance ingestion. Similarly, participants perceived the victim as highly traumatized and as experiencing low levels of pleasure from the assault regardless of the substance ingested and regardless of the voluntary or involuntary nature of the substance ingestion.

Consistent with prior research, there were significant differences in the reactions of male and female observers. Compared to male observers, female observers perceived the victim as less culpable for the assault, as experiencing less pleasure from the assault, and as experiencing more trauma from the assault. Compared to male observers, female observers were also more likely to consider the assault a rape, to perceive the perpetrator as guilty, and to see themselves as more likely to convict the perpetrator should they have an opportunity to do so.

Although males and females may have differed in the degree to which they perceived the victim and perpetrator on the above variables, they did not differ in the relative direction of their attributions. In fact, males and females tended to perceive the victim as not culpable for the assault, as experiencing low levels of pleasure, and as experiencing high levels of trauma. Similarly, both groups saw the perpetrator as guilty, worthy of conviction, and the incident as constituting rape. Thus, males were not insensitive to the plight of the victim or the guilt of the perpetrator. The difference between the groups was one of degree.

Overall, male and female observers were largely similar in their perceptions regarding the intentionality of the substance use, which emerged as a main effect in the findings. Victims who voluntarily ingested Everclear or GHB were assigned greater culpability for the assault than victims who had involuntarily ingested Everclear or GHB. Similarly, perpetrators that assaulted the voluntarily intoxicated victim received lower ratings of guilt and lower likelihood of conviction compared with perpetrators who assaulted a victim they had surreptitiously drugged with Everclear or GHB. Finally, incidents that involved voluntary use of Everclear or GHB were less likely to be considered rape by observers than incidents that involved the surreptitious drugging of the victim.

The above findings regarding intentionality suggest that context can have a significant impact on attributions about rape victims that have used alcohol or drugs. While alcohol and drug use in rape victims has been found to exert a negative effect on observer attributions in several studies, it is apparent from the findings of the present study that observers consider the context in which the substance use occurs. If the context suggests that the substances were a tool used by the perpetrator to secure a victim, attributions toward the victim are more sympathetic, and attributions toward the offender more punitive.

The only variable for which the effect of intentionality significantly differed between male and female observers

was the degree of pleasure attributed to the perpetrator. Male observers provided their highest ratings of perpetrator pleasure when the victim voluntarily ingested Everclear. Female observers provided their highest ratings of perpetrator pleasure when the victim was surreptitiously drugged with Everclear. This suggests that female observers may perceive sexual assault perpetrators as especially aroused by premeditated overtly forced sex. Male observers, on the other hand, may perceive sexual assault perpetrators as more aroused by sex in which the perpetrator's actions have a greater opportunity to be viewed as unplanned and as a miscommunication or misunderstanding between the victim and perpetrator.

The degree of victim culpability and pleasure attributed to the perpetrator were the only variables for which the type of substance exerted a main effect on attributions. First, observers exposed to the GHB vignettes attributed higher levels of victim responsibility to the victim than observers exposed to the Everclear vignettes. Second, observers exposed to the Everclear vignettes attributed greater perpetrator pleasure than observers exposed to the GHB vignettes. It is unclear what these findings indicate in the absence of other significant main effects by substance type. Perhaps a perpetrator that sexually assaults a woman intoxicated on GHB produces different assumptions about his sexuality than a perpetrator that sexually assaults a woman intoxicated on Everclear. Although if this is the case, the assumptions apparently do not extend to blame for the offense.

The relative lack of significant findings regarding substance type suggests two primary possibilities. The first is that type of substance does not significantly impact attributions regarding rape victims or offenders. It may be that Everclear and GHB are essentially perceived equally in the mind of observers when it comes to making judgments about victims and offenders as long as the substances are mind altering and could plausibly impair the victim. A second possibility is that observers do perceive substances differently, but that in this case they were largely unaware of the dangerous properties of GHB and its use as a “date rape” drug. It may be that using a more well known “date rape” drug such as Rohypnol (commonly referred to as “roofies”), which has received widespread media attention, would have produced different results. Recent research suggests the former possibility is more likely (Brown et al. 2006). College students perceive GHB as a substance that makes the user sedated and vulnerable (Brown et al. 2006). The fact that college students perceive GHB in this light is consistent with the overall low levels of responsibility assigned to the victim and high levels of responsibility assigned to the perpetrator found in the present study.

The use of a college student population as observers in the present study can be considered both a strength and a limitation. It can be considered a strength in that college women have higher rates of sexual assault than women in the general population, and that the majority of the offenses committed against them are by male college students with whom they are acquainted (Fisher et al. 2002). Thus, the use of a college student population as observers is highly relevant for a study that uses a stimulus such as the one utilized in the present study. On the other hand, a college student population, especially one that is predominantly female (as in the present study) is also likely to be more sensitive to the victim than a population of older noncollege students, skewing the attributions toward the victim and perpetrator.

Another limitation of the study was the manner in which intentionality was manipulated. Observers were presented with a vignette in which the victim either voluntarily used Everclear or GHB, or was drugged by the perpetrator. This approach does not provide understanding into observer reactions to sexual assaults that involve a blend of both intentional substance use on the part of the victim and predatory behavior on the part of the perpetrator, such sexual assaults may, in fact, be more common than the kind of situations used in the present study. For example, it would be useful to know how observers would respond to a sexual assault that involved intentional alcohol use by the victim and surreptitious drugging by the perpetrator, or a sexual assault that involved intentional alcohol use by the victim and verbal attempts by the perpetrator to increase the victim's substance use so that he could more easily take advantage of her later.

The present study provides a first examination in the literature of the relation between GHB use and intentionality in rape attributions. The gender of the observer and the intentionality of the victim were ultimately more important influences on attributions than the nature of the substance. Future research into rape attributions and substance use should attempt to more clearly delineate the variable of intentionality by modifying the relative degree of voluntariness on the part of the victim, and the relative degree of coercion or deceit on the part of the perpetrator. Future research into rape attributions and substance use should also continue to examine the impact of other specific substances that are commonly abused on college campuses and associated with date rape. Such research can potentially elucidate substances that uniquely bias observers against victims.

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## Appendix

### Brief Crime Report

#### *Alleged Victim*

Sara is a 19-year-old single, white, undergraduate student who lives in an urban community. Sara, an only child, was raised in a middle class family. She graduated with honors from her high school and later enrolled in a 4-year university. Sara lives in an apartment near campus with three roommates. The campus is located in the heart of a northeastern city. Sara serves as vice president of a school organization and has many friends and acquaintances. However, she seldom goes to parties and has little experience with alcohol and drugs.

#### *Alleged Incident*

The following events allegedly occurred on the evening of September 16, 2003 at around midnight: After spending a significant amount of time dancing at a house party, Sara decided to take a break and have a drink. She poured a cup of heavily sweetened fruit punch and was simultaneously approached by a young man. The man introduced himself as Steve, a resident of the house holding the party. Steve and Sara began to make small talk. A few minutes later *Steve refilled Sara's drink and put some GHB (a popular club drug) in Sara's cup without her noticing.* Sara proceeded to finish her punch, without tasting the *drug/alcohol* while the casual conversation continued. Steve later asked Sara to go to the dance floor where she began to feel extremely sleepy. Steve invited her up to his room, where he forced Sara to have sexual intercourse. Sara had initially said "no" but felt too groggy to physically resist. Sara awoke the next morning, left the house, and went to the local police office. She provided some identifying information about the offender, including the location of the house.

#### *Alleged Offender*

Police identified the alleged offender as Steve L., a 21-year old, student at the university. When questioned by police, Steve denied sexually assaulting Sara, claiming that the sex was consensual.

\*The above represents the involuntary GHB use scenario. Except for the italics text, all other elements remained the same for the alternative scenarios.

Changes to italics for voluntary GHB use scenario:

Sara was offered some GHB (a popular club drug) by a friend and proceeded to put it in her own cup.

Changes to italics for involuntary alcohol use scenario:

Steve poured Everclear (one of the most potent brands of alcohol sold in America) in Sara's cup without her noticing.

Changes to italics for voluntary alcohol use scenario:

Sara was offered some Everclear (one of the most potent brands of alcohol sold in America) by a friend and proceeded to pour it into her own cup.

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