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## The effects of pre-existing beliefs about alcohol consumption on predicting victim blame in incapacitated and drug-facilitated rape

Robyn Ellis

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## ABSTRACT

### THE EFFECTS OF PRE-EXISTING BELIEFS ABOUT ALCOHOL CONSUMPTION ON PREDICTING VICTIM BLAME IN INCAPACITATED AND DRUG-FACILITATED RAPE

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Alcohol-involved sexual assault is more common on college campuses and appears to garner more negative social reactions, such as victim blaming, than forcible assault. There are two specified types of alcohol-involved sexual assaults identified in the literature: drug and alcohol-facilitated rape (DAFR) and incapacitated rape (IR). Factors such as rape myths, rape scripts and alcohol expectancies also have been implicated in victim blaming. This study sought to test Abbey's model of alcohol's role in sexual assault in predicting victim blame by a third-party observer and examine differences in victim blame between IR and DAFR. Participants included 227 undergraduates at a large midwestern university who read either an IR or DAFR vignette and completed measures of victim and perpetrator blame, alcohol expectancies, rape myth acceptance, and traditional gender roles, as well as sexual victimization and perpetration history. Results offer preliminary support for the Abbey model of alcohol's role in sexual assault, with vulnerability to sexual coercion expectancies predicting victim blame and aggressive expectancies for men predicting perpetrator blame. No differences in victim blame were found between the IR and DAFR groups. Implications and future directions are discussed.

NORTHERN ILLINOIS UNIVERSITY  
DEKALB, ILLINOIS

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THE EFFECTS OF PRE-EXISTING BELIEFS ABOUT ALCOHOL CONSUMPTION  
ON PREDICTING VICTIM BLAME IN INCAPACITATED AND  
DRUG-FACILITATED RAPE

BY  
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## CHAPTER 1

### INTRODUCTION

Sexual assault has gained media attention in the last decade due to the alarmingly high prevalence rates in women and the posttraumatic consequences. Experiencing a sexual assault has been linked to negative short-term and long-term outcomes such as posttraumatic stress disorder (PTSD; Brown, Testa, & Messman-Moore, 2009; Kilpatrick, Edmunds, & Seymour, 1992; Najdowski & Ullman, 2009), substance use (Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997; Ullman, Relyea, Peter-Hangene, & Vasquez, 2014), as well as an increased risk for revictimization (see Classen, Paresh, & Aggarwal, 2005; Walker, Freud, Ellis, Fraine, & Wilson, 2019, for reviews). National estimates find that 1 in 5 women (18.3%) report attempted or completed rape in their lifetime (Black et al., 2011), and research has shown that women on college campuses are especially at high risk for sexual assault (Conley et al., 2017; Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Lawyer, Resnick, Bakanic, Burkett, & Kilpatrick, 2010). A recent review of the college sexual assault literature found that the prevalence of women reporting unwanted sexual contact, excluding rape, clustered around 20%, whereas estimates of forcible completed rape of women ranged from 0.5% to 8.4%, and estimates of completed rape under the influence of drugs or alcohol ranged between 1.8% and 14.2% (Fedina, Holmes, & Backes, 2016).

While high prevalence rates of sexual assault have gained attention in the last twenty years, the estimates of prevalence are likely too low. Confounding estimates of prevalence,

sexual assault goes unreported for many reasons including concerns of disbelief from the individual or institution that the victim disclosed to as well as fears of being blamed for the assault (Kilpatrick et al., 2007; see Sabina & Ho, 2014; Ullman, 1999, 2010, for reviews). Coined the “second injury” of victims (Burgess & Holmstrom, 1978; Symonds, 1975), rejection or negative reactions to a disclosure are associated with poorer outcomes for the victim, including increased posttraumatic symptoms, self-blame, as well as increased symptoms of depression and anxiety (Orchowski, Untied, & Gidycz, 2013, Ullman & Filipas, 2001; Ullman, Filipas, Townsend, & Starzynski, 2007; Ullman, Starzynski, Long, Mason, & Long, 2013). The detrimental effects of negative social reactions to disclosure emphasize the need to better understand factors that lead to negative reactions.

Victim blaming is especially prevalent in sexual assaults that involve alcohol consumption by the victim (Cameron & Stritzke, 2003; Norris, 1994; Peter-Hagene & Ullman, 2015; Richardson & Campbell, 1982; Schuller & Stewart, 2000; Untied, Orchowski, Mastroleo, & Gidycz, 2012; see Grubb & Turner, 2012, for review). While rates of alcohol consumption for victims and perpetrators at the time of the assault are comparable across studies, ranging from about 30 to 79% (Abbey, Ross, & McDuffie, 1994; Brecklin & Ullman, 2010; Crowell & Burgess, 1996; Reed, Amaro, Matsumoto, & Kaysen, 2009), assignment of responsibility for the assault is paradoxical. While alcohol consumption by victims makes them more culpable for their assault, perpetrator intoxication excuses their behavior, resulting in more blame attributed to victims than perpetrators when alcohol is involved in an assault (Abbey, 2011a; Cameron & Stritzke, 2003; Norris, 1994; Richardson & Campbell, 1982; Schuller & Stewart, 2000; Starfelt,

Young, White, & Palik, 2015; see Abbey, Ross, McDuffie, & McAuslan, 1996; Grubb & Turner, 2012, for reviews).

The implications and frequency of victim blaming in alcohol-related sexual assaults is especially important to study given that roughly half of all sexual assaults involve alcohol (Abbey, McAuslan, & Ross, 1998; Abbey, Ross, McDuffie, & McAuslan, 1996; Gidycz, Warkentin, & Orchowski, 2007; see Abbey, 2011b; Abbey, Wegner, Woerner, Pegram, & Pierce, 2014, for reviews). On college campuses, these findings may be of particular concern, given the high prevalence rates of alcohol use (U.S. DHHS, 2013) and sexual victimization (Conley et al., 2017; Fedina et al., 2016; Kilpatrick et al., 2007; Lawyer et al., 2010). Although nearly 60% of college students may consume alcohol in any given month (U.S. DHHS, 2013), a recent study estimated the prevalence of incapacitated rape at around 14% (Fedina et al., 2016), suggesting that most college women who consume alcohol are not sexually assaulted. Research into the relationship between alcohol consumption and sexual assault has been a focus of the literature more recently in order to better understand what role alcohol plays in sexual assault.

Alcohol expectancies, or beliefs about alcohol's effects and individuals who consume alcohol (Fromme, Stroot, & Kaplan, 1993; Goldman et al., 1999), have been shown to be predictive of behavior while intoxicated and have implications for attributions of blame after a sexual assault has occurred. These expectancies have also been associated with predicting alcohol use, misuse and problem drinking (e.g., Pabst, Kraus, Piontek, Mueller, & Demmel, 2013; Tuliao & McChargue, 2014), factors that have also been associated with increased risk for sexual assault (see White & Hingson, 2014, for review).

## CHAPTER 2

### REVIEW OF THE LITERATURE

In the last twenty years, research has identified two categories of sexual assault involving alcohol: incapacitated (IR) and drug and alcohol-facilitated rape (DAFR/DFR). These categories describe the manner by which a victim becomes intoxicated, either voluntarily (i.e., IR) or involuntarily (i.e., DAFR; Kilpatrick et al., 2007; Lawyer et al., 2010). Historically, cases of DAFR and IR have been studied as one group in comparison to forcible rapes (i.e., sexual intercourse obtained through force or threat of force, excluding the use of alcohol; Lawyer et al., 2010). While the research is limited, IR and DAFR have been separately studied more recently, due to growing interest in differing posttraumatic outcomes (Richer et al., 2015).

This study seeks to add to the literature on alcohol's role in victim blaming by investigating the role of voluntary/involuntary intoxication in assignment of responsibility. First, the importance of understanding the origins of negative reactions is presented through a review of the literature on the consequences of negative reactions for victims of sexual assault. Second, mechanisms of alcohol's effects are discussed. Third, IR and DAFR are defined, and empirically based differences between the categories of assault are presented. Fourth, factors that affect attributions of blame are discussed. Fifth, the theoretical framework of alcohol's role in sexual assault is presented, and alcohol's expectancies on blame attributions are discussed, as well as the potential impact in understanding blame attribution in DAFR and IR. Finally, through the presentation of this study, the potential role of alcohol expectancies in predicting attributions of

victim blame from third-party observers is discussed, as well as the assignment of blame due to the mechanism of intoxication by the victim.

### Consequences of Negative Social Reactions

The literature on social reactions to disclosure of a sexual assault has shown that the type of reaction received can have a large impact on the victim's recovery, either positively or negatively (e.g., Filipas & Ullman, 2001; Orchowski et al., 2013, Ullman & Filipas, 2001; Ullman et al., 2007; Ullman et al., 2013). Disclosure is defined in the literature as a discussion of a sexual assault experience, which does not necessarily require having a formal (e.g., police) record or report of the assault (see Fisher, Diagle, Cullen, & Turner, 2003). Although sexual assault is recognized as one of the most underreported crimes (Catalano, 2006; Fisher et al., 2003; see Sabina & Ho, 2014, for review), a recent meta-analysis found that informal disclosure rates clustered around 65%, and ranged from 41% for rape to 100% for more broadly defined sexual assault (Sabina & Ho, 2014), which suggests high levels of informal disclosure.

One possible explanation for the discrepancy between formal reporting and informal disclosure rates is fear of negative reactions (Kilpatrick et al., 2007; see Sabina & Ho, 2014; Ullman, 1999, 2010, for reviews). Negative reactions to disclosure include reactions that blame, stigmatize, or attempt to control the victim as well as egocentric reactions, focused on the individual disclosed to, that take focus from the victim (Ullman, 2000, 2010). These negative responses to sexual assault victims have been associated with the development and severity of PTSD symptoms, more severe depression and anxiety, lowered perceived control over recovery, increased shame, as well as engagement in problem drinking (DeCou, Cole, Lynch, Wong, &

Matthews, 2017; Orchowski et al., 2013; Ullman & Filipas, 2001; Ullman et al., 2007; Ullman & Peter-Hagene, 2014; Ullman et al., 2013). It has been hypothesized that because disclosing an assault to family and friends is common, negative reactions are potentially more detrimental due to the expected supportive nature of these relationships (Campbell, Dworkin, & Cabral, 2009). These types of negative reactions from historically supportive networks may also dissuade a victim from disclosing to another person (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007).

Coping strategies have also been implicated in the detrimental consequences of negative social reactions to disclosure (Ullman & Peter-Hagene, 2014). Ullman and Peter-Hagene (2014) found that negative reactions such as victim blame and trying to control the victim were related to the victim's engagement in avoidant forms of coping. These avoidant coping strategies may arise due to increased feelings of helplessness and self-blame for the assault after receiving negative social reactions and may lead to more long-term effects due to the maintenance of PTSD symptomatology through avoidance (Ullman & Peter-Hagene, 2014). The implication that social reactions can affect coping strategies post-assault highlights the need to better understand where negative reactions originate, as to inform psycho-education regarding sexual victimization. To begin understanding where negative reactions originate in alcohol-involved sexual assault, it is important to understand the role alcohol plays in sexual assault broadly, including the effects of alcohol and types of alcohol-related sexual assault.

## Effects of Alcohol

### Acute Effects of Alcohol on the Brain

Alcohol has widespread effects on the brain, including several neurotransmitter systems and regions of the brain implicated in a wide variety of functions (see Bjork & Gilman, 2014, for review). Both primarily excitatory and inhibitory neurotransmitter systems have been shown to be affected by alcohol consumption, including the gamma-aminobutyric acid (GABA), glutamate, serotonin, dopamine and acetylcholine systems (Eckardt et al., 1998). Further, there is research that suggests the interaction of alcohol with neurotransmitter systems is dependent on the location of the receptors, wherein alcohol may have excitatory effects in one region but inhibitory effects in another when examining a single neurotransmitter system (see Eckardt et al., 1998; Oscar-Berman & Marinković, 2007, for reviews). Some of the brain regions alcohol consumption is posited to affect include the ventral striatum, dorsolateral prefrontal and mesial cortex, the amygdala, and the dorsolateral inferior prefrontal and parietal cortices, implicated in a wide range of functions including emotional processing, error detection, self-control and learning (Bjork & Gilman, 2014).

Specific to sexual assault, the acute effects of alcohol on regions of the brain associated with error detection (i.e., anterior cingulate cortex [ACC]) and emotional processing may increase the chance for a potential forced-sex situation. The ACC is associated with behavioral monitoring and error detection, processes that have been shown to be blunted with alcohol consumption (see Ridderinkhof, Ullsperger, Crone, & Nieuwenhuis, 2004, for review). Further, alcohol has been shown to impact emotional processing, specifically the processing of fearful or

threatening stimuli. Alcohol may blunt the activity of the amygdala and inhibit engagement of the limbic structures that enable appropriate response to threatening stimuli (Bjork & Gilman, 2014), potentially leading an individual to be more susceptible to a potential sexually assaultive situation.

### Alcohol Myopia Model

The alcohol myopia model (AMM) is a widely accepted theory of the effects of alcohol on behavior (Giancola, Josephs, Parrot, & Duke, 2010; Steele & Josephs, 1990). The model posits that alcohol impairs attentional capacity through its effects on effortful control processes. The effects are a reduction in the number of internal and external cues that can be attended to and processed, otherwise referred to as “alcohol myopia.” As a result, all attentional processing resources are designated to the most salient, provocative and easily processed cues in the environment, while less salient cues are not fully processed (Giancola et al., 2010). This model has been used in explaining alcohol’s role in aggression broadly (e.g., Abbey, 2002; Aviles, Earleywine, Pollock, Stratton, & Miller, 2005), engagement in sexually risky behavior (e.g., MacDonald, MacDonald, Zanna, & Fong, 2000; Wray, Simons, & Maisto, 2015), as well as sexually aggressive behavior (i.e., sexual assault; e.g., Abbey, 2002; see Giancola et al., 2010, for review).

Studies of risky sexual behavior and alcohol inform the sexual assault literature in identifying what cues in a sexual situation are salient and may translate into a sexually aggressive situation involving alcohol. Several studies have shown that, consistent with the AMM, alcohol consumption narrows attention to sexual arousal cues, which appear to be more

salient than sexual risk cues (e.g., risk for STI; Davis, Hendershot, George, Norris, & Heiman, 2007; MacDonald et al., 2000). These findings also may have implications for sexual inhibitory cues, such as a woman's refusal or resistance to sexual advances.

### Alcohol Administration Studies

Alcohol administration studies offer a unique experimental method of studying alcohol's effect on individuals in proxy sexual assault scenarios. There are four types of proxies consistently used: written vignettes, audiotapes, videotapes, or use of a confederate, although alcohol administration studies are limited in the literature (see Abbey & Wegner, 2015, for a review). With the exclusion of the use of a female confederate, proxies involve asking the participant to respond to a sexual assault situation being presented as if they were the individual involved. Studies that involve non-confederate proxies are recognized to be limited by mundane realism because individuals are asked to imagine themselves involved but are not responding to a stimulus in their environment. In contrast, using a confederate introduces more experimental realism but is still limited, due to the inability to study sexually aggressive behaviors directly. Despite limitations, the balanced placebo design of most alcohol administration studies allows for causal links to be established due to alcohol consumption and provide valuable insight in the study of alcohol's role in sexual assault (see Abbey & Wegner, 2015, for a review).

A recent review of alcohol administration studies found that within the small number of studies using written vignette proxies ( $n=6$ ), alcohol did not have a direct effect on willingness to use force but was found to have a direct effect on how the male participants perceived the female victim in the vignette. The men perceived the woman's character and sexual arousal, as

well as their own feelings of sexual arousal, anger and entitlement to sex, differently based on their consumption of alcohol (Davis, Norris, George, Martell, & Heiman, 2006; Norris, Davis, George, Martell, & Heiman, 2002; see Abbey & Wegner, 2015, for review). Interestingly, two vignette studies which assessed for individual beliefs regarding alcohol (i.e., alcohol expectancies) found that participants who believed alcohol increased their sex drive (Norris et al. 2002) or that alcohol increased their aggressiveness (Davis, 2010) endorsed perceiving the man's behavior as sexually aggressive.

In a study using a videotape proxy, Noel, Maisto, Johnson, and Jackson (2009) investigated the effects of alcohol on willingness to act sexually aggressively in the presence of salient inhibitory cues (e.g., the victim wearing a Rape Crisis Center T-shirt). They hypothesized, according to the alcohol myopia theory, that salient inhibitory cues would make the intoxicated men less likely to endorse sexually aggressive behavior. Their hypotheses were not supported, finding more approval for the use of force in the alcohol consumption groups (Noel et al., 2009). Interestingly, Noel et al. (2009) also found an interaction between self-reported sexual dominance scores and alcohol in endorsement of the use of force. Specifically, there was no relationship found between sexual dominance and use of force in the sober and placebo groups, but higher sexual dominance scores were related to more approval of force in the alcohol consumption group. Similar findings have been reported with interaction effects between alcohol and hostility ratings on willingness to use coercion and misperceptions of a woman's sexual intent (Abbey, Parkhill, Jacques-Tiura, & Saenz, 2009).

In contrast with vignette and videotape proxies, audiotape proxy studies have found main effects for alcohol consumption on assessment of sexual aggressiveness (Gross, Bennett, Sloan,

Marx, & Juergens, 2001; Marx, Gross, & Adams, 1999; Marx, Gross, & Juergens, 1997; see Abbey & Wegner, 2015, for review). The audiotapes used in these studies depict male and female college students on a date returning to the man's apartment; they begin kissing and the interaction escalates until the man forcibly rapes the woman despite her refusals. Participants are asked to stop the tape when they believe the man should stop (i.e., response latency), which is operationalized as a measure of sexual aggression (Gross et al., 2001; Marx et al., 1999; Marx et al., 1997; see Abbey & Wegner, 2015, for review). Interestingly, in these studies, those who believed that they consumed alcohol had longer response latency than those who did not believe that they had consumed alcohol, and there was also no interaction between reported alcohol expectancies and alcohol consumption (Gross et al., 2001; Marx et al., 1999; Marx et al., 1997). These findings suggest that individuals' beliefs about alcohol consumption may drive their behaviors and perceptions of sexual aggressiveness with and without actual alcohol consumption, highlighting the importance of alcohol expectancy research.

Lastly, in a confederate proxy alcohol administration study, Abbey, Zawacki and Buck (2005) found that alcohol consumption affected cue recall as well as perceived sexual behaviors. In this study, male college students were placed in either the sober, placebo or intoxicated conditions and interacted with a female confederate for 20 minutes during which she would deliver four positive (e.g., compliments) and four negative cues (e.g., looking around the room and not at the participant) at predetermined times during the interaction. Abbey and colleagues (2005) found that the intoxicated group perceived both themselves and the confederate to be acting sexually during their conversation. Similarly, when asked to indicate behaviors exhibited by the confederate during the conversation, the intoxicated group recalled more positive cues

than the placebo and sober groups (Abbey et al., 2005). This study suggests that alcohol may play a role in what cues are salient in an interaction as well as perceptions of sexual behaviors, both of which may inform alcohol's role in sexual assault.

Alcohol administration offers a unique opportunity to investigate the effects of alcohol in a proxy sexual assault scenario and test the alcohol myopia theory. These studies have shown that alcohol affects perceptions of sexual intent, sexual arousal, feelings of entitlement to sex (Abbey et al., 2009; Davis et al., 2006; Norris et al., 2002; see Abbey & Wegner, 2015, for review), and endorsement of sexually aggressive behavior (Davis, 2010; Noel et al., 2009; Norris et al., 2002), providing evidence for alcohol myopia, the reduction in the number of internal and external cues able to be attended to and processed, as sex-related cues may be the most salient cues. Alcohol administration studies have also shown evidence that beliefs about alcohol affect perceptions of sexual aggressiveness, regardless of alcohol consumption (Gross et al., 2001; Marx et al., 1999; Marx et al., 1997), demonstrating the salience of alcohol expectancies. Further, a recent meta-analytic review found that the effects of alcohol on aggression were small (Crane, Godleski, Przybyla, Schlaugh, & Testa, 2016), providing further evidence that alcohol influences but does not account for all the variance in aggressive behavior. Alcohol expectancies may set the stage for an interaction while alcohol consumption may limit the cues an individual can attend to and bias those cues towards perceptions of sexual behavior that implicate alcohol in sexual assault. Additionally, the method by which the individual becomes intoxicated may be important in understanding alcohol's role in sexual assault and subsequent social reactions.

### Incapacitated (IR) and Drug and Alcohol-Facilitated Rape (DAFR)

Incapacitated rape is defined as unwanted oral, anal, or vaginal penetration after the victim has voluntarily taken drugs or consumed alcohol to the degree that they cannot consent (Kilpatrick et al., 2007; Lawyer et al., 2010). Drug and alcohol-facilitated rape (DAFR) is defined as unwanted oral, anal, or vaginal penetration after the victim has become intoxicated by drugs or alcohol involuntarily and cannot consent (i.e., the assailant gives the victim drugs or alcohol without the victim's permission; Kilpatrick et al., 2007; Lawyer et al., 2010). For comparison, forcible rape is defined as unwanted oral, anal or vaginal penetration obtained through force or threat of force (Lawyer et al., 2010). While drugs such as gamma-hydroxybutyric acid (GHB) and drugs colloquially referred to as "roofies" are popularly associated with DAFR, in a recent international meta-analysis, alcohol was found to be the only specific substance associated with DAFR (Anderson, Flynn, & Pilgrim, 2017). These findings replicate previous results that found alcohol to be the most commonly used substance in the perpetration of sexual assault (e.g., Koss, 1985; Scott-Ham & Burton, 2005; see Johnson, 2014, for a review), pointing to the importance of understanding alcohol's role in sexual assault.

Research has found that DAFR and IR occur more frequently on college campuses than forcible rape (Kilpatrick et al., 2007; Lawyer et al., 2010; see Fedina et al., 2016, for review) and account for an estimated 22% of lifetime rapes (Kilpatrick et al., 2007). Victims of DAFR or IR report their assaults less frequently than victims of forcible rape, citing fears of being held responsible (Wolitzky-Taylor et al., 2011), and report more feelings of self-blame than forcible rape victims (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001). In comparison to forcible rape victims, DAFR and IR victims are also less likely to seek post-assault medical treatment

(Resnick et al., 2000; Zinzow, Resnick, Barr, Danielson, Kilpatrick, 2012); one study found forcible rape victims were three times more likely to seek out medical services (Walsh et al., 2016). The extant literature categorizes sexual assault as forcible or DAFR/IR, rarely separating these two categories, revealing a need for research to better understand these distinct categories of alcohol- involved sexual assault. Due to heightened concerns of negative social reactions, to explore how blame is attributed in IR and DAFR, other factors that affect blame attribution must also be understood.

### Factors Affecting Blame Attribution

#### Traditional Gender Role Adherence

Traditional gender roles have been implicated in helping understand allocation of blame in the wake of a sexual assault. An example of a commonly held traditional gender role would be that men are aggressive and women are passive in a sexual scenario (Yamawaki, 2007). These traditional gender roles may influence attributions of blame by setting the expectations for sexual encounters (e.g., the man initiates and the woman must be reluctant) and may contribute to the development of misconceptions about rape (e.g., women are supposed to be coy, so rape must include high levels of resistance; Burt, 1980). Much research has pointed to traditional gender role adherence as a mediating variable between observer gender and attributions of blame (e.g., Anderson & Lyons, 2005; Grubb & Turner, 2012). Studies that have investigated the role of traditional gender role adherence on attributions of blame have found that participants who endorse higher levels of traditional gender role acceptance placed more blame on the victim (Angelone, Mitchell, & Grossi, 2014; Grubb & Harrower, 2008; see van der Bruggen & Grubb,

2014, for review) and that these effects are stronger when the victim knows the perpetrator (i.e., acquaintance or date rape; White & Yamawaki, 2009). Further, other study has shown that traditional gender role adherence also predicts rape myth acceptance (see Suarez & Gadalla, 2010, for review), another factor important in understanding attributions of blame.

### Rape Myths and Rape Scripts

Rape myth theory has also been used to help explain why victim blaming occurs in sexual assault. Rape myths were originally defined as persistent, stereotypical false beliefs about rape, including beliefs about the victims, the perpetrators, and characteristics of the rape (Burt, 1980). Examples of common rape myths include that rape must be completed using violence or physical force, women who are intoxicated at the time of their assault are somewhat responsible because of their consumption of alcohol (Peterson & Muehlenhard, 2004), rape is perpetrated by strangers (Hockett, Smith, Klausing, & Saucier, 2016), and women often lie when they disclose a sexual assault (Moor, 2010). Rapes that do not adhere to an individual's rape myth stereotype may not be considered a "real" rape, and responsibility for the assault may be attributed to a combination of characteristics of the victim (e.g., what the victim was wearing, if the victim was drinking; see Hockett, Saucier, & Badke, 2016; Hockett, Smith, et al., 2016, for reviews).

Some research has found gender differences in acceptance of rape myths, specifically that men adhere to more rape myths than women (Hayes, Lorenz, & Bell, 2013; see Hockett, Smith, et al., 2016; Suarez & Gadalla, 2010; van der Bruggen & Grubb, 2014, for reviews). A recent meta-analysis found that men held significantly more negative attitudes towards women, such as blaming the victim, but interestingly, as the vignettes presented to the participants became more

rape-myth consistent, the differences between men's and women's attributions of blame were smaller (Hockett, Smith, et al., 2016). In conjunction with the Hockett, Smith and colleagues (2016) findings, an older meta-analysis found that the more men were exposed to and/or perpetrated rape, the more negative their views of rape and rape victims became, but this phenomenon was not found for women as their exposure to and/or experience of rape increased (Anderson, Cooper, & Okamura, 1997). Similar findings were reported in a more recent study of rape myths and beliefs about alcohol (Starfelt et al., 2015), where no gender differences were found but greater support of rape myths significantly predicted victim blame. To illustrate the salience of these beliefs, a recent study found that those who endorsed more rape myths tended to distort their memory for a presented rape scenario to fit their pre-existing beliefs that the victim was to blame (Dawtry, Cozzolino, & Callan, 2019). Said differently, the participants who more strongly believed in rape myths predetermined that the victim was to blame for the assault and their memory for the presented stimuli was altered to fit within this view (i.e., that the victim was to blame; Dawtry et al., 2019). These findings point to the importance of beliefs about rape in evaluating a victim and highlight the importance of targeting rape myths in the work to prevent victim blame.

Rape scripts are also a type of false belief about rape but are more specific to the behaviors and experience of a sexual assault (Hockett, Saucier, & Badke, 2016; Littleton & Dodd, 2016; Peterson & Muelenhard, 2004; see Hockett, Smith, et al., 2016, for review). To better understand rape scripts, consensual sexual scripts have been studied (e.g., Littleton, 2011; Masters, Casey, Wells, & Morrison, 2013). Sexual scripts, both consensual and nonconsensual, are impacted by the media, peers, and family, as well as personal experiences (Ryan, 2011).

These scripts are cognitive structures that define the roles and expectations of individuals involved in a sexual situation (Byers, 1996; Littleton, 2011; Masters et al., 2013). An empirically supported, commonly shared sexual script portrays women as the sexual gatekeepers, who set the limits for the sexual encounter, and men as the individuals who initiate and pursue sexual activity (Byers, 1996; Littleton, 2011; Masters et al., 2013). Women within the gatekeeper role should desire intimacy and commitment, whereas men are perceived to have strong, uncontrollable sexual drives that motivate them to pursue multiple sexual partners (Littleton, 2011; Masters et al., 2013).

Consensual sexual scripts that adhere to traditional Western gender roles may provide the framework for nonconsensual sexual scripts and victim blaming. Individuals with sexual scripts that uphold the idea that women are the sexual gatekeepers to the uncontrollable sexual urges of men may believe that it is the woman's responsibility to stop a man's sexual advances, and when she fails to do so (i.e., a sexual assault), it is her own fault and may not be considered a rape (Edwards, Turchik, Dardis, Reynolds, & Gidycz, 2011; Ryan, 2011). Similarly, if a man cannot control his sexual behavior, a sexual assault is not his responsibility due to his uncontrollable sexual urges (Edwards et al., 2011; Ryan, 2011). These traditional sexual scripts are implicated in what is societally deemed a "real rape," which includes the assault of a woman in a blitz attack in an isolated area by a stranger while the woman engages in strong resistance (Bondurant, 2001; DuMont, Miller, & Myhr, 2003; Estrich, 1987; Littleton & Axsom, 2003; Ryan, 2011).

Rape myths and rape scripts are mutually reinforcing, informing each other in their development (Hockett, Saucier, & Badke, 2016). For example, if an assault between acquaintances occurs, and both the man and the woman have been drinking, the man may believe

that when a woman says “no” she means “yes” because she is not supposed to show sexual interest (i.e., his rape script does not include verbal resistance). Additionally, due to the fact that the woman was drinking alcohol, the man may believe that she is responsible for what happens to her because she chose to drink alcohol (i.e., his rape myth includes this belief). The culmination of both the man’s rape myths and rape scripts may result in the man denying the incident as sexual assault, and if it is classified as rape (by the man and/or outside sources), the man would not believe he was at fault. Through rape scripts and rape myths, many instances of sexual assault are not perceived to be assault or are perceived to be at least partially the victim’s fault due to the situation not aligning with rape scripts or myths (Hayes et al., 2013). Because rape myths and rape scripts are entangled, it is important for psycho-education to include both in explaining misperceptions of sexual assault as well as challenge these beliefs with education about the prevalence and characteristics of rape experiences, to help reduce victim blaming due to these cognitive biases about rape.

### Defensive Attribution Hypothesis

The defensive attribution hypothesis proposed by Shaver (1970) states that people will assign blame for an event based on their perception of themselves and how similar that perception is to the victim, as well as how likely they feel that they could be in a similar situation (personal and situational relevance, respectively). The more similar, i.e., the more one identifies with the victim, the less likely one is to assign blame to the victim (see van der Bruggen & Grubb, 2014, for review). Similarly, if an individual believes that she or he could end up in a similar situation (i.e., situational relevance) then that person is likely to assign blame to the

perpetrator or other factors than the victim as a protective mechanism (Shaver, 1970; see van der Bruggen & Grubb, 2014, for review).

Empirically, the defensive attribution hypothesis has been used to help explain victim blaming in sexual assault (e.g., Amacker & Littleton, 2013; Donovan, 2007). Amacker and Littleton (2013) specifically measured perceived similarity of female undergraduates to a vignette of a college freshman female on a first date that ended in no sexual contact, consensual sex, or sexual assault. The sample was representative of victimization rates of college females, with 31.3% reporting attempted or completed sexual assault. The authors found that perceived similarity was only related to blame attribution in the sexual assault condition, and as perceived similarity to the victim increased, responsibility attributions of the victim decreased, as predicted by the defensive attribution hypothesis. While similarity to the victim may account for some of the victim blaming found in alcohol-involved sexual assault, an individual's beliefs regarding alcohol consumption and the effects of alcohol may contribute to his or her feelings of similarity or difference, as well as affect attributions of blame toward a victim.

### Alcohol Expectancies

Alcohol expectancies are beliefs about the effects of alcohol on the consumer as well as beliefs about individuals who consume alcohol (Fromme et al., 1993; Goldman et al., 1999). These expectancies have been shown to predict alcohol use, misuse and problem drinking (e.g., Pabst et al., 2013; Tuliao & McChargue, 2014). Expectancies have also been implicated in alcohol-related sexual assault in a number of ways, such as the misunderstanding of sexual interest cues (e.g., Abbey, 2002; see Abbey, Wegner, Woerner, Pegram, & Pierce, 2014, for

review) and aggressive behavior while intoxicated (e.g., Davis, 2010). Interestingly, some research supports that alcohol expectancies fully mediate the relationship between alcohol consumption and behavior, with the expectancies acting like self-fulfilling prophecies (George, Stoner, Norris, Lopez, & Lehman, 2000; Tuliao & McChargue, 2014). Additionally, a recent study found that perpetrators of sexual assault with victims who had consumed alcohol reported greater alcohol expectancies related to sexual drive and stereotypes about women who consume alcohol (e.g., “If a woman gets really drunk at a party, she is looking to be taken advantage of sexually”) when compared to perpetrators of sexual assault whose victims are sober (Pegram et al., 2018), providing evidence for the salience of these pre-existing beliefs on behavior and the need for research examining their effects.

Positive alcohol expectancies (such as, “When I drink alcohol I have more fun”) have been associated with alcohol use, specifically higher levels of alcohol consumption and problem drinking (Park & Grant, 2005; Tuliao & McChargue, 2014). This is especially important given that heavy episodic alcohol use increases risk for sexual assault victimization and perpetration (e.g., Testa & Cleveland, 2017). More recently, the field of alcohol expectancies has been shifting to recognize the impact of environment and situational context on alcohol expectancies (LaBrie, Grant, & Hummer, 2011; Monk & Heim, 2013; Wall, McKee, & Hinson, 2000). For example, a study on positive alcohol expectancies for sexual enhancement reported increased endorsement of this alcohol expectancy in a college social setting (LaBrie et al., 2011). Other research has shown that positive alcohol expectancies are more strongly endorsed when individuals are exposed to alcohol-related stimuli (Monk & Heim, 2013), which may occur more frequently in college settings due to the norms surrounding drinking in social settings (e.g.,

drinking games). Many studies have investigated the effects of alcohol expectancies both in isolation (e.g., Park & Grant, 2005) as well as in conjunction with situational contexts (e.g., Monk & Heim, 2013), but they lack theoretical framework to explain how alcohol expectancies, alcohol consumption and situational factors interact to provide the potential for sexual assault.

### Abbey (1996, 2002) Model

Abbey (1996, 2002) outlines a model of alcohol's role in sexual assault to help explain the gap between risk for assault and prevalence of alcohol use. To briefly outline the model, alcohol begins to play a role in the potential for a sexual assault situation in the form of an individual's pre-existing belief systems related to dating and sexual behavior, alcohol's effect on sex and behavior, as well as pre-existing beliefs about women who drink alcohol.

Subsequently, the existence of these pre-existing beliefs is more likely to influence behavior when an individual is drinking and will underlie the way an individual perceives social cues in a heterosexual interaction, enhancing perceived sexual intent. The alcohol impairs the woman's ability to rectify her misperceived intentions and her ability to resist the sexual assault. After an assault, the use of alcohol can both justify the man's actions and make the woman feel responsible for her assault. Finally, these cognitions of blame attribution feed back into the pre-existing beliefs each individual holds about alcohol and its effects on sexual behavior (Abbey 1996, 2002). This model is limited to explaining heterosexual interactions, which is a limitation of the generalizability of the model but is representative of the majority of sexual assaults (Black et al., 2011; see Appendix L for an illustration of this model).

### Pre-Existing Beliefs

The model breaks pre-existing beliefs that influence alcohol's role in sexual assault into five categories: beliefs about dating and sexual behavior, beliefs about the acceptability of men forcing sex on women, alcohol and gender role norms, beliefs about alcohol's effect on behavior, and beliefs about women who drink. Many of these categories could be identified under the umbrella of alcohol expectancies and rape myths.

In the beliefs about dating and sexual behavior that exist prior to a sexual assault, Abbey (1996, 2002) highlights the potential for traditional gender roles to facilitate acceptance of sexual aggression. Adherence to traditional gender roles, such as beliefs that women are the gatekeepers of sexual activity and that when women say "no" they mean "convince me," has major implications when interpreting interactions between a man and a woman. These beliefs are similar to those which are associated with rape myth acceptance and can lead to similar consequences to the rape myth/script literature, such as victim blaming, reviewed previously. The second category of pre-existing beliefs, regarding the acceptability of men forcing sex on women, also has clear implications for sexual assault and victim blaming. The model presents examples of such beliefs suggesting that forced sex is okay if the woman originally agreed but changed her mind or if the perpetrator and victim are dating exclusively (Abbey et al., 1996). In fact, recent data supports the commonality of these types of beliefs, citing 63% of college students agreed that it is okay for a man to pressure a woman for sex if she has been kissing him (Aronowitz, Lambert, & Davidoff, 2012).

Beliefs about alcohol and gender role norms make up the last three categories of pre-existing beliefs in the model. Abbey and colleagues (Abbey, 2002; Abbey et al., 1996) posit that alcohol expectancies work in conjunction with traditional gender roles to create specific

behavioral expectancies for both men and women when they consume alcohol. Men are deemed to be the sexual initiator, and women the sexual gatekeepers, and this relationship is extended into interactions that involve alcohol (Abbey, 2002; Abbey et al., 1996). The alcohol expectancies that an individual may hold will influence her or his behavior and how that person interprets alcohol-related cues (Starfelt et al., 2015). Beliefs about women who drink are also included in this model, given that research has consistently found that men perceive women who drink alcohol as more promiscuous, willing to engage in sexual intercourse, and more responsive to sexual advances (e.g., George, Cue, Lopez, Crowe, & Norris, 1995; Kanin, 1985; Koukounas, Djokic, & Miller, 2015).

#### Misperception of Intent

Due to the alcohol myopia effects on attentional processes, men and women who consume alcohol have limited capacity to attend to cues. According to the model, it is the interactions between pre-existing beliefs and the alcohol myopia that lead to a misperception of intent (Abbey, 2002; Abbey et al., 1996). For example, if a man adheres to traditional gender norms, in that he is the initiator of sexual activity, and he also believes that women who drink are more sexually promiscuous, then under the influence of alcohol he may perceive a woman's friendly interaction as sexual intent. Given the salience of alcohol expectancies on predicting behaviors, it is likely that individuals' pre-existing beliefs prime their attentional faculties, which become limited when they drink. Wegner and Abbey (2016) found that factors such as hostile masculinity (i.e., distrustful, insecure attitudes towards women) and impersonal sexual orientation (i.e., engagement in sexual activity without intimacy or commitment) predicted

misperception of sexual intent cues in women. Furthermore, Wegner and Abbey (2016) also found that drinking in sexual situations was associated with impersonal sexual orientation, but there was no direct effect of alcohol on misperception of sexual intent. These findings illustrate how alcohol on its own does not necessarily predict sexual assault outcomes; rather, the pre-existing beliefs about alcohol an individual may hold are important factors to consider in understanding misperception of sexual intent.

#### Potential for Forced-Sex Situation

Next, according to the model, there is the potential for a forced-sex situation in which the misperception of sexual intent influences the behavior of the man and the same attentional limits (i.e., alcohol myopia) of the man also affect the woman's ability to realize the misperception of her cues (Abbey, 2002; Abbey et al., 1996). In the same way that the pre-existing beliefs and interpretation of cues lead the man to believe the woman is sexually interested, the woman may believe that her platonic interests have been received and the alcohol may make it less likely for her to recognize that they have not. In addition, if the woman does realize that her intent has been misperceived and she is not forceful or direct in rectifying the misperception, the indirect or polite refusal may be reinforcement of the traditional gender role stereotype of playing "coy" (Abbey, 2002; Abbey et al., 1996). Unfortunately, alcohol also makes it less likely that a woman could resist a sexual assault (Davis, Stoner, Norris, George, & Masters, 2009; Testa, VanZile-Tamsen, Livingston, & Buddie, 2006; see Abbey, 2002; Abbey et al., 1996, for reviews), which makes it more likely for a sexual assault to occur while intoxicated.

### Attributions of Blame

According to the model, after a sexual assault occurs, attributions of blame are assigned paradoxically, with men feeling as though intoxication excuses their behavior and women feeling responsible for the assault due to their intoxicated state (Abbey, 2002; Abbey et al., 1996). A large literature base backs this theoretical notion, finding that victims who were intoxicated during their assault are viewed to be responsible by a third party, whereas perpetrators are excused (Abbey, 2011a; Cameron & Stritzke, 2003; Norris, 1994; Richardson & Campbell, 1982; Schuller & Stewart, 2000; Starfelt et al., 2015; see Abbey et al., 1996; and Grubb & Turner, 2012, for reviews). In the model, these attributions feed back into the pre-existing beliefs, informing the beliefs about alcohol specifically, that may influence behavior at a future point in time (Abbey, 2002; Abbey et al., 1996).

## CHAPTER 3

### METHODOLOGY

Given that the consequences of negative social reactions to the disclosure of sexual assault have been well documented in the literature (Orchowski et al., 2013; Ullman & Filipas, 2001; Ullman et al., 2007; Ullman & Peter-Hagene, 2014; Ullman et al., 2013), research that seeks to identify factors that influence negative reactions to disclosure is warranted. Negative reactions, such as victim blaming, are frequent in sexual assaults involving alcohol, which is of concern given the high rates of alcohol consumption (U.S. DHHS, 2013) as well as sexual victimization on college campuses (Fedina et al., 2016). While much research has been devoted to the investigation of sexual assault involving alcohol on college campuses, prior research has not studied the differences in negative social reactions to the two categories of alcohol-involved sexual assault (e.g., DAFR and IR) identified in the literature. In fact, the literature examining differences in IR and DAFR is quite limited, as generally alcohol-involved sexual assault is categorized as a combination of both IR and DAFR (e.g., IR/DAFR). Further, while rape myths and rape scripts have been implicated as influential in victim blaming (Hockett, Smith, et al., 2016; Starfelt et al., 2015), the influence of alcohol expectancies on negative social reactions has largely been omitted from studies investigating victim blame in cases of alcohol-involved sexual assault.

This study sought to investigate two major research questions involving the role of alcohol expectancies in victim blaming, as well as differences in attributions of blame for both

the victim and perpetrator between IR and DAFR, through the use of vignettes. First, guided by the Abbey model (2002; Abbey et al., 1996) of alcohol's role in sexual assault, this study sought to investigate whether alcohol expectancies can predict ratings of attributions of blame by individuals not directly involved in the sexual assault (i.e., a third party or observer). Secondly, this study sought to explore whether blame is assigned differently dependent on the mechanism of intoxication, specifically if attributions of blame differ between IR and DAFR, due to the lack of research comparing these groups. To answer these questions, vignettes depicting IR and DAFR rapes were utilized, with participants randomized into either condition. Participants were asked to read their respective vignette and make ratings of responsibility for the victim and perpetrator. Acceptance of alcohol expectancies was measured, and rape myth acceptance, traditional gender role adherence, victimization and perpetration history were also assessed to isolate the effects of alcohol expectancies on attributions of blame.

## Hypotheses

### Hypothesis 1: Replication of the Extant Literature

It was expected that this study would replicate findings in the extant literature regarding the predictive power of rape myth acceptance (Edwards et al., 2011; Ryan, 2011; Starfelt et al., 2015) and specific alcohol expectancies (Starfelt et al., 2015) in predicting victim blame; therefore, the following hypotheses were made:

H1a: After removing shared variance with alcohol expectancies and any significant covariates, higher levels of acceptance of rape myths would be associated with higher levels of perceived victim responsibility in both the IR and DAFR groups.

H1b: Based on Starfelt and colleagues (2015), it was expected that after removing shared variance between all alcohol expectancies and rape myth acceptance, higher levels of alcohol expectancies, including increased aggression, increased sexual drive, or sexual vulnerability, would be associated with higher levels of perceived victim responsibility in the IR group.

Hypothesis 2: Alcohol Expectancies Predicting Ratings of Attributions of Blame

H2a: After removing shared variance between all alcohol expectancies and rape myth acceptance, higher levels of alcohol expectancies that include increased sexual arousal would be associated with higher levels of perceived victim responsibility in both the IR and DAFR groups.

H2b: After removing shared variance between all alcohol expectancies and rape myth acceptance, higher levels of alcohol expectancies that women who drink are more promiscuous or more sexually available would be associated with higher levels of perceived victim responsibility in both the IR and DAFR groups.

H2c: After removing shared variance between all alcohol expectancies and rape myth acceptance, higher levels of alcohol expectancies for vulnerability to sexual coercion for women would be associated with higher levels of perceived levels of victim responsibility in both the IR and DAFR groups.

H2d: After removing shared variance between all alcohol expectancies and rape myth acceptance, higher levels of aggressive alcohol expectancies for men would be associated with higher levels of perceived victim blame in both the IR and DAFR groups

H2e: After removing shared variance between all alcohol expectancies and rape myth acceptance, higher levels of aggressive alcohol expectancies for men would be associated with lower levels of perceived perpetrator blame in both the IR and DAFR groups.

### Hypothesis 3: Attributions of Blame by Mechanism of Intoxication

Hypotheses regarding differences in IR and DAFR were based in the extant literature that collapses them into one group due to the exploratory nature of this study's second research question. Therefore, it was hypothesized that the mean victim blame score in the IR group would be significantly higher than the mean victim blame score in DAFR group, due to the voluntary intoxication in IR.

## Method

### Participants

Participants in this study were 304 students from the undergraduate pool enrolled in the introductory psychology class at a large midwestern university. Participants were required to be at least 18 years old. Two cases were identified as duplicates and removed, 10 other cases were removed as they did not contain any data for any of the variables of interest, and 65 were removed due to failing to complete the comprehension questions after two attempts. The final sample was comprised of 227 participants (55.5% female,  $M_{\text{age}} = 19.88$ ,  $SD = 3.84$ , range = 18 – 55). Regarding race, participants identified as 54.6% White, 18.5% Latino or Hispanic or of Spanish origin, 17.6% African American or Black, 4.8% Asian or South Asian, 3.5% Other, and 0.9% preferred not to respond. Students who participated were compensated with research

credits for their class. Participants were randomly assigned into two conditions: to read either a vignette describing an IR ( $n = 108$ ) or a vignette describing a DAFR ( $n = 119$ ).

### Power Analysis

G\*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) analyses were conducted to determine the necessary sample size for this study. Given the number of statistical analyses needed to address all the hypotheses of this study, several G\*Power analyses were conducted. Based on Hockett, Saucier, and Badke's (2016) vignette study on the effects of rape myths, rape scripts and common experiences of women on perceptions of the victim, effect sizes in the medium (e.g.,  $\eta^2 = .08$ ) to large range (e.g.,  $\eta^2 = .16$ ) were utilized for the  $t$ -test analysis. The G\*Power analysis for a  $t$ -test to detect a medium effect ( $d = 0.5$ ), with at least 80% power, yielded a sample size of 102 participants, while the analysis with a large effect ( $d = 0.8$ ) with the same parameters yielded 42 participants. Unfortunately, many of the studies looking at the predictive power of alcohol expectancies or rape myths did not report their effect sizes (e.g., Hayes et al., 2013; Starfelt et al., 2015), so a small-medium effect size was utilized in the power analyses for the regression. A G\*Power analysis of a hierarchical regression with nine predictors, with at least 80% power, would need 114 participants to detect a medium effect ( $f^2 = .15$ ), while 193 participants are necessary to detect a small-medium effect size ( $f^2 = .085$ ), with at least 80% power, and 791 participants would be necessary to detect a small effect ( $f^2 = .02$ ). To balance feasibility and methodological rigor (i.e., conserving power), this study sought to collect 204 participants, 102 participants per group. A sample of 204 participants satisfies the small-medium effect size for the  $t$ -test analysis, which needs 204 participants, and the regression analyses that

need 114 participants to detect the effects. Thus, this study is adequately powered to identify a small-medium effect with a total  $n$  of 227.

## Measures

### Primary Measures

#### Demographics (Appendix A)

A nine-item demographics questionnaire that includes gender, age, race/ethnicity, education, marital/relationship status, SES, and alcohol use in the last year was completed for descriptive purposes. Gender was also included as a potential covariate in the analyses, due to the established relationship between gender and other potential covariates such as rape myth acceptance and traditional gender role acceptance.

#### Alcohol Expectancies (Appendix B)

The Alcohol Expectancies Regarding Sex, Aggression, and Sexual Vulnerability Questionnaire (AESASVQ; Abbey, McAuslan, Ross, & Zawacki, 1999) is a self-report questionnaire designed to measure four factors of alcohol expectancies that are implicated in sexual assault. Each of the four factors of alcohol expectancies are directed at three targets (e.g., the self, women and men). The four factors assessed are aggression, sexual affect, sexual drive, and vulnerability to sexual coercion. For each of the targets (e.g., the self, women and men), there are subscales for each of the four factors, resulting in a total of 12 subscales across the three targets (i.e., aggression expectancies for women is one subscale). There are seven items

assessing aggression expectancies, six items assessing sexual affect expectancies, six items assessing sexual drive expectancies, and six items assessing vulnerability to sexual coercion expectancies on each target's scale. Participants were asked to rate on a 5-point Likert-type scale, from *not at all* (1) to *very much* (5), the degree to which they agree with the expectation of the effect of moderate alcohol consumption on the target (e.g., When drinking alcohol...*men are likely to initiate sex*). Each subscale was scored as a summation of the items, with higher scores on a subscale representing stronger beliefs that alcohol affects the specific domain (i.e., aggression, sexual affect, sexual drive, or vulnerability) on the specific target (i.e., the self, women, or men). This study used a total of six subscales: the sexual drive, aggression, and vulnerability to coercion subscales for the men and women targets, and the calculated mean of each subscale was used in the analyses.

The AESASVQ has demonstrated strong psychometric properties, including good internal consistency across the subscales with Cronbach alphas ranging from .82 to .96 (Abbey, McAuslan, & Ross, 1999), which have been replicated for the aggression, sexual drive, and vulnerability to sexual coercion factors (Abbey, Buck, Zawacki, & Saenz, 2003; Davis, Danube, Stappenbeck, Norris, & George, 2015; Davis et al., 2006). The internal consistency of the sexual affect factor has not been replicated but did not pose a problem for this study, as the sexual affect subscales were not included. The AESASVQ has also shown convergent validity with the Comprehensive Effects of Alcohol Questionnaire (CEOA), with correlations ranging from  $r = .34$  to  $r = .55$  across targets on the aggression subscales and moderate positive correlations ( $r = .22$  to  $r = .53$ ) on the sexual affect and sexual drive subscales (Abbey et al., 1999). Additionally, discriminant validity has also been demonstrated with weak correlations between the AESASVQ

and measures of social desirability (from  $r = .01$  to  $r = .16$  across the factors), gender roles (from  $r = .01$  to  $r = -.12$  across the factors), and sexual esteem (from  $r = .03$  to  $r = .12$  across the factors). The six subscales of the AESASVQ demonstrated high internal consistency in this study (Cronbach alphas ranging from .88 to .96).

#### Attributions of Blame (Appendix C)

Brown and Testa (2008) developed a questionnaire to measure victim and perpetrator blame for use in vignette studies. Three items for victim blame (e.g., *How responsible do you think Erika was for what happened?*) and four items for perpetrator blame (e.g., *To what extent is Bryan to blame for what happened?*) are included within the two scales. One item in each subscale was altered to exclude the word “rape,” given that the word “rape” is not used in this study’s vignettes. Participants were asked to rate on a 9-point scale with anchors appropriate to the question (e.g., *Not at all/ To a great extent*), with higher scores representing higher responsibility or blame being assigned to the target. Mean scores on the subscale represent total scores for the subscale. High internal consistency for both the victim blame and perpetrator blame subscales has been demonstrated ( $\alpha = .90$  and  $\alpha = .86$ , respectively; Brown & Testa, 2008), including in this study ( $\alpha = .86$  and  $\alpha = .90$  for victim blame and perpetrator blame, respectively).

### Additional Potential Covariate Measures

#### Sexual Victimization History (Appendix D)

The Sexual Experiences Survey – Short Form Victimization (SES-SFV; Koss et al., 2007) assesses sexual victimization history since age 14 through the endorsement of a series of behaviorally descriptive items of attempted or completed unwanted sexual experiences. There are seven descriptive attempted or completed sexual experience items for women, and five descriptive items for men. Following each unwanted sexual experience item, there are five items that describe tactics employed by the perpetrator (e.g., telling lies, threatening physical harm, using force). Participants were instructed to read the behavioral description of a completed or attempted sexual act and indicate how many times they have experienced the described act in the past 12 months (i.e., 0,1,2, or 3+ times) as well as how many times they experienced the act since the age of 14, excluding the last 12 months. Participants were instructed to indicate any of the five tactics that were employed and to indicate multiple if more than one tactic was employed in the sexual act. Following the items describing unwanted sexual experiences, there are items asking for the gender and age of the participant; these items were not included in this study as this information was gathered through the demographics questionnaire. The remaining items include an item asking if the experiences described in the survey occurred one or more times, and, if so, the gender of the perpetrator. The last item on the SES-SFV asks if the participant has ever been raped. The SES-SFV has evidenced good psychometric properties, including reliability, with a 90% agreement for victimization status over two weeks (Anderson, Cahill, & Delahanty, 2018). The SES-SFV has also demonstrated convergent validity with measures of

relationship violence and abuse, with all Spearman's rank-order correlations positively, significantly correlated ranging from .29 to .40 (Davis et al., 2014). As the SES-SFV represents an induced latent variable rather than a reflective latent variable, measurement of internal consistency is not appropriate (Edwards & Bagozzi, 2000). Said differently, because the SES-SFV represents an aggregate measure of experiences that represent a latent construct of victimization (i.e., the observed variables cause the latent variable), rather than the latent construct causing the observed variables (i.e., reflective latent variable), measuring the covariance between the observed variables is not an appropriate indicator of the psychometric value of the measure (Edwards & Bagozzi, 2000).

#### Sexual Assault Perpetration History (Appendix E)

The Sexual Experiences Survey -Short Form Perpetration (SES-SFP; Koss et al., 2007) measures sexual assault perpetration for both men and women since age 14, using a series of behaviorally descriptive attempted or completed unwanted sexual acts (e.g., I put my penis into a woman's vagina without her consent). Following each unwanted sexual act there are five tactics described that may have been used to attempt or complete the sexual act (e.g., telling lies, threatening to end the relationship, using force). Participants were asked to indicate how many times (0, 1, 2 or 3+) they have perpetrated the described unwanted sexual act in the last 12 months and since the age 14 up until 12 months ago, as well as any of the five tactics used to attempt or complete that specific unwanted sexual act. The final items on the questionnaire ask for the gender and age of the participant if they have perpetrated any of the acts described one or more times and, if so, the gender of their victims and whether the participant believes they have

raped someone. For the purposes of this study, the gender and age items were not included, as this information was collected in the demographics questionnaire. Psychometric data on the SES-SFP is limited, and some convergent validity has been found with other measures of perpetration ( $r \approx .50$ ; Buday & Peterson, 2015). Although good internal consistency has been demonstrated in the literature (e.g., Murphy, Johnson, & Gidycz, 2014; Dardis, Murphy, Bill, & Gidycz, 2016), this metric is not an appropriate psychometric property of the SES-SFP due to the induced latent nature of the measure (Edwards & Bagozzi, 2000).

#### Gender Role Attitudes (Appendix F)

Burt (1980) developed the Sex Role Stereotyping Scale, which is a nine-item measure assessing agreement with common sex role stereotypes. The nine items focus primarily on traditional gender roles as they pertain to women (e.g., *There is something wrong with a woman who doesn't want to marry and raise a family*), which could be a limitation of the measure, but due to the focus of this study on the victim blaming of women, it did not pose a problem to this study. Each participant was asked to rate each statement on a 7-point rating scale (1 = *strongly disagree* to 7 = *strongly agree*). With the exception of two reverse-scored items (e.g., *It is acceptable for the woman to pay for the date* and *There is nothing wrong with a woman going to a bar alone*), higher scores reflect stronger agreement with traditional gender roles, and a total score for gender role attitudes was entered into the analyses as a sum of all nine items. The scale has been shown to have high internal consistency ( $\alpha = .80$ ; Burt, 1980) as well as construct validity demonstrated in positive correlations with rape myth acceptance in both men and women ( $r = .53$ , and  $r = .45$ , respectively) and sexual conservatism for both men and women ( $r = .53$ ,

and  $r = .67$ , respectively; Burt, 1980). In this study, this scale demonstrated low internal consistency ( $\alpha = .65$ ) and therefore should be interpreted with caution.

### Rape Myth Acceptance (Appendix G)

The Illinois Rape Myth Acceptance Scale- Short Form (IRMA-SF; Payne, Lonsway, & Fitzgerald, 1999) is a 20-item measure that assesses an individual's agreement with rape myths, or various stereotypes about what constitutes a "real" rape. Participants were asked to rate their agreement with each of the statements on a 7-point Likert-type scale (1= *Very much disagree*, 7 = *Very much agree*), with higher scores indicating more acceptance of rape myths, except for three filler items included to control for response set. Total scores of all items, excluding the three filler items, were utilized in the analyses. The IRMA-SF has demonstrated good internal consistency in both its development ( $\alpha = .87$ ; Payne et al., 1999) and subsequent uses ( $\alpha = .90$ ; Dardis et al., 2016; Starfelt et al., 2015). Additionally, the IRMA-SF has evidenced construct validity in significant positive correlations with measures of hostile attitudes towards women ( $r = .56$ ), acceptance of interpersonal violence ( $r = .67$ ) and violence broadly ( $r = .47$ ; Payne et al. 1999). The IRMA-SF demonstrated good internal consistency in this study ( $\alpha = .85$ ).

## Materials

### Comprehension Test Vignette (Appendix H)

A vignette describing a male and female college student at a party who are enjoying themselves and decide to leave together was presented to the participants on a computer. Following the vignette, a series of four multiple-choice questions pertaining to the content of the

vignette was presented (e.g., *What was Megan drinking?*) with no option to go back to the vignette. Participants were required to answer all four questions correctly to move forward with the study. If the participant did not correctly answer the four questions, they were shown the vignette again and were required to answer the same four questions. This cycle continued until the participant answered all four questions correctly, upon which they could move forward with the study. This vignette served to prime the participant to read each of the following vignettes carefully, and 65 participants were screened out due to exceeding two presentations of the vignette.

#### IR and DAFR Vignettes (Appendix I)

Two vignettes adapted from Maurer and Robinson (2008) were used, one describing an incapacitated rape, the other describing a drug and alcohol-facilitated rape. Maurer and Robinson (2008) adapted their vignettes from Hannon, Kuntz, Van Laar, Williams and Hall (1996) and added several alcohol use conditions for their study of the effects of attire, alcohol, and gender in a date-rape scenario. The vignette opens, “Marcus and Jacqueline meet at a party. They hang out for a while and talk to one another.” This study adapted the “Both Drunk” condition to reflect an IR through the addition of language to indicate that the woman (Jacqueline) is very drunk and the man (Marcus) is feeling a strong buzz after playing drinking games with friends at a party. The couple goes into a bedroom and begin kissing. The vignette continues:

After kissing for a while, Marcus puts his hand under Jacqueline’s shirt and starts squeezing her breasts. Jacqueline says “No,” and pushes his hand away. Marcus says, “You know you want it,” and puts his hand back under her shirt. Jacqueline shouts, “No!” and tries to push him away. Marcus persists, takes off Jacqueline’s clothes, and they have sex despite Jacqueline’s protests, struggles, and attempts to stop.

The second vignette uses the same storyline as the first vignette but was adapted to reflect a DAFR. To reflect a DAFR, the alcohol use sentence following the opening sentences details that while Jacqueline is in the bathroom, Marcus spikes her drink with a couple more shots of alcohol, without Jacqueline's permission, and does not tell her. The following sentences detailing the assault are identical to the IR vignette.

### Procedures

The participants began by reading the comprehension test vignette and answered the four questions. Once the participant answered the comprehension questions correctly, they read either the IR or the DAFR vignette, based on the condition to which they were randomly assigned. Following the vignette, the participant was asked to respond to the questionnaire used by Brown and Testa (2008) to assess for victim and perpetrator blame. After reading the vignettes and responding to the Brown and Testa (2008) questionnaire, participants completed each of the self-report questionnaires, starting with the demographics questionnaire, the AESASVQ, the SES-SFV, the SES-SFP, the Sex Role Stereotyping Scale, and then the IRMA-SF.

### Data Analysis Plan

To test for successful randomization, independent-samples *t*-tests were utilized. To investigate Hypothesis 1 (i.e., H1a and H1b) and Hypothesis 2 (i.e., H2a-H2e), three hierarchical regressions were utilized to test the predictive power of various alcohol expectancies, predicting both victim and perpetrator blame. To test Hypothesis 3, an independent-samples *t*-test was

utilized to examine differences in victim blame across the groups. All analyses were conducted in the Statistical Package for the Social Sciences (SPSS) Version 22.

## CHAPTER 4

### RESULTS

#### Preliminary Analyses

All data were screened for quality of responses through the utilization of descriptive statistics, histograms and box plots to identify any out of range responding as well as any potential outliers. Any participant who failed to complete the comprehension questions after two attempts was excluded from analyses ( $n = 65$ ). Additionally, data were visually examined for other quality assurance as well as for normality. The residuals for the primary analyses were examined for significant skew and kurtosis; given the large sample size, transformations were deemed unnecessary despite significant skew and kurtosis in the residuals, and bootstrapping was utilized for a more robust estimate of the standard error due to this assumption violation. No influential multivariate outliers were identified. Two univariate outliers (i.e., more than three standard deviations above/below the mean) were identified on the SRS; two univariate outliers were identified on the IRMA-SF; two univariate outliers were identified in the AESASVQ sexual drive for men subscale; and two univariate outliers were identified on the AESASVQ vulnerability to sexual coercion for women subscale. All outliers were revalued to the lowest/highest score within three standard deviations.

Utilizing Little's MCAR test (Little, 1988), missing data for the full sample (i.e., all IVs, DVs and all potential covariates) was found to be not missing completely at random (NMICAR).

Of note, missing data on all variables, with the exception of victimization and perpetration history, had 1% or less missing data; the victimization history variable had considerable missing data (49.78%), and perpetration history had approximately 5.73% missing data. Each variable was isolated and removed from the MCAR analysis to identify the problematic variables; data were NMAR when victimization history was included ( $p < .01$ ) and perpetration history was included ( $p < .01$ ), but when these variables were excluded, missing data was MCAR ( $p = .06$ ). Given the status of victimization and perpetration history as potential covariates, the correlations between victimization history and perpetration history (see Appendix K for full statistics) were assessed, revealing that neither had significant correlations with both the IVs and DVs, and therefore would not be included in further analyses. Thus, for the variables included in subsequent analyses (i.e., victim blame, perpetrator blame, AESASVQ subscales, gender, SRS and IRMA-SF), total missing data was 3.8% and was found to be MCAR ( $p = .06$ ). Given that the analyses were adequately powered and the proportion of missing data was small and MCAR, listwise deletion was an appropriate method for handling the missing data in this study (Cheema, 2014).

### Randomization Checks

To test for successful randomization of participants into either the IR or DAFR groups, a series of independent-samples  $t$ -tests were conducted. There were no significant differences between the IR and DAFR groups on proportion of women and men ( $t[225] = .814, p = .42$ ), sexual victimization history ( $t[112] = .56, p = .58$ ), sexual perpetration history ( $t[212] = .698, p = .49$ ), mean gender role acceptance ( $t[223] = -.239, p = .81$ ), rape myth acceptance ( $t[222] = -.50,$

$p = .62$ ), and mean alcohol expectancy acceptance for each of the six subscales (i.e., aggressive expectancies for men [ $t(225) = -.20, p = .84$ ], aggressive expectancies for women [ $t(224) = 1.86, p = .07$ ], sexual drive expectancies for men [ $t(225) = .02, p = .98$ ], sexual drive expectancies for women [ $t(224) = 1.15, p = .25$ ], vulnerability to sexual coercion for men [ $t(225) = 1.02, p = .31$ ], and vulnerability to sexual coercion for women [ $t(224) = 1.31, p = .19$ ]).

### Potential Covariates

Gender, victimization history, perpetration history, traditional gender role attitudes, and rape myth acceptance were potential covariates for this study. Traditional gender role attitudes and rape myth acceptance were measured as continuous variables, and gender, victimization history, and perpetration history were dichotomously coded into dummy variables. “Any history of sexual victimization” (i.e., any attempted or completed unwanted sexual contact) was coded as 1 and “no history of sexual victimization” was coded as 0. “Any history of sexual perpetration” (i.e., any attempted or completed acts) was coded as a 1 and “no history of sexual perpetration” was coded as a 0. To determine covariates, bivariate correlations between the proposed continuous potential covariates and alcohol expectancies, victim blame and perpetrator blame (i.e., the DV) were analyzed (see Appendix K). To test the dichotomous potential covariates, point-biserial correlations were conducted (see Appendix K). Any variable with significant correlations ( $p < .05$ ) with alcohol expectancies and victim/perpetrator blame was included in the analysis as a covariate. Gender demonstrated significant biserial correlations with all alcohol expectancies except sexual drive expectancies for women ( $p = .22$ ) and vulnerability expectancies for men ( $p = .57$ ). Given the significant correlations with victim blame ( $r = -.147; p$

= .03) and the majority of alcohol expectancies, gender was included in all further analyses that included victim blame as the DV. Traditional gender role acceptance demonstrated significant bivariate correlations with aggressive alcohol expectancies for women ( $r = .16$ ;  $p = .02$ ), victim blame ( $r = .30$ ;  $p < .01$ ) and perpetrator blame ( $r = -.17$ ;  $p = .01$ ), and therefore was included in all further analyses that included these variables. Victimization and perpetration history both did not demonstrate significant correlations with victim or perpetrator blame, and therefore were excluded from further analyses. Rape myth acceptance was significantly correlated with victim blame ( $r = .41$ ;  $p < .01$ ), perpetrator blame ( $r = -.27$ ;  $p < .01$ ) and aggressive alcohol expectancies for women ( $r = .16$ ;  $p = .02$ ), and was included in all regression analyses due the consistent inclusion of it in previous studies of alcohol expectancies and sexual assault (e.g., Marx et al., 1997; Starfelt et al., 2015).

### Primary Analyses

As stated previously, all primary analyses were bootstrapped (1,000 samples, 95% CI) for a more robust estimate of the standard error given the skew and kurtosis assumption violation. A single hierarchical linear regression was conducted to examine the effects of rape myth acceptance and alcohol expectancies on predicting victim blame scores in both the IR and DAFR groups (i.e., hypotheses H1a, H2a, H2b, H2c and H2d). For the first analysis the mean victim blame score from the Attributions of Blame scale, for both the IR and DAFR groups, served as the dependent variable. In the first step, traditional gender roles and gender were entered (i.e., significant covariates). In the second step, rape myth acceptance and all alcohol expectancy subscales were entered to control for shared variance within all alcohol expectancies and rape

myth acceptance. The overall model was significant,  $F(9, 214) = 8.96, p < .01, f^2 = .38$ , with a medium-sized effect. To test H1a (i.e., that rape myth acceptance would be a significant positive predictor of victim blame), the unique predictive effects of rape myth acceptance on victim blame was examined; this hypothesis was supported ( $\beta = .35, p < .01$ ), as rape myth acceptance was a significant positive predictor of victim blame. Hypothesis H2a (i.e., that sexual drive expectancies would be significant positive predictors of victim blame) was tested by examining the unique predictive effects of sexual arousal expectancies for men and women; this hypothesis was partially supported, as sexual drive expectancies for men were a positive predictor of victim blame ( $\beta = .21, p = .02$ ), but sexual drive expectancies for women were nonsignificant ( $\beta = .12, p = .11$ ). As previously reported, the unique predictive effects of sexual drive expectancies for women were nonsignificant and therefore H2b (i.e., sexual drive expectancies for women would positively predict victim blame) was not supported. The unique predictive effects of vulnerability to sexual coercion expectancies for women on victim blame was examined to test H2c (i.e., vulnerability expectancies for women would be a significant positive predictor of victim blame); this hypothesis was supported, but in the opposite of expected direction ( $\beta = -.20, p = .02$ ), such that vulnerability to sexual coercion expectancies for women were a negative predictor of victim blame. Finally, H2d (i.e., that aggressive alcohol expectancies for men would be a significant positive predictor of victim blame) was tested by examining the unique predictive effects of aggressive alcohol expectancies for men on victim blame; this hypothesis was not supported ( $\beta = -.02, p = .75$ ; see Appendix K for full results).

Next, a linear hierarchical regression was conducted to test the unique effects of aggressive, sexual drive, and sexual vulnerability alcohol expectancies on predicting victim

blame in the IR group. Only participants in the IR groups were included in this analysis, and mean victim blame scores from the Attributions of Blame scale served as the DV. All significant covariates (i.e., gender and traditional gender role beliefs) were entered on the first step. Next, rape myth acceptance and all alcohol expectancies were entered on the second step to control for shared variance between alcohol expectancies and rape myth acceptance. To test H1b, the unique effects of aggressive, sexual drive and sexual vulnerability alcohol expectancies for men and women were examined. The overall model was significant,  $F(9,95) = 6.07, p < .01, f^2 = .57$ , with a medium to large effect. Hypothesis H1b was partially supported as the only alcohol expectancy that significantly predicted victim blame was the vulnerability to sexual coercion expectancy for men ( $\beta = .26, p < .01$ ; see Appendix L for full results).

Another linear hierarchical regression was conducted to test H2e, using the mean perpetrator blame scores from both the IR and DAFR groups as the dependent variable. In the first step, mean traditional gender role beliefs was entered. In the second step, rape myth acceptance and all alcohol expectancy subscales were entered to control for shared variance within alcohol expectancies and rape myth acceptance. The overall model was significant,  $F(8,215) = 4.465, p < .01, f^2 = .17$ , with a small effect. This hypothesis was marginally supported as aggressive alcohol expectancies for men marginally, positively predicted perpetrator blame ( $\beta = .18, p = .05$ ; see Appendix M for full results).

Lastly, to test Hypothesis 3, an independent-samples *t*-test was conducted. Group type (i.e., IR or DAFR) was used as the IV, and mean victim blame scores were used as the DV. Participants were expected to assign more victim blame in the IR group than in the DAFR group; this hypothesis was not supported as the *t*-test was nonsignificant,  $t(225) = 1.08, p = .28, d = .14$ .

## CHAPTER 5

### DISCUSSION

Alcohol-involved sexual assaults are common (see Abbey, Wegner, Woerner, Pegram, & Pierce, 2014, for review) and are typically associated with more victim blaming (Cameron & Stritzke, 2003; Norris, 1994; Richardson, & Campbell, 1982; Schuller & Stewart, 2000; Untied et al., 2012; see Grubb & Turner, 2012, for review). There is a large body of literature that has documented the consequences of negative reactions to sexual assault disclosure (Orchowski et al., 2013, Ullman & Filipas, 2001; Ullman et al., 2007; Ullman et al., 2013), but limited research into how the mechanism of intoxication by the victim may influence victim blaming. Further, the literature has implicated rape myths and rape scripts (Hockett, Smith, et al., 2016; Starfelt et al., 2015) as important factors in unpacking victim blame, but the literature investigating alcohol expectancies influence on victim blaming is lacking (e.g., Starfelt et al., 2015). This study sought to investigate if there were differences in victim blaming based on the mechanism of intoxication by the victim (i.e., IR or DAFR), as well as the role alcohol expectancies play in attributions of responsibility for an alcohol-involved sexual assault. Overall, hypotheses were partially supported.

While overall most participants assigned low levels of blame to the victim and high levels of blame to the perpetrator, some significant predictors of both victim and perpetrator blame were found. As predicted, rape myth acceptance was a significant predictor of victim blame above and beyond all significant covariates and alcohol expectancies. Support for hypotheses

regarding specific alcohol expectancies were mixed. Sexual drive expectancies were significant predictors of victim blame for men, but not women; vulnerability to sexual coercion expectancies for women were predictive of victim blame in the opposite of expected direction (i.e., negative predictor) when both groups were combined (i.e., DAFR and IR) but was not a significant predictor of victim blame when the IR group was isolated; vulnerability expectancies for men were a significant predictor of victim blame when the IR group was isolated; and aggressive alcohol expectancies for men were a marginally significant negative predictor of perpetrator blame. All other alcohol expectancy hypotheses were not supported. Lastly, there were no significant differences found between the groups on victim blame based on mechanism of intoxication.

### Replication of the Extant Literature

The findings of this study replicated those of the extant literature on the role of rape myth acceptance in victim blame as well as the limited literature investigating alcohol expectancies and victim blame. Rape myth acceptance was a significant predictor above and beyond the shared variance with alcohol expectancies, gender and traditional gender role acceptance regardless of method of intoxication, thus successfully replicating the extant literature that has documented the predictive power of rape myth acceptance on victim blame (Edwards et al., 2011; Ryan, 2011; Starfelt et al., 2015). This study adds to the growing literature base that suggests the importance of challenging rape myths as a path towards mitigating negative reactions to disclosure in an effort to decrease the added consequences of negative reactions such

as increased PTSS, self-blame, increased depression, and anxiety (Orchowski et al., 2013; Ullman & Filipas, 2001; Ullman et al., 2007; Ullman et al., 2013).

Further, rape myth acceptance has been implicated in victim blaming within the context of police decision making. Specifically, decisions regarding the legitimacy of a case, such that the officers who endorse high levels of rape myth acceptance are more likely to blame the victim (Goodman-Delahanty & Graham, 2011; Sleath & Bull, 2012) and find the case less credible (Hine & Murphy, 2019), which likely impacts how the case is investigated, if at all. Additionally, although not hypothesized, rape myth acceptance was also found to be a significant negative predictor of perpetrator blame, such that as rape myth acceptance increased, blame attributed to the perpetrator decreased, suggesting that rape myths not only impact victim blaming but may buffer responsibility attributed to the perpetrator. In fact, studies that proxy juror decision making in rape cases have found that high rape myth acceptance is associated with greater accuser (victim) blame (e.g., Eyssel & Bohner, 2011; Sleath & Bull, 2012) and greater leniency for the defendant (perpetrator), shorter sentence length (Klement, Sagarin, & Skowronski, 2018; Osborn, Davis, Button, & Foster, 2018). These findings highlight the widespread implications for rape myth acceptance and highlight the need for programs aimed at decreasing victim blame to include efforts to challenge widespread acceptance of rape myths.

Additionally, this study partially replicated the results of Starfelt and colleagues (2015). Starfelt and colleagues (2015) found that sexual-coercion alcohol expectancies for women (i.e., women are more likely to *be* forceful for sex) predicted victim blame in an incapacitated rape vignette, but vulnerability alcohol expectancies for women did not predict victim blame. Given the measurement differences in this study, it was originally thought that aggressive and sexual-

drive alcohol expectancies would operate similarly to the sexual coercion expectancies utilized by Starfelt and colleagues (2015). Additionally, given the dearth of literature on specific alcohol expectancies, this study chose to hypothesize congruent with Starfelt and colleagues' (2015) hypotheses regarding sexual-vulnerability expectancies despite their nonsignificant findings. In this study, contrary to hypotheses but in line with Starfelt and colleagues (2015), vulnerability expectancies for women were not predictive of victim blame in the IR group. In contrast to Starfelt and colleagues (2015), sexual-drive and aggressive-alcohol expectancies for women were not predictive of victim blame in this study. Additionally, an alternative proxy for women's sexual coercion, vulnerability expectancies for men were a significant positive predictor of victim blame in this study.

The finding that sexual-drive and aggressive-alcohol expectancies for women were not predictive of victim blame is inconsistent with the findings of Starfelt and colleagues (2015). A plausible explanation for this difference may be due to measurement differences and measurement error. The correlation between sexual-coercion expectancies for women was significant and positive in Starfelt and colleagues (2015), but only the sexual-drive expectancies for women (out of both the aggressive and sexual-drive expectancies for women) were significantly correlated with victim blame in this study. It may be that the aggressive-alcohol expectancies in this study were not correlated with victim blame as they represent a different construct than aggression within the context of sexual-coercion expectancies. Further, the sexual-drive expectancies for women may not have predicted victim blame despite being significantly correlated because of the inclusion of rape myths as a predictor, which may have explained variance that sexual-drive expectancies would have otherwise accounted for (i.e., sexual-drive

expectancies may be similar to the “she wanted it” scale of rape myth acceptance). Additionally, it is possible that aggressive-alcohol expectancies with sexual-drive expectancies are not a good proxy for sexual-coercion expectancies and as such did not function similarly in this study when compared to Starfelt and colleagues (2015).

In this study, a potential alternative proxy for the sexual-coercion expectancies for women in Starfelt and colleagues (2015) may be the vulnerability to sexual-coercion alcohol expectancies for men. Vulnerability expectancies for men were measured utilizing items such as “men are more likely to be pressured to have sex” in this study, which could be interpreted as the inverse of sexual-coercion expectancies of women, if the participant is applying this expectancy to a heterosexual interaction. It may be reasonable to suggest that participants may have been primed to respond to the alcohol expectancy questions with a heterosexual frame of reference, as alcohol expectancies were assessed after the presentation of two vignettes depicting a heterosexual interaction. Applying vulnerability expectancies for men as a proxy for sexual-coercion expectancies for women, this study provides additional support for the findings of Starfelt and colleagues (2015), as vulnerability expectancies for men were the only significant alcohol expectancy in predicting victim blame in the IR scenario.

While this study was not a direct replication of the limited extant literature on alcohol expectancies and victim blame, it offers support for the majority of the findings. This study supports the findings of Starfelt and colleagues (2015), with sexual vulnerability expectancies for women found to be a nonsignificant predictor of victim blame. Additionally, this study offers support for the large body of literature that implicates rape myth acceptance as an important target for consideration in discussions of victim blame. While this study partially replicated the

only other study to examine alcohol expectancies' direct impact on victim blame, this study sought to investigate a wider range of alcohol expectancies and their effect on victim and perpetrator blame.

### Alcohol Expectancies Predicting Ratings of Attributions of Blame

In this study, hypotheses regarding specific alcohol expectancies predicting victim blame were partially supported. Specifically, vulnerability to sexual-coercion expectancies for women and sexual-drive expectancies for men were significant predictors of victim blame, but contrary to hypotheses, sexual-drive expectancies for women and aggressive-alcohol expectancies for men were not. Vulnerability to sexual-coercion expectancies for women were a negative predictor of victim blame, such that individuals endorsing greater vulnerability expectancies for women attributed less blame to the victim. While this relationship was hypothesized in the opposite direction, it may be that beliefs that women are more vulnerable when they consume alcohol may alleviate responsibility for the victim because endorsement of the expectancy in and of itself identifies women as having less control when consuming alcohol. For example, one of the items in the vulnerability expectancy for women subscale reads, "Women are more likely to be forced by their date to have sex." The language utilized in this subscale implies that women are less in control, and as such this may alleviate responsibility for what happens to them (i.e., less victim blame). Further, the predictive strength of vulnerability expectancies for women only increased when comparing the findings in the IR versus the combined IR/DAFR group, suggesting that vulnerability expectancies for women may be protective against negative social reactions, regardless of mechanism of intoxication. Given the inconsistency between this study

and the limited extant literature that explores specific alcohol expectancies (i.e., Starfelt et al., 2015), future research is necessary to elucidate the nature of the relationship between vulnerability expectancies and victim blame.

Contrary to expectations, of the sexual-drive expectancies only sexual-drive expectancies for men were predictive of victim blame in this study. Sexual-drive expectancies for men include beliefs such as men “have a strong sex-drive” and are “likely to initiate sex” when consuming alcohol. As proposed by Abbey and colleagues (Abbey, 2002; Abbey et al., 1996), alcohol expectancies and beliefs about gender roles together create specific behavioral expectations for men and women, and as such, sexual-drive expectancies for men appear to reinforce the role of men as the sexual initiator, especially when alcohol is consumed. This association may explain why sexual-drive expectancies for men, but not women, were predictive of victim blame since beliefs that women would become sexually interested under the influence of alcohol violate traditional gender scripts for sexual behavior. As such, the positive relationship between sexual-drive expectancies and victim blaming may represent the view that, given the traditional role of sexual gatekeeping for women, the victim is responsible for her assault, as it represents a failure of her to gatekeep the advances of the man.

It was originally thought that increased sexual-drive expectancies would positively predict victim blame, as this expectancy may feed into rape myths that describe women as “wanting to be raped.” This was not the case in this study, as sexual-drive expectancies for women were not a significant predictor of victim blame nor significantly correlated with rape myth acceptance. This is also inconsistent with Starfelt and colleagues’ (2015) finding that sexual-coercion expectancies for women were predictive of victim blame. As stated previously,

this study's measurement differences may be the cause of the inconsistent findings, as sexual-drive expectancies are not a comprehensive proxy for sexual coercion expectancies.

Alternatively, it may be that the endorsement of sexual-drive expectancies for women are unrelated to victim blame due to the violation of the traditional gender role script for sexual behavior. Future research is necessary to determine what role, if any, sexual-drive expectancies for women play in victim blame.

Inconsistent with expectations, aggressive-alcohol expectancies for men were a marginally significant positive predictor of perpetrator blame but were not significantly related to victim blame. The finding that aggressive-alcohol expectancies for men were positively associated with perpetrator blame is consistent with the extant literature on intoxicated aggression and perpetrator blame. In one study, a perpetrator's aggressive behavior was perceived to be caused in part by their intoxication, but intoxication only explained part of the variance in the blame (Wild, Graham, & Rehm, 1998); other factors such as the premeditative nature of the act, victim intoxication, and the criminal history of the perpetrator also impacted ratings of blame (Wild et al., 1998). Based on Wild and colleagues (1998), it is unsurprising that beliefs that alcohol enables aggressive behavior in men were positively associated with ratings of responsibility for the man in this study, given the contextual factors (i.e., perpetrator presented as an acquaintance, lacking neither a documented criminal history nor any notion of premeditation, and the victim's intoxication), such that the expectation of aggressive behavior and victim intoxication lead to increased perpetrator blame. Alternatively, the contextual factors that are lacking in this study, such as information regarding a criminal record and evidence of

premeditation, may explain why aggressive-alcohol expectancies were only a marginally significant predictor of perpetrator blame.

Overall, findings of this study suggest that specific alcohol expectancies may be an important factor to consider when examining predictors of victim and perpetrator blame. Consistent with the Abbey and colleagues' (Abbey, 2002; Abbey et al., 1996) model of alcohol's role in sexual assault, alcohol expectancies (i.e., pre-existing beliefs) have demonstrated a significant effect on attributions of blame for both victim and perpetrator. Although hypotheses were not fully supported, this study's findings regarding alcohol expectancies suggests that vulnerability to sexual-coercion expectancies for men and women as well as sexual-drive expectancies for men are significant predictors of victim blame; future research may seek to further investigate the nature of these relationships. Further, this study also identified aggressive-alcohol expectancies for men as another potential avenue for future research regarding factors that affect perpetrator blame.

#### Attributions of Blame by Mechanism of Intoxication

Although the predictors of victim blame appeared to be different across the IR and DAFR groups, there were no significant differences found in mean victim blame. The literature investigating IR and DAFR suggest that IR and DAFR are more common on college campuses (see Fedina et al., 2016, for review) and reported less frequently (Wolitzky-Taylor et al., 2011) than forcible rapes. Despite these findings, the literature on IR and DAFR is quite limited, and this study is the first, to my knowledge, to examine differences in victim blaming between these groups. Although this study did not find significant differences in victim blame, there are several

factors that should be considered that may have impacted these results. This study was highly limited in the range of responses to the victim blame questions, such that 80% of the sample's mean victim blame was 3 or less (out of 9), significantly limiting the variance in victim blame where differences could be found. Additionally, the lack of significant differences between the groups could be due to a weak manipulation. This study relied on the modification of one sentence and the addition of another sentence to distinguish the IR from the DAFR vignette. Given the proportion of data that had to be removed prior to the analyses (approximately 21%) due to incorrect responding to comprehension questions (i.e., a check for careful reading), it is plausible that the manipulation was not strong enough to impact victim blame ratings. Alternatively, it may be the case that the mechanism of intoxication is not a relevant factor when making attributions of blame in a rape scenario. It may be that factors such as rape myth acceptance, traditional gender roles, gender and alcohol expectancies are more influential in attributing blame, and therefore no significant differences were found based on mechanism of intoxication. As this was the first study to examine IR and DAFR separately, future research is necessary to determine if mechanism of intoxication impacts attributions of blame in alcohol-involved sexual assault.

### Limitations and Future Directions

A significant limitation of this study was the proportion of missing data on the victimization history variable. While this variable did not correlate with the IVs and DVs of this study and therefore was excluded from further analyses, analyses revealed that there were significant differences on gender, four of the alcohol expectancies (i.e., aggressive expectancies

for men and women, sexual-desire expectancies for men, and vulnerability to sexual coercion expectancies for women), victim blame, and rape myth acceptance between those who did and did not respond to the victimization history measure. It is therefore unclear if the pattern of relationships between the IVs and DVs would have been different had there had been less missing data.

Further, this study is limited by basement effects for victim blame and ceiling effects for perpetrator blame across the groups, therefore limiting differences that could be found between the groups. One potential explanation for the limited variability in victim/perpetrator blame in contrast to other self-report measures may be the sociocultural context in which this study was conducted. Sexual violence has been discussed more openly in the media and on social media, which has spurred recent research examining the impact of these media outlets on perceptions of sexual violence (e.g., Armstrong & Mahone, 2017; Wellman, Reddington, & Clark, 2017). The context in which participants completed this study may have increased social desirability biases, as sexual violence is a highly sensitive topic that has currently garnered significant attention, especially on college campuses (e.g., the “It’s On Us” campaign).

Additionally, this study also relied on self-report for all questionnaires and was hosted on an online platform. Due to the nature of this study examining expectancies, self-reported methodology could not be avoided. Given the underreporting issues with using medical or police records for perpetration or victimization history, at the current time there is not a better way of obtaining this information than self-report. The online platform of this study allowed the participants to complete the survey in multiple sessions, which may have affected the experimental manipulation if the participant did not complete the measures for the DVs

immediately after reading the experimental vignette. Given the nature of studying sexual assault, a major limitation of this study is using written vignettes rather than an interactive behavioral task. Future research should consider using actors in vivo to interact with the participant to create a more realistic scenario and ultimately increase ecological validity and interpretability of the results. Additionally, this study is limited in generalizability due to the vignettes only depicting a heterosexual sexual assault scenario with a female victim. While heterosexual sexual assaults are prevalent (Black et al., 2011), recent research suggests that the prevalence of sexual assault in sexual minorities (i.e., LGBTQ) may be significantly higher (Eisenberg, Lust, Mathiason, & Porta, 2017) and future research is needed to explore the role alcohol expectancies may play in attributions of blame in non-heterosexual assault.

Lastly, the use of a college student sample taking introductory psychology is another limitation of this study. While this sample may be representative of the college student body of the university where the study was being conducted, future research should sample from the community to make the findings more generalizable. College samples are useful in studying sexual assault, given the high prevalence of sexual assault that occurs on campuses nationwide, but they are not the only high-risk group. In the last ten years, studies have focused on sexual assault in younger populations, looking at adolescents in middle and high school (see De La Rue, Polanin, Espelage, & Pigott, 2016, for review), and future research should consider extending the research conducted on college samples to these populations.

## Conclusions

Alcohol-involved sexual assault is more common on college campuses (Fedina et al., 2016) and appears to garner more negative social reactions, such as victim blaming, than forcible assault (Cameron & Stritzke, 2003; Norris, 1994; Richardson & Campbell, 1982; Schuller & Stewart, 2000; Untied et al., 2012; see Grubb & Turner, 2012, for review). Given the prevalence of alcohol-involved sexual assault and the documented detrimental effects of negative social reactions (e.g., increased PTSS, self-blame, depression, anxiety; Orchowski, Untied & Gidycz, 2013; Ullman & Filipas, 2001; Ullman et al., 2007; Ullman et al., 2013), research on factors that impact victim blaming in alcohol-involved sexual assault is warranted. This study sought to investigate two main research questions: (1) can alcohol expectancies predict victim blame in an alcohol-involved sexual assault by a third party, as proposed by Abbey and colleagues (Abbey, 2002; Abbey et al., 1996);, and (2) are there differences in victim blaming based on mechanism of intoxication, specifically differences between IR and DAFR?

Regarding the first research question, consistent with Abbey and colleagues' (Abbey, 2002; Abbey et al., 1996) model, this study provided evidence that some, but not all, alcohol expectancies are predictive of attributions of blame. Specifically, it appears that vulnerability to sexual-coercion expectancies for men and women and sexual-drive expectancies for men are predictive of victim blame, whereas aggressive-alcohol expectancies for men appear to be predictive of perpetrator blame. This study represents an initial investigation into the role of specific alcohol expectancies (beyond vulnerability and coercion) predicting victim blame and the first study to investigate the role of alcohol expectancies in attribution of perpetrator blame. Future research is necessary to confidently state the nature of these relationships, but this study offers preliminary support for Abbey and colleagues' (Abbey, 2002; Abbey et al., 1996) model of alcohol's role in sexual assault through

the perspective of a third party. Regarding the second research question, this study did not find support for the hypothesized difference between the IR and DAFR group on victim blame but represents the first study of its kind to separate the groups. While there are several limitations to this study that may account for the null findings, future research may consider examining other potential differences between these classifications of alcohol-involved sexual assault prior to collapsing them into one group.

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APPENDIX A  
DEMOGRAPHICS QUESTIONNAIRE

### Demographics Questionnaire

1. What is your gender?
  - a. Male
  - b. Female
  - c. Prefer not to answer
  
2. What is your sex?
  - a. Male
  - b. Female
  - c. Prefer not to answer
  
3. What is your date of birth? \_\_\_\_/\_\_\_\_/\_\_\_\_ (Month/Day/Year)
  
4. What is your race/ethnicity?
  - a. American Indian or Alaskan Native
  - b. Asian or South-Asian
  - c. Black or African American
  - d. Latino, Hispanic or of Spanish Origin
  - e. Native Hawaiian or Pacific Islander
  - f. White
  - g. Other (please specify) \_\_\_\_\_
  - h. Prefer not to respond
  
5. How many years of education have you completed?
  - a. \_\_\_\_\_ Years of education
  - b. Prefer not to respond
  
6. What year in school are you now?
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior
  - e. Graduate
  - f. Other (please specify) \_\_\_\_\_
  - g. Prefer not to respond
  
7. What is your legal marital status?
  - a. Single
  - b. Married or equivalent? (e.g., civil union)
  - c. Divorced
  - d. Widowed
  - e. Prefer not to respond

8. What is your relationship status now?
- Engaged
  - Living with someone
  - Dating seriously
  - Dating casually
  - Not involved
  - Prefer not to respond
9. What is the highest level of education completed by your mother?
- Some high school
  - High school diploma/GED
  - Some college
  - College degree
  - Some graduate work
  - Graduate/ Doctorate degree
  - Prefer not to respond
10. What is the highest level of education completed by your father?
- Some high school
  - High school diploma/GED
  - Some college
  - College degree
  - Some graduate work
  - Graduate/ Doctorate degree
  - Prefer not to respond
11. During the last 12 months, how often did you usually have any kind of drink containing alcohol? By a drink we mean half an ounce of absolute alcohol (e.g., a 12 ounce can or glass of beer or cooler, a 5 ounce glass of wine, or a drink containing 1 shot of liquor). Choose only one.
- Every day
  - 5 to 6 times a week
  - 3 to 4 times a week
  - twice a week
  - once a week
  - 2 to 3 times a month
  - once a month
  - 3 to 11 times in the past year
  - 1 or 2 times in the past year
  - I do not drink
  - Prefer not to respond

APPENDIX B

ALCOHOL EXPECTANCIES REGARDING SEX, AGGRESSION,  
AND SEXUAL VULNERABILITY QUESTIONNAIRE

### Alcohol Expectancies Regarding Sex, Aggression, and Sexual Vulnerability Questionnaire (AESASVQ)

<b>When drinking alcohol:</b>	NOT AT ALL.....VERY MUCH				
1. It is easy for men to have a fight or argument.	1	2	3	4	5
2. Men are mean.	1	2	3	4	5
3. Men say or do rude things.	1	2	3	4	5
4. Men become hostile.	1	2	3	4	5
5. Men are short-tempered.	1	2	3	4	5
6. Men feel angry.	1	2	3	4	5
7. Men are likely to hit or slap.	1	2	3	4	5
8. Men have a strong sex-drive.	1	2	3	4	5
9. Men are likely to initiate sex.	1	2	3	4	5
10. Men feel sexually aroused.	1	2	3	4	5
11. Men become sexually excited.	1	2	3	4	5
12. Men are interested in having sex.	1	2	3	4	5
13. Men want to have sex.	1	2	3	4	5
14. Men are at greater risk of being coerced into having sex.	1	2	3	4	5
15. Men are more sexually vulnerable.	1	2	3	4	5
16. Men are taken advantage of sexually.	1	2	3	4	5
17. Men are likely to be forced to by their date to have sex.	1	2	3	4	5
18. Men are likely to be pressured to have sex.	1	2	3	4	5
19. Men become easy targets for sexual advances.	1	2	3	4	5

<b>When drinking alcohol:</b>	NOT AT ALL.....VERY MUCH				
1. It is easy for women to have a fight or argument.	1	2	3	4	5
2. Women are mean.	1	2	3	4	5
3. Women say or do rude things.	1	2	3	4	5
4. Women become hostile.	1	2	3	4	5
5. Women are short-tempered.	1	2	3	4	5
6. Women feel angry.	1	2	3	4	5
7. Women are likely to hit or slap.	1	2	3	4	5
8. Women have a strong sex-drive.	1	2	3	4	5
9. Women are likely to initiate sex.	1	2	3	4	5
10. Women feel sexually aroused.	1	2	3	4	5
11. Women become sexually excited.	1	2	3	4	5
12. Women are interested in having sex.	1	2	3	4	5
13. Women want to have sex.	1	2	3	4	5
14. Women are at greater risk of being coerced into having sex.	1	2	3	4	5

15. Women are more sexually vulnerable.	1	2	3	4	5
16. Women are taken advantage of sexually.	1	2	3	4	5
17. Women are likely to be forced to by their date to have sex.	1	2	3	4	5
18. Women are likely to be pressured to have sex.	1	2	3	4	5
19. Women become easy targets for sexual advances.	1	2	3	4	

APPENDIX C

ATTRIBUTIONS OF BLAME QUESTIONNAIRE

### Attributions of Blame Questionnaire (Brown & Testa, 2007)

#### Victim Blame Subscale

1. How responsible do you think that (insert female victim name) was for what happened?  
Not at all responsible.....Very responsible  
1      2      3      4      5      6      7      8      9
2. To what extent is (insert female victim name) to blame for what happened?  
Not at all .....To a great extent  
1      2      3      4      5      6      7      8      9
3. How much did (insert female victim name)'s behavior cause what happened?  
Not at all .....Very much  
1      2      3      4      5      6      7      8      9

#### Perpetrator Blame subscale

1. How responsible do you think that (insert male perpetrator name) was for what happened?  
Not at all responsible.....Very responsible  
1      2      3      4      5      6      7      8      9
2. To what extent is (insert male perpetrator name) to blame for what happened?  
Not at all .....To a great extent  
1      2      3      4      5      6      7      8      9
3. How much did (insert male perpetrator name)'s behavior cause the rape to happen?  
Not at all .....Very much  
1      2      3      4      5      6      7      8      9
4. To what extent do you feel that (insert male perpetrator name) deserves to be punished for what happened?  
Not at all .....To a great extent  
1      2      3      4      5      6      7      8      9

APPENDIX D

SEXUAL EXPERIENCES SURVEY – SHORT FORM VICTIMIZATION

### Sexual Experiences Survey- Short Form Victimization (SES-SFV)

The following questions concern sexual experiences that you may have had that were unwanted. We know that these are personal questions, so we do not ask your name or other identifying information. Your information is completely confidential. We hope that this helps you to feel comfortable answering each question honestly. Place a check mark in the box showing the number of times each experience has happened to you. If several experiences occurred on the same occasion--for example, if one night someone told you some lies and had sex with you when you were drunk, you would check both boxes a and c. The past 12 months refers to the past year going back from today. Since age 14 refers to your life starting on your 14th birthday and stopping one year ago from today.

- | <b>1. Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent (but did not attempt sexual penetration) by:</b> | How many times in the last 12 months? | How many times since age 14? |
|---|---------------------------------------|------------------------------|
|   | 0 1 2 3+                              | 0 1 2 3+                     |
| a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.                   |                                       |                              |
| b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.  |                                       |                              |
| c. Taking advantage of me when I was too drunk or out of it to stop what was happening.   |                                       |                              |
| d. Threatening to physically harm me or someone close to me   |                                       |                              |
| e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.  |                                       |                              |

**2. Someone had oral sex with me or made me have oral sex with them without my consent by:**

- a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.
- b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.
- c. Taking advantage of me when I was too drunk or out of it to stop what was happening.
- d. Threatening to physically harm me or someone close to me
- e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

How many  
times in the last  
12 months?

0 1 2 3+

How many  
times since age  
14?

0 1 2 3+

**If you are a male, check this box and skip to item 4.**

**3. A man put his penis into my vagina, or someone inserted fingers or objects without my consent by:**

- a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.
- b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.
- c. Taking advantage of me when I was too drunk or out of it to stop what was happening.
- d. Threatening to physically harm me or someone close to me
- e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

How many  
times in the last  
12 months?

0 1 2 3+

How many  
times since age  
14?

0 1 2 3+

- |   |                                       |                              |
|---|---------------------------------------|------------------------------|
| <b>4. A man put his penis into my butt, or someone inserted fingers or objects without my consent by:</b>   | How many times in the last 12 months? | How many times since age 14? |
| a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to. | 0 1 2 3+                              | 0 1 2 3+                     |
| b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.  |                                       |                              |
| c. Taking advantage of me when I was too drunk or out of it to stop what was happening.   |                                       |                              |
| d. Threatening to physically harm me or someone close to me   |                                       |                              |
| e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.  |                                       |                              |
| <b>5. Even though it didn't happen, someone TRIED to have oral sex with me, or make me have oral sex with them without my consent by:</b>   | How many times in the last 12 months? | How many times since age 14? |
| a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to. | 0 1 2 3+                              | 0 1 2 3+                     |
| b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.  |                                       |                              |
| c. Taking advantage of me when I was too drunk or out of it to stop what was happening.   |                                       |                              |
| d. Threatening to physically harm me or someone close to me   |                                       |                              |
| e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.  |                                       |                              |

If you are a male, check this box and skip to item 7.

<b>6. Even though it did not happen, I TRIED to have oral sex with someone or make them have oral sex with me without their consent by:</b>	How many times in the last 12 months?	How many times since age 14?
a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	0 1 2 3+	0 1 2 3+
b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.		
c. Taking advantage when they were too drunk or out of it to stop what was happening.		
d. Threatening to physically harm them or someone close to them		
e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon		
<b>7. Even though it did not happen, I TRIED to put in my penis (men only) or I tried to put my fingers or objects (all respondents) into someone's butt without their consent by:</b>	How many times in the last 12 months?	How many times since age 14?
a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	0 1 2 3+	0 1 2 3+
b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.		
c. Taking advantage when they were too drunk or out of it to stop what was happening.		
d. Threatening to physically harm them or someone close to them		
e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.		

8. Did any of the experiences described in this survey happen to you 1 or more times?  
Yes No
9. What was the sex of the person or persons who did them to you?  
a. Female only  
b. Male only  
c. Both females and males  
d. I reported no experiences
10. Have you ever been raped?  
Yes No

APPENDIX E

SEXUAL EXPERIENCE SURVEY – SHORT FORM PERPETRATION

### Sexual Experiences Survey – Short Form Perpetration (SES-SFP)

The following questions concern sexual experiences. We know these are personal questions, so we do not ask your name or other identifying information. Your information is completely confidential. We hope this helps you to feel comfortable answering each question honestly. Place a check mark in the box showing the number of times each experience has happened. If several experiences occurred on the same occasion--for example, if one night you told some lies and had sex with someone who was drunk, you would check both boxes a and c. The past 12 months refers to the past year going back from today. Since age 14 refers to your life starting on your 14th birthday and stopping one year ago from today

- | <b>2. I fondled, kissed, or rubbed up against the private areas of someone’s body (lips, breast/chest, crotch or butt) or removed some of their clothes without their consent (<i>but did not attempt sexual penetration</i>) by:</b> | How many times in the last 12 months? | How many times since age 14? |
|---|---------------------------------------|------------------------------|
|   | 0 1 2 3+                              | 0 1 2 3+                     |
| a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to.      |                                       |                              |
| b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.   |                                       |                              |
| c. Taking advantage when they were too drunk or out of it to stop what was happening.   |                                       |                              |
| d. Threatening to physically harm them or someone close to them   |                                       |                              |
| e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.  |                                       |                              |

<b>3. I had oral sex with someone or had someone perform oral sex on me without their consent by:</b>	How many times in the last 12 months?	How many times since age 14?
a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	0 1 2 3+	0 1 2 3+
b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.		
c. Taking advantage when they were too drunk or out of it to stop what was happening.		
d. Threatening to physically harm them or someone close to them		
e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.		
<b>4. I put my penis (men only) or I put my fingers or objects (all respondents) into a woman's vagina without her consent by:</b>	How many times in the last 12 months?	How many times since age 14?
a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	0 1 2 3+	0 1 2 3+
b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.		
c. Taking advantage when they were too drunk or out of it to stop what was happening.		
d. Threatening to physically harm them or someone close to them		
e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon		

<b>4. I put in my penis (men only) or I put my fingers or objects (all respondents) into someone's butt without their consent by:</b>	How many times in the last 12 months?	How many times since age 14?
f. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	0 1 2 3+	0 1 2 3+
g. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.		
h. Taking advantage when they were too drunk or out of it to stop what was happening.		
i. Threatening to physically harm them or someone close to them		
j. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon		
<b>5. I put my penis (men only) or I put my fingers or objects (all respondents) into a woman's vagina without her consent by:</b>	How many times in the last 12 months?	How many times since age 14?
a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	0 1 2 3+	0 1 2 3+
b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.		
c. Taking advantage when they were too drunk or out of it to stop what was happening.		
d. Threatening to physically harm them or someone close to them		
e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon		

<p><b>7. Even though it did not happen, I TRIED put in my penis (men only) or I tried to put my fingers or objects (all respondents) into a woman's vagina without their consent by:</b></p>	<p>How many times in the last 12 months?</p>	<p>How many times since age 14?</p>
<p>a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.</p> <p>b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.</p> <p>c. Taking advantage when they were too drunk or out of it to stop what was happening.</p> <p>d. Threatening to physically harm them or someone close to them</p> <p>e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon</p>	<p>0 1 2 3+</p>	<p>0 1 2 3+</p>
<p><b>7. Even though it did not happen, I TRIED to put in my penis (men only) or I tried to put my fingers or objects (all respondents) into someone's butt without their consent by:</b></p>	<p>How many times in the last 12 months?</p>	<p>How many times since age 14?</p>
<p>a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.</p> <p>b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.</p> <p>c. Taking advantage when they were too drunk or out of it to stop what was happening.</p> <p>d. Threatening to physically harm them or someone close to them</p> <p>e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.</p>	<p>0 1 2 3+</p>	<p>0 1 2 3+</p>

8. Did you do any of the acts described in this survey 1 or more times?
- a. Yes
  - b. No

If yes, what was the sex of the person or persons to whom you did them?

- a. Female only
  - b. Male only
  - c. Both females and males
  - d. I reported no experiences
9. Do you think you may have you ever raped someone?
- a. Yes
  - b. No

APPENDIX F

SEX ROLE STEREOTYPING SUBSCALE

### Sex Role Stereotyping Subscale (Burt, 1980)

Please rate your agreement with the following statements based on the scale below:

**Strongly Disagree.....Strongly Agree**

**1            2            3            4            5            6            7**

- |  |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|
| 1. A man should fight when the woman he's with is insulted by another man                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. It is acceptable for the woman to pay for the date.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. A woman should be a virgin when she marries.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. There is something wrong with a woman who doesn't want to marry and raise a family.                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. A wife should never contradict her husband in public  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. It is better for a woman to use her feminine charm to get what she wants rather than ask for it outright. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. It is acceptable for a woman to have a career, but marriage and family should come first.                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. It looks worse for a woman to be drunk than for a man to be drunk.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. There is nothing wrong with a woman going to a bar alone.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX G

ILLINOIS RAPE MYTH ACCEPTANCE SCALE – SHORT FORM

**Illinois Rape Myth Acceptance Scale – Short Form (IRMA-SF; Payne et al., 1999)**

Please rate your agreement with the following statements based on the scale below:

<b>Not at all Agree</b> .....								<b>Very Much Agree</b>
1	2	3	4	5	6	7		
10. If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control.	1	2	3	4	5	6	7	
11. Although most women wouldn't admit it, they generally find being physically forced into sex a real "turn-on."	1	2	3	4	5	6	7	
12. If a woman is willing to "make out" with a guy, then it's no big deal if he goes a little further and has sex with her.	1	2	3	4	5	6	7	
13. Many women secretly desire to be raped.	1	2	3	4	5	6	7	
14. Most rapists are not caught by the police.	1	2	3	4	5	6	7	
15. If a woman doesn't physically fight back, you can't really say that it was rape	1	2	3	4	5	6	7	
16. Men from nice middle-class homes almost never rape.	1	2	3	4	5	6	7	
17. Rape accusations are often used as a way of getting back at men.	1	2	3	4	5	6	7	
18. All women should have access to self-defense classes.	1	2	3	4	5	6	7	
19. It is usually only women who dress suggestively that are raped	1	2	3	4	5	6	7	
20. If the rapist doesn't have a weapon, you really can't call it a rape.	1	2	3	4	5	6	7	
21. Rape is unlikely to happen in a woman's own familiar neighbourhood.	1	2	3	4	5	6	7	
22. Women tend to exaggerate how much rape affects them.	1	2	3	4	5	6	7	
23. A lot of women lead a man on and then they cry rape.	1	2	3	4	5	6	7	
24. It is preferable that a female police officer conduct the questioning when a woman reports a rape.	1	2	3	4	5	6	7	
25. A woman who "teases" men deserves anything that might happen.	1	2	3	4	5	6	7	
26. When women are raped, it's often because the way they said "no" was ambiguous.	1	2	3	4	5	6	7	
27. Men don't usually intend to force sex on a woman, but sometimes they get too sexually carried away.	1	2	3	4	5	6	7	
28. A woman who dresses in skimpy clothes should not be surprised if a man tries to force her to have sex.	1	2	3	4	5	6	7	
29. Rape happens when a man's sex drive gets out of control.	1	2	3	4	5	6	7	

APPENDIX H

COMPREHENSION TEXT VIGNETTE

### Comprehension Test Vignette

Please read the following scenario carefully:

Megan is a sophomore at NIU studying chemistry. Last weekend, Megan went to a party at a friend's place where she met Danny, who is also a sophomore at NIU. Megan thought Danny was cute and walked over to the table where he was standing. They began talking and Danny offered to get Megan a beer from the kitchen. Megan followed Danny into the kitchen where Danny kissed her. Megan smiled at Danny and lead him back to the room where her friends were playing drinking games. After a couple hours of dancing, talking, and kissing, Megan asked Danny if he would walk her back to her room. The couple left the party holding hands.

Comprehension Questions:

1. What year in school was Danny?
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior
2. What was Megan drinking?
  - a. A cocktail/ mixed drink
  - b. Wine
  - c. Beer
  - d. She wasn't drinking
3. Where was the party being held?
  - a. Off campus
  - b. At Megan's friend's house
  - c. At Danny's friend's house
  - d. There was no party
4. What were Megan's friends doing?
  - a. Talking to Danny
  - b. Dancing
  - c. Playing drinking games
  - d. Talking to Megan

APPENDIX I

IR/DAFR VIGNETTES

### **IR Vignette**

Marcus & Jacqueline meet at a party. They hang out for a while and talk to one another. Both Marcus and Jacqueline play drinking games with friends, during which Marcus gets a strong buzz and Jacqueline gets really drunk and is stumbling around. They go to one of the bedrooms in the building, sit down on the bed, and start making out. After kissing for a while, Marcus puts his hand under Jacqueline's shirt and starts squeezing her breasts. Jacqueline says, "No," and pushes his hand away. Marcus says, "You know you want it," and puts his hand back under her shirt. Jacqueline shouts, "No!" and tries to push him away. Marcus persists, takes off Jacqueline's clothes, and they have sex despite Jacqueline's protests, struggles, and attempts to stop.

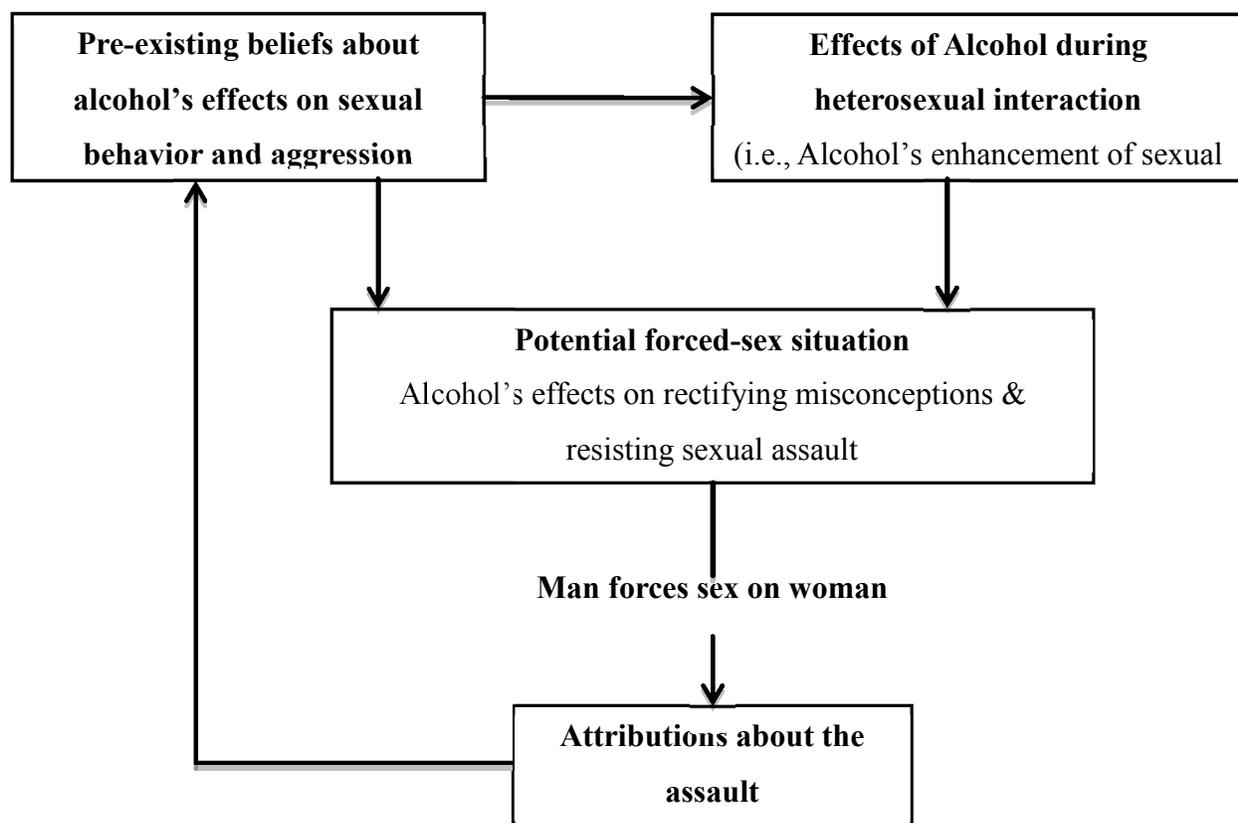
### **DAFR Vignette**

Marcus & Jacqueline meet at a party. They hang out for a while and talk to one another. Both Marcus and Jacqueline play drinking games with friends. Marcus is feeling pretty buzzed, but doesn't believe Jacqueline is really feeling the alcohol, so when Jacqueline goes to the bathroom Marcus pours a few extra shots in Jacqueline's drink to loosen her up, and does not tell Jacqueline when she returns. An hour later Marcus is feeling a little drunk, and Jacqueline is really drunk and stumbling around. They go to one of the bedrooms in the building, sit down on the bed, and start making out. After kissing for a while, Marcus puts his hand under Jacqueline's shirt and starts squeezing her breasts. Jacqueline says, "No," and pushes his hand away. Marcus says, "You know you want it," and puts his hand back under her shirt. Jacqueline shouts, "No!" and tries to push him away. Marcus persists, takes off Jacqueline's clothes, and they have sex despite Jacqueline's protests, struggles, and attempts to stop.

APPENDIX J

ABBEY (1996,2002) MODEL OF ALCOHOL'S ROLE IN SEXUAL ASSAULT

## Abbey (1996,2002) Model of Alcohol's Role in Sexual Assault



## APPENDIX K

DESCRIPTIVE STATISTICS AND BIVARIATE/BISERIAL CORRELATIONS  
AMONG POTENTIAL COVARIATES

Descriptive Statistics and Bivariate/Biserial Correlations Among Potential Covariates

Scale	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	--												
2. Rape myth acceptance	-.121	--											
3. Traditional gender roles	-.099	.496**	--										
4. Victimization history	-.101	-.017	-.111	--									
5. Perpetration history	-.028	-.039	.029	.302**	--								
6. Aggressive expectancies men	.310**	.126	.029	.055	.055	--							
7. Aggressive expectancies women	.182**	.155*	.162*	.094	.006	.555**	--						
8. Sexual drive expectancies men	.179**	.072	.111	.372**	.042	.554**	.392**	--					
9. Sexual drive expectancies women	.082	.091	-.005	.189*	-.019	.279**	.422**	.393**	--				
10. Vulnerability expectancies men	.038	.054	.015	.049	-.064	.074	.331**	-.030	.215**	--			
11. Vulnerability expectancies women	.204**	.000	-.101	.174	.074	.463**	.305**	.390**	.181**	.062	--		
12. Victim blame	-.147*	.411**	.295**	-.091	-.006	-.011	.030	.131*	.157*	.122	-.166*	--	
13. Perpetrator blame	.088	.271**	-.170*	.156	-.052	.150*	.004	-.011	-.095	-.097	.190**	.456**	--
<i>Min</i>	1	20	9	0	0	7	7	10	6	6	12	1	1
<i>Max</i>	2	87	42	1	1	35	35	30	30	30	30	9	9
<i>Mean</i>	1.56	47.75	22.82	.46	.08	21.83	21.25	23.52	19.54	16.05	24.36	2.11	8.47
<i>SD</i>	.50	13.82	7.64	.50	.28	6.00	6.06	4.95	4.82	5.01	4.55	1.51	1.12
<i>N</i>	227	224	225	114	214	227	226	227	226	227	226	227	227

Note. Gender was coded 1= Male and 2 = Female; Victimization and Perpetration history were coded 0 = no history and 1 = any attempted or completed sexual victimization or perpetration

\* =  $p < .05$ ; \*\* =  $p < .01$ .

APPENDIX L

BOOTSTRAPPED RESULTS OF HIERARCHICAL LINEAR REGRESSION WITH RAPE  
MYTH ACCEPTANCE AND ALCOHOL EXPECTANCIES PREDICTING  
VICTIM BLAME IN COMBINED IR/DAFR GROUPS.

Bootstrapped Results of Hierarchical Linear Regression with Rape Myth Acceptance and Alcohol Expectancies Predicting Victim Blame in Combined IR/DAFR Groups

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>R</i> <sup>2</sup>
<b>Step 1</b>					.101
Traditional gender role	.055	.013	.279	4.343**	
Gender	-.385	.211	-.127	-1.976	
<b>Step 2</b>					.247
Traditional gender role	.017	.017	-.8	1.247	
Gender	-.243	.177	-.080	-1.281	
Rape myth acceptance	.038	.010	.350	5.082**	
Aggressive expectancies men	-.006	.020	-.023	-.274	
Aggressive expectancies women	-.035	.022	-.140	-1.761	
Sexual drive expectancies men	.063	.028	.206	2.677*	
Sexual drive expectancies women	.037	.024	.119	1.740	
Vulnerability expectancies men	.044	.020	.145	2.275*	
Vulnerability expectancies women	-.067	.027	-.201	-2.956*	

*Note.* *B* = unstandardized coefficient; *SE* = standard errors;  $\beta$  = standardized coefficient

\* =  $p < .05$ ; \*\* =  $p < .01$

APPENDIX M

BOOTSTRAPPED RESULTS OF HIERARCHICAL LINEAR REGRESSION WITH  
RAPE MYTH ACCEPTANCE AND ALCOHOL EXPECTANCIES PREDICTING  
VICTIM BLAME IN THE IR GROUP.

Bootstrapped Results of Hierarchical Linear Regression with Rape Myth Acceptance and Alcohol Expectancies Predicting Victim Blame in the IR Group

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>R</i> <sup>2</sup>
<b>Step 1</b>					.160
Traditional gender role	.065	.023	.300	3.198**	
Gender	-.605	.329	-.200	-2.134*	
<b>Step 2</b>					.365
Traditional gender role	.030	.032	.139	1.366	
Gender	-.449	.324	-.148	-1.591	
Rape myth acceptance	.047	.014	.393	4.099**	
Aggressive expectancies men	-.041	.028	-.156	-1.332	
Aggressive expectancies women	-.037	.026	-.149	-1.397	
Sexual drive expectancies men	.046	.039	.144	1.329	
Sexual drive expectancies women	.027	.026	.084	.870	
Vulnerability expectancies men	.074	.024	.261	2.950**	
Vulnerability expectancies women	-.039	.039	-.104	-1.096	

*Note.* *B* = unstandardized coefficient; *SE* = standard errors;  $\beta$  = standardized coefficient

\* =  $p < .05$ ; \*\* =  $p < .01$

## APPENDIX N

BOOTSTRAPPED RESULTS OF HIERARCHICAL LINEAR REGRESSION WITH  
RAPE MYTH ACCEPTANCE AND ALCOHOL EXPECTANCIES PREDICTING  
PERPETRATOR BLAME IN THE COMBINED DAFR/IR GROUP.

Bootstrapped Results of Hierarchical Linear Regression with Rape Myth Acceptance and Alcohol Expectancies Predicting Perpetrator Blame in the Combined DAFR/IR Group

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>R</i>
<b>Step 1</b>					.030
Traditional gender role	-.025	.011	-.174	-2.630*	
<b>Step 2</b>					.142
Traditional gender role	-.003	.009	-.021	-.272	
Rape myth acceptance	-.021	.008	-.267	-3.618**	
Aggressive expectancies men	.032	.017	.178	1.997	
Aggressive expectancies women	.006	.016	.031	.363	
Sexual drive expectancies men	-.024	.019	-.111	-1.329	
Sexual drive expectancies women	-.019	.016	-.085	-1.154	
Vulnerability expectancies men	-.020	.014	-.095	-1.372	
Vulnerability expectancies women	.036	.016	.151	2.050*	

*Note.* *B* = unstandardized coefficient; *SE* = standard errors;  $\beta$  = standardized coefficient

\* =  $p < .05$ ; \*\* =  $p < .01$