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The Impact of Hyperfemininity on Explicit and Implicit Blame Assignment and Police Reporting of Alcohol Facilitated Rape in a Sample of College Women

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The Impact of Hyperfemininity on Explicit and Implicit Blame Assignment and Police
Reporting of Alcohol Facilitated Rape in a Sample of College Women

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
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College of Behavioral and Community Sciences
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Dedication

This thesis is dedicated to several important people. First, my Nanny and Grandpa who helped raise me and taught me the importance of family; no matter how big or small. Second, this is dedicated to my dad. I am motivated each and every day to make y'all proud and I hope you're smiling down as you watch over me through this journey. Most importantly, this is dedicated my personal cheerleader and best friend who has been there for me through everything in life, my mom. I cannot express how grateful I am for all of the sacrifices you have made for me. You have read and helped me practice many presentations, and tried your hardest to understand the "IAT" and everything else I ramble about. You listened to me and encouraged me (except when I wanted to give up and be an elementary school teacher), and for that I am forever grateful; I love you.

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Abstract

Rape remains a significant problem in the U.S., with the majority of victims reporting a drug-or-alcohol facilitated rape (DAFR) or incapacitated rape (IR). Many DAFR/IR victims do not acknowledge the incident as a rape, and are therefore the least likely to report or disclose the assault. Rape scripts theory is one theory that could be used to explain why DAFR/IR victims are more likely than other victims to not acknowledge the incident. In addition, individuals are more likely to blame the victim of a DAFR/IR rape. Furthermore, DAFR/IR victims experience more self-blame for the incident. Taken together, when alcohol is involved in a rape, the victim is viewed as more responsible for the assault. The majority of studies that examine blame for a sexual assault rely on explicit self-report methods. However, implicit beliefs may be more accurate in measuring unbiased beliefs that individuals hold. Implicit attitudes are commonly measured using an Implicit Association Task (IAT). Moreover, hyperfemininity (HF) is a personality characteristic that may influence blame for a sexual assault. Women higher in HF value relationships with men and are willing to use their sexuality as a means to maintain the relationships. Therefore, the present study hypothesized that women higher in HF who read a scenario of a rape involving alcohol will be more likely to implicitly blame the victim.

A sample of undergraduate college women completed a battery of questionnaires, read a written scenario depicting a rape in which the victim and perpetrator consumed either alcohol or soda, and completed an IAT. The IAT instructed participants to

correctly categorize two sets of stimuli. The stimuli used for the IAT were words that described the victim (innocent-related words) and perpetrator (guilt-related words) of the scenario, and pictures of alcohol and soda. Faster reaction times of categorization indicated a stronger IAT effect; that is, more blame towards the victim of an alcohol involved assault. Results indicated that HF did not influence the relationship between written scenario condition and implicit blame for the rape.

Because Women who have not been sexually victimized may hold strong rape myth acceptance and thus may assign more blame to the victim of a sexual assault (Mason et al., 2004), an exploratory analysis was conducted to determine if sexual victimization history impacted the relationship between rape myth acceptance and implicit blame for a sexual assault. Results showed that women without a history of sexual victimization may hold certain rape myths, but implicitly believe that alcohol can be associated with guilt or blame towards the perpetrator of a rape. Additionally, women with a history of SV who hold certain rape myths may be less likely to blame the perpetrator of a rape when alcohol is involved. Detailed results of the present study, policy and public health implications, and future directions are discussed.

Chapter One

Introduction

The prevalence of rape among women remains high, despite increased intervention and prevention efforts. Several psychiatric conditions have been shown to be associated with sexual assault victimization. Posttraumatic stress disorder (PTSD), depression, and substance use problems are common diagnoses given to rape victims (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Kilpatrick, Ruggiero, Acierno, Saunders, Resnick, & Best, 2003; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993; Tjaden & Thoennes, 2006). Furthermore, rape victims are more likely to develop these mental health problems, compared to victims of other types of trauma (Breslau, Kessler, Chilcoat, Schultz, Davis, & Andreski, 1998; Danielson, Amstadter, Dangelmaier, Resnick, Saunders, & Kilpatrick, 2009). Specifically, women who are assaulted are more likely to abuse alcohol (Bedard-Gilligan, Kaysen, Desai, & Lee, 2011; Kaysen, Neighbors, Martell, Fossos, & Larimer, 2006; Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997). Moreover, rape has been related to poor physical health (Zinzow, Amstadter, McCauley, Ruggiero, Resnick, & Kilpatrick, 2011). These findings indicate that rape victims may be more likely to suffer mental and physical health consequences following a rape, relative to other trauma victims.

Although recent evidence suggests that mental health outcomes are better when a victim reports or discloses a rape (Ahrens et al., 2010; Ruggiero et al., 2004), rates of reporting and disclosing the incident remain low. Without reporting or disclosing the

assault to anyone, victims may not receive pertinent psychological and/or medical care. In accordance with the Violence Against Women Act (2013), rape victims are entitled to free services that could minimize future health and psychological problems. When alcohol is involved during a rape, victims are less likely to report the incident (Resnick et al., 2000), compared to when alcohol is not involved. One explanation of this reluctance to report could be that individuals hold certain rape scripts of the factors related to a sexual assault. Typical rape scripts include the use of force, that a rape occurs outdoors, and that the perpetrator was a stranger (Kahn, Mathie, & Torgler, 1994; Littleton, Grills-Taquechel, Axsom, 2009b; Ryan, 1988). Although most rapes involve the use of alcohol, this factor is not commonly associated with rape scripts.

Victims of alcohol-involved rapes report guilt, remorse, or fear being blamed for the incident, perhaps because alcohol consumption is not a typically included in a person's rape script. For example, several studies have found that alcohol consumption prior to the rape increased the likelihood that a sexual assault victim would report feelings of guilt and self-blame after the assault, compared to non-impaired victims (Koss, Figueredo, & Prince, 2002; Littleton et al., 2009b; Stewart, Dobbin, & Gatowski, 1996). Thompson, Sitterle, Clay, and Kingree, (2007) found that college student victims did not report the rape to police because they feared being blamed for the assault. Further, several studies suggest that individuals perceive a victim who was intoxicated as more responsible for the rape (Norris & Cubbins, 1992; Stormo, Lang, & Stritzke, 1997). Collectively, research shows that victims of alcohol-involved sexual assault may be the least likely to report or disclose a rape due to fear of being blamed for that assault.

Therefore these victims may not receive important medical or mental health care that could aid them in the recovery process.

Feminine gender roles may also impact perceived responsibility of an alcohol-involved rape. Alcohol use among women is viewed as a feminine gender role violation (Huselid & Cooper, 1992; Ricciardelli, Connor, Williams, & Young, 2001). Therefore, women who hold conservative feminine gender role attitudes may be more likely to believe that a victim of an alcohol-involved sexual assault is more at fault for the incident. Further, if a victim discloses the incident to a friend or family member who holds stronger feminine gender role attitudes, they may feel blamed for the incident which will deter them from reporting the incident to police. This may also impact whether or not they seek medical and/or mental health for the rape. Hyperfemininity (HF) is a personality characteristic in which a person has a strong adherence to feminine gender roles (Murnen & Byrne, 1991). Thus, women who are higher in HF may be more likely to blame the victim of an alcohol-involved rape.

All of the research examining the relationship between alcohol consumption prior to a rape and responsibility for the incident has relied on self-report questionnaires. These types of measures examine explicit cognitions and may not be the most reliable sources when analyzing beliefs that a person may hold. For example, explicit measures are able to be modified to reflect more socially desirable responses (Gawronski & Payne, 2010). Therefore, a person may modify how much responsibility they assign to the victim and perpetrator of a sexual assault in an attempt to provide a more appropriate response. In contrast, implicit cognitions are unable to be modified and may represent underlying

biases that the individual could be unaware of (Gawronski & Payne, 2010). Thus, by measuring implicit cognitions we may be better able to accurately examine attitudes of blame for an alcohol-involved rape compared to standard explicit questionnaires. The Implicit Association Task (IAT) has been utilized to examine implicit cognitions (Greenwald, McGhee, & Schwartz, 1998). When completing an IAT, participants assign stimuli into paired categories on a computer screen. A reaction time is then computed and analyzed. The assumption is that quicker reaction times indicate a stronger association for the assigned pairing.

Only one study to date has examined implicit attitudes (positive or negative) towards the victim and perpetrator of a domestic violence written scenario. Results showed that women implicitly held a more favorable view of the victim, compared to men (Jackson, 2010). That is, female participants, relative to male participants, were faster at pairing positive words and the victim's name from the scenario, than negative words and the perpetrators name.

To date no study has looked specifically at women's implicit cognitions of blame towards victims of an alcohol-involved rape. The main purpose of the current study is to examine implicit attitudes of blame when the victim of a sexual assault has been consuming alcohol. As yet, there is very little research about whether or not the cognitive scripts that women hold about rape scenarios influence their attributions of blame for the incident if the victim had been consuming alcohol.

Understanding more about the inter-relationships between implicit cognitive scripts of rape blame and alcohol-related sexual assault may further enhance

interventions and campus awareness campaigns by helping to target specific myths and misconceptions about the role of alcohol in defining and prosecuting a rape. Further, given that many women are concerned about being blamed for a sexual assault, especially if they had consumed alcohol at the time of the incident, examining the relationship between alcohol use during the incident and victim blame can be used to bolster education programs that focus on encouraging women of alcohol-involved rapes to report the crime. Improving upon prior research, the proposed study will use an IAT to examine the strength of associations between a set of blame and non-blame related words that describe the perpetrator and victim of a rape scenario, respectively and pictures of alcohol or soda cues.

Chapter Two

Literature Review

The literature begins with a definition of rape, as well as the different types of sexual assault. Reasons why a majority of sexual assault victims do not disclose or report a rape are discussed next. Several subsections are included in this section to elaborate on why a person may not be likely to disclose the incident. These explanations include rape scripts, non-acknowledgement of rape, guilt, shame, and victim's perception of responsibility, and fear of stigma by others. The degree to which a woman internalizes feminine gender roles may impact her reaction to the incident and attributions of blame for an alcohol involved sexual assault. Feminine gender roles and rape blame are discussed in the next section. Specifically, hyperfemininity (HF) is an extreme adherence to feminine gender roles and is explained in more detail in this section. Although rape blame has been examined extensively using self-report measures, implicit associations may represent internal biases that an individual holds subconsciously. The Implicit Association Task (IAT) allows us to examine implicitly held beliefs, and can be correlated with explicit responses. Implicit cognitions as well as the IAT are described in this section. Only one study has examined positive and negative implicit attitudes towards the victim of a domestic violence scenario, and is detailed as a subsection.

Prevalence of Rape

Despite increased intervention efforts and public health awareness campaigns, reports of rape remain staggeringly high. For over 80 years rape was defined primarily as

forcible vaginal rape. In 2012, a more inclusive definition was developed. The new definition stated that rape is “the penetration, no matter how slight, of the vagina or anus with any body part for object, or oral penetration by a sex organ of another person, without the consent of the victim” (National Institute of Justice, 2012). The revised definition is not gender specific for victimization or perpetration, and includes all instances of when the victim may be unable to give consent, including due to the influence of drugs or alcohol. Specifically, the definition notes that incapacitation may include mental or cognitive disability, self-induced or forced intoxication, or status as a minor (National Institute of Justice, 2012). One likely effect of updating the definition of rape is that reports of rape may increase, which can have important implications for the criminal justice system as well as the victim. Although the current definition of rape in the U.S. includes males, the decision was made in this thesis to focus on females as victims in an effort to build on previous research.

In the U.S., 18% of women have been raped during their lifetime and 16.1% report being forcibly raped (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007). Forcible rape (FR) is defined when the tactic used by the perpetrator involves force, threat of force, or other harm to the victim or someone else (Resnick, Guille, McCauley, & Kilpatrick, 2011). However, FR does not appear to be the most prevalent type of rape. Research indicates that between 65.2% and 72% of rape victims report being intoxicated at the time they were raped (Littleton et al., 2009b; Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004); and such alcohol- or drug-involved rapes typically do not include the use of force (Zinzow et al., 2010). In fact, drug-or-alcohol facilitated rape/incapacitated rape (DAFR/IR) is five times more likely to occur than FR (Lawyer,

Resnick, Von Bakanic, Burkett, & Kilpatrick, 2010). Estimates indicate that one in 10 women will experience a DAFR/IR in their lifetime (Testa, Livingston, Vanzile-Tamsen, & Frone, 2003; Wolitzky-Taylor et al., 2011). DAFR is specifically defined as rape that occurs when the perpetrator deliberately gives the victim drugs or tries to get the victim drunk and then commits an unwanted sexual act against her; and IR is when the victim voluntarily consumes alcohol or takes drugs and is passed out or awake, but too intoxicated to know what she is doing or to control her behavior (Kilpatrick et al., 2007).

Women in college are at particularly high-risk of experiencing an unwanted sexual incident (Ullman, Starzynski, Long, Mason, & Long, 2008), and DAFR/IR experiences, in particular, are especially common in this age-group. For example, the risk of being raped is 10 to 15% greater for college-aged women than any other age group (Fisher, Cullen, & Turner, 2000; Kilpatrick et al., 2007), and the average age of a woman's most serious sexual assault is 19 years old (Ullman et al., 2008). Of particular note, compared to FR, DAFR/IR victimization is nine times more prevalent among college students than the general adult female population (Kilpatrick et al., 2007).

The high prevalence of DAFR/IR is alarming due to the increased rates of drinking among college students. Approximately 44% of college students report at least one heavy episode of drinking per month (Wechsler, Lee, Nelson, & Kuo, 2002) and approximately 20% report engaging in at least three or more heavy episodic drinking occasions per month (Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994). These rates exceed those among non-college attending same-aged peers (Slutske, 2005). Moreover, nearly half of all students on college campuses report binge drinking (Beseler, Taylor, & Leeman, 2010; McGee, Williams, & Kyrie, 2010; Wechsler, Dowdall,

Davenport, & Castillo, 1995), which is defined as four or more drinks on one occasion for women and five or more drinks on a single occasion for men. Additionally, the odds of a sexual assault occurring during college are nine times higher on days when a woman reports drinking heavily than when no alcohol is consumed (Parks & Fals-Stewart, 2004). Given the association between alcohol use and sexual assault, rape victimization is a significant public health concern among college women. These findings suggest that university-based public health awareness campaigns and prevention efforts should focus specifically on reducing the risk factors that impact alcohol related sexual assault among females in college.

Reporting and Disclosing Rape

Many women do not report a rape to authorities or disclose the incident to family or friends. For example, fewer than 5% of completed or attempted rapes are reported to law enforcement (Fisher et al., 2000; Koss, Gidycz, & Wisniewski, 1987) and less than half of the rapes experienced by college students are disclosed to anyone (Koss et al., 1987; Walsh, Banyard, Moynihan, Ward, & Cohn, 2010). DAFR/IR victims in particular are the least likely to report or disclose a rape relative to FR victims (Clay-Warner & Burt, 2005; Wolitzky-Taylor et al., 2011). Furthermore, when alcohol is consumed prior to the incident, the victim is more likely to disclose the incident to someone other than judicial authorities, compared to victims who were not consuming drugs or alcohol before the incident (Fisher, Daigle, Cullen, & Turner, 2003). Non-reporting to formal sources (i.e., police) may occur because DAFR/IR victims believe that the incident is less credible as a rape or crime, and often do not acknowledge the incident as a rape (Kahn, Jackson, Kully, Badger, & Halvorsen, 2003). However, some data suggest that even

when the victim of a DAFR/IR incident considers the unwanted sexual experience to be a rape (i.e., rape acknowledgement), she is still less likely to report the incident to police compared to FR victims (Resnick et al., 2000). This finding suggests that, even if a rape is acknowledged, some other aspect of the incident, or the negative consequences thereof, impede victims from connecting to the judicial system.

Reporting or disclosing a rape to others has important clinical implications, as the psychological trauma of rape can have a long-term negative impact on the victim, such as increasing interpersonal stress, creating social isolation (Calhoun & Atkeson, 1991; Cole, 2006; Orchowski, Meyer, & Giycz, 2009), and impacting clinical disorders, such as post-traumatic stress disorder (PTSD), depression (Campbell, 2008), and alcohol or substance use disorders (Grayson & Nolen-Hoeksema, 2005). Moreover, women who are assaulted are more likely to abuse alcohol (Bedard-Gilligan, Kaysen, Desai, & Lee, 2011; Kaysen, Neighbors, Martell, Fossos, & Larimer, 2006; Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997) and approximately one third of female rape victims will be diagnosed with PTSD following the incident (Kilpatrick, Edmunds, & Seymour, 1992). Clinical issues may become debilitating and interfere with daily life if treatment or professional help is not sought. Non-reporting becomes particularly relevant to seeking and gaining access to rape crisis services. According to the law (Violence Against Women Act, 2013), individuals who are raped are entitled to free health services that may aid in physical and emotional recovery. However, without reporting the incident to police or a professional service provider, victims may be unaware that they have access to these services (Kilpatrick et al., 1992). Overall, these studies suggest that not reporting a rape to police

may negatively impact victims' psychological well-being in the long-term by hindering access to appropriate post-rape services (Ahrens, Stansell, & Jennings, 2010).

Recent evidence does suggest that psychological recovery is improved when the victim discloses a rape; reporting could have important implications for the victim's ability to recover and heal after reporting a rape to police. For example, women who disclose their rape (to friends and family members) report better mental health outcomes (Ruggiero et al., 2004) and fewer symptoms of posttraumatic stress and depression after disclosing the assault, compared to those who do not disclose the incident (Ahrens et al., 2010). Victim disclosure may help improve psychological outcomes by providing social support from friends or family (Foa, Rothbaum, Riggs, & Murdock, 1991). Moreover, social support may have protective effects against the development of psychological symptoms by providing outlets for victims to turn to for comfort and advice (Ullman, 1999). The timing of reporting or disclosing the sexual assault is also an important factor in psychological recovery. Research shows that victims who disclose the incident to informal sources (i.e., family or friends) immediately after it occurs demonstrate improved psychological recovery (Cohen & Roth, 1987; Ruggiero et al., 2004; Ullman, 2007) than victims who delay disclosure. Thus, social support systems, including judicial entities, can improve psychological recovery especially when victims of sexual assault disclose the incident promptly.

In contrast to the benefits of reporting or disclosing a rape, not reporting or disclosing a rape may carry serious physical consequences, as well as represent problems for the criminal justice system. First, the physical problems following a rape can be severe. Bruises, bleeding, damage to the throat, sexually transmitted diseases (STDs), and

pregnancy (Koss, Koss, & Woodruff, 1991) are all problems that can occur. If untreated, physical symptoms may worsen. Additionally, unreported rapes undermine the criminal justice systems efforts to effectively intervene, apprehend and adjudicate offenders, and provide information and services to victims to which they have free access (Kilpatrick et al., 1992; see Violence Against Women Act 2013). Such services include counseling, medical treatment, and crisis intervention (Amstadter, McCauley, Ruggiero, Resnick, & Kilpatrick, 2008). For example, one recent study found that 94% of college student rape victims did not use any rape crisis or mental health services that were available to them, and 83% reported that the likelihood of using the services in the future was minimal (Walsh et al., 2010). With the large number of individuals reporting minimal use of various rape crisis services available, public health campaigns should emphasize the importance of proper treatment following an unwanted sexual experience, as well as increasing awareness of the services available.

Research indicates differences across DAFR/IR and FR rape types in relation to police reporting. Although DAFR/IR appears to be more prevalent, FR is more likely to be reported to police (Clay-Warner & Burt, 2005; Wolitzky-Taylor et al., 2011). For example, while 16% of college women who experience FR report the incident to authorities, only 7% of college women who experience DAFR/IR report the rape to police (Kilpatrick, 2007). DAFR/IR victims are, however, more likely than FR victims to eventually disclose the incident to friends or social supports, rather than to authorities (Fisher et al., 2003). This finding suggests that victims of alcohol related sexual assaults may initially turn to informal sources to decide what is an appropriate response to the unwanted incident. Some research indicates that informal sources may discourage

DAFR/IR victims from reporting the assault to police (Kilpatrick et al., 2007), perhaps because informal sources may not view the assault as a crime and because they fear that the victim will be treated negatively by criminal justice entities. Similarly, victims who experience FR are more likely to disclose the incident immediately or soon after the incident (Ullman & Filipas, 2001), and may be more likely to receive important medical examinations that could have implications for prosecuting the offender. Therefore, for various reasons, which will be discussed in more detail below, those who experience FR rather DAFR/IR incidents are more likely to report the event to authorities.

Assault-related characteristics have also been shown to vary across FR and DAFR/IR incidents, and may explain, in part, different rates of reporting between the two types of rape tactics. For example, FR victims are more likely to report peri-traumatic fear (i.e. fear that they would be seriously harmed or injured at the time of the incident), use of force by the perpetrator, greater injury, and memory for the event, compared to DAFR/IR victims (Abbey, BeShears, Clinton-Sherrod, & McAuslan, 2004; Zinzow et al., 2010). Moreover, factors that are more strongly correlated with FR incidents than DAFR/IR incidents, such as being raped by a stranger and experiencing injury during the rape, have been shown to increase the likelihood of reporting the rape to formal sources of support (i.e., police or crisis centers; Ullman & Filipas, 2001). In contrast to FR incidents, DAFR/IR incidents are more likely to occur at a bar or party (Testa, Livingston, Vanzile-Tamsen, & Frone, 2003), often involve a perpetrator who is known to the victim (Littleton, Axsom, & Grills-Taquechel, 2009a), and are less likely to involve the use of force or a weapon (Brecklin & Ullman, 2002; Ullman & Najdowski, 2010). Further, because DAFR/IR victims may be intoxicated at the time of the event,

sometimes to the point of being incapacitated, perpetrators may not use force to assault the victim and, therefore, victims may not show signs of resistance or injury (Zinzow et al., 2010). For instance, in a sample of college undergraduates, Abbey, Clinton-Sherrod, McAuslan, Zawacki, and Buck (2003) found that as the level of intoxication increased, victim resistance decreased. Further, in a national sample of female rape victims, Zinzow et al (2010) found a negative association between DAFR/IR and minor or severe injury. Lack of physical evidence is indeed a primary reason why DAFR/IR victims may not report the incident to police (Kahn & Mathie, 2000; Kahn et al., 1994). Therefore, the recently modified definition of rape may increase rates of reporting by including elements of DAFR/IR.

Reasons for Not Reporting a Rape: Theoretical Explanations for the Role of Alcohol

Rape Scripts

There have been several theories purported in the literature to explain why victims of DAFR/IR versus FR may be less likely to report the incident to police. Rape Scripts Theory is one such hypothesis that could explain why rape victims, particularly those who have experienced DAFR/IR, do not report the incident to police. A script describes a learned cognitive belief and a subjective assessment that an individual internalizes about appropriate and inappropriate behavior. Scripts can be influenced by culture, life experiences, personality attributes, and social interactions (McCormick, 2010). According to Rape Scripts Theory, typical rape scripts include information and beliefs an individual holds about the nature and sequence of events that occur during a rape (referred to as incident or assault-related characteristics), as well as how the victim and perpetrator act and are known to each other (Crome & McCabe, 2001). As indicated by

the Rape Scripts Theory, a rape may be less likely to be acknowledged as a rape or crime, and/or less likely to be reported to police, if the incident does not involve characteristics that fit with a stereotypical definition of what constitutes a rape (Crome & McCabe, 2001; Frese, Moya, & Megias, 2004; Mont, Miller, & Myhr, 2003).

Research indicates that there are several characteristics that define a rape script; the majority of which are consistent with an FR scenario (Bondurant, 2001; Mont et al., 2003). These include a woman who is attacked outdoors, at night, and by a stranger who uses physical violence or a weapon (Kahn et al., 1994; Littleton et al., 2009b; Ryan, 1988). Recall that the characteristics often associated with a DAFR/IR incident involve rape by an intimate partner or acquaintance, occur in a social setting, and include limited use of force or threat by the perpetrator, which are factors that all appear to be inconsistent with a typical rape script. Most importantly, rape scripts often include overt resistance on the part of the victim (Littleton & Axsom, 2003), which is a less common characteristic of DAFR/IR and more common in FR incidents (Abbey, Clinton, McAuslan, Zawacki, & Buck, 2002; Mont et al., 2003). Rape characteristics may explain, in part, why FR incidents are more often reported and/or acknowledged: they fit with the conventional scenario of what individuals believe to be an unwanted sexual encounter.

There are several ways in which rape scripts may impact whether and why a rape victim does not report the incident to police: (1) the victim may not acknowledge the incident as a rape or a crime; (2) the victim may experience guilt and shame surrounding the event because it does not fit with a “stereotypical” assessment of a non-consensual sexual incident; and (3) the victim may experience fear of being stigmatized and blamed for the rape by others if she had been consuming drugs or alcohol (voluntarily or

involuntarily) at the time of the incident. The impact of the victim blaming herself for the sexual assault, and their implications for reporting a rape to police, are discussed in more detail in the following sections.

Non-Acknowledgment of Rape

According to the Rape Scripts Theory, one reason that rates of reporting for DAFR/IR incidents may be low relative to FR incidents is because assault-related characteristics that often define a DAFR/IR incident – use of alcohol by the victim, lack of force or threat of force by the perpetrator, and an intimate relationship between the victim and perpetrator - may not fit with victim’s pre-conceived notions of a rape. Therefore, victims may be less likely to acknowledge the incident as a rape or a crime or perceive that harm was intended. As defined by the literature, unacknowledged rape victims are those who have had an experience that would legally be classified as rape, but who do not consider the experience a rape or a crime (Kahn & Mathie, 2000). A key element of an acknowledged rape is evidence that the victim did not consent: usually a result of injuries sustained by force or threat of force from the perpetrator (Bondurant, 2001). Therefore, victims are less likely to acknowledge a rape that lacks FR characteristics. For example, in a seminal study, Kahn et al. (1994) found that the only difference between unacknowledged and acknowledged victims was that acknowledged victims were more likely to have experienced a rape involving physical restraint. Another assault-related characteristic that is highly correlated with rape acknowledgment is whether or not alcohol was consumed prior to, or at the time of the incident. For example, research suggests that binge drinking prior to a rape is associated with an increased likelihood that the incident will be unacknowledged by the victim (Kahn et al., 2003;

Littleton et al., 2009a; Zinzow et al., 2010). Further, while unacknowledged rape victims appear more likely to have been raped by an acquaintance (Koss, 1985), they still hold beliefs that a stranger is more likely to perpetrate a sexual assault than an intimate partner or acquaintance (Kahn et al., 1994). Taken together, research indicates that incident characteristics of DAFR/IR rapes decrease the likelihood that the victim will label the incident as a rape or crime that should be reported to authorities, which significantly reduces the likelihood that it will be reported to police.

Results about the health and psychological outcomes of acknowledged and unacknowledged victims are mixed. Some literature suggests that not acknowledging a rape may protect victims from experiencing a certain level of psychological disturbance, whereas other studies suggest that non-acknowledgment may lead to psychiatric problems, or exacerbate pre-disposing ones (Conoscenti & McNally, 2006; Littleton, Axsom, Breitkopf, & Berenson, 2006; Littleton et al., 2009a). For example, some research indicates that acknowledged rape victims report more negative health consequences, more symptoms of depression and post-traumatic stress disorder (PTSD), and have higher rates of anxiety than unacknowledged victims (Conoscenti & McNally, 2006; Littleton et al., 2009a). Conversely, other studies have not found that acknowledgment status has any effect on psychological distress (Littleton et al., 2006), including subsequent PTSD symptomatology (Littleton & Henderson, 2009c). Since unacknowledged victims may experience less severe assaults, they may view themselves as less traumatized (Kahn et al., 2003). Furthermore, Layman, Gidycz, and Lynn (1996) found that unacknowledged victims report fewer PTSD symptoms than acknowledged victims, indicating that non-acknowledgement may benefit a victim. In contrast, other

data suggests that victims who do not acknowledge the incident as a rape report heavier alcohol use compared to non-rape victims and acknowledged victims (McMullin & White, 2006). However, the causal association between rape acknowledgement and health and psychological outcomes remains unclear. It could be that victims who have more severe psychiatric problems *before* the incident do not acknowledge the rape because they possess limited emotional resources to effectively cope with the event. Regardless of the degree of causality, these findings highlight that non-acknowledged rapes are linked with poor mental health problems in some studies. Clearly, the association between acknowledgment status and post-rape outcomes, including police reporting, needs to be examined further.

Guilt, Shame, and Victim's Perception of Responsibility

Another potential reason why DAFR/IR rape victims may not report a rape to police may be attributed to the victim's feelings of guilt, shame, and fear of being blamed for the incident. The majority of rape victims report feeling shame or embarrassment following a sexual assault, compared to victims of other crimes (Felson & Pare, 2005; Vidal & Petrak, 2007). Some even blame themselves for the sexual assault that occurred. DAFR/IR victims, in particular, experience feelings of guilt that arise due to the discrepancy between what they believe they could have done to prevent the assault from occurring (i.e., not consuming alcohol) and what actually occurred during the time of the incident (Branscombe, Wohl, Owen, Allison, & N'gbala, 2003; Littleton et al., 2009c). For instance, one study of undergraduate rape victims found that victims who were impaired or incapacitated (from alcohol) during the assault reported more guilt after the rape compared to non-impaired victims (Littleton et al., 2009b). Several additional

studies reveal a positive association between incident characteristics associated with DAFR/IR, relative to FR, and victim self-blame after the assault (Koss et al., 2002; Stewart et al., 1996). For example, victim alcohol use at the time of the incident and being raped by a known perpetrator are both associated with greater perceptions of self-blame (Vidal & Petrak, 2007; Ruback, Menard, Outlaw, & Shaffer, 1999). Additionally, it has been theorized in the literature that DAFR/IR victims may be more likely than non DAFR/IR victims to engage in “counterfactual thinking” (i.e., thoughts of how the incident might have been altered if the victim had not consumed alcohol prior to the rape) and ultimately blame themselves for the rape, in an attempt to justify why the incident occurred (Branscombe et al., 2003; Littleton et al., 2009b).

There is also research to suggest that individuals may view the victim as more responsible for a rape if the victim was intoxicated at or before the incident (Norris & Cubbins, 1992; Stormo et al., 1997). Level of intoxication may impact whether or not the victim blames herself for the incident and chooses to report the rape to police. Self-blaming is in line with the victimology literature, which states that society has perpetuated a myth that women who consume alcohol are more sexually interested or lack morals and therefore “ask” to be raped (Finch & Munro, 2005; Richardson & Campbell, 1982; Stewart & Jacquin, 2010). In fact, research shows that shame and self-blame mediate the association between a rape experience and subsequent disclosure to informal sources (Weiss, 2010). Similarly, findings show that self-blame reduces the likelihood that a victim will report the rape to authorities (Starzynski, Ullman, Filipas, & Townsend, 2005) for several reasons: (1) victims may feel “re-traumatized” from reporting an assault to police (Allison & Wrightsman, 1993), and (2) victims who blame

themselves may be less likely to perceive that police are empathic or helpful (Maddox, Lee, Barker, 2011). A recent study of college student rape victims corroborates these data, by finding that victims did not report the rape because they believed police would view the assault as their fault (Thompson et al., 2007).

Fear of Stigma by Others

Fear of being stigmatized by others is also common among victims of DAFR/IR (Littleton et al., 2009b) and is another primary reason why DAFR/IR rapes are less likely to be reported to police. This stigmatization is also tied to the victimology literature, which posits that women who consume alcohol are perceived as sexually available, promiscuous (Parks & Scheidt, 2000), and open to sexual overtures by men (Abbey, McAuslan, & Ross, 1998). Thus, women who have experienced DAFR/IR, versus FR, may believe that individuals will view them in a negative light as being sexually immoral, licentious, and reckless. There are some data to suggest that negative perceptions may be the case, as victims who consume alcohol prior to being raped have been shown to perceive greater negative social reactions from the police and other individuals compared to women who did not drink alcohol before being raped (Littleton et al., 2009b; Ullman et al., 2008). In another recent study, when the perpetrator but not the victim consumed alcohol, victims reported the incident to a significantly greater number of informal and formal sources, compared to victims who had consumed alcohol prior to the assault (Ullman & Najdowski, 2010). Perhaps victims who were consuming alcohol prior to the rape may feel a greater sense of stigma from support sources, compared to victims who were not drinking alcohol. Furthermore, impaired victims receive less positive reactions in response to their disclosures and reports, and

rate their support sources as being less helpful compared to non-impaired victims (Ullman & Najdowski, 2010). All of these findings suggest therefore, that individuals may hold biases against DAFR/IR victims, perhaps because the rape scenario, which includes alcohol or substance use, does not fit an a priori rape script. The perception of negative reactions from criminal justice entities may discourage victims from reporting an unwanted sexual experience, particularly if alcohol is involved in the incident.

Not only do people perceive the victim of a DAFR/IR more negatively than other types of rape victims, but perceptions of victims of alcohol or drug-involved rapes can also have a negative impact on judicial proceedings, particularly the reliability of the victim's testimony. For example, one study found that victim credibility was negatively correlated to police officer perceptions of victim intoxication: the victim was believed to be less credible by officers if they perceived her to be more intoxicated. Further, the victim was also more likely to be perceived by officers as interested in sex, responsible for the rape, and more likely to consent to the incident if she was intoxicated at the time of the rape (Schuller & Stewart, 2000). Similar to police attitudes towards DAFR/IR victims, research indicates that mock jurors view the victim of an alcohol involved sexual assault as being more at fault for the incident than victims who were not drinking prior to the assault (Campbell, Sefl, & Ahrens, 2004; Wild, Graham, & Rehm, 1998). The societal belief that there is a correlation between women's drinking and immoral behavior (Young, Morales, McCabe, Boyd, & D'Arcy, 2005) may indicate why jurors find the testimonies of victims of DAFR/IR as being less convincing and plausible, and more prone to errors and fallacies (Stewart & Jacquin, 2010). Along similar lines, if the victim is intoxicated at the time of the incident, she may have difficulty remembering specific

aspects of the event, therefore reducing the credibility of her testimony or report to police. For example, research shows that jurors perceive an intoxicated victim who willingly consumed alcohol as less credible than a victim who was not consuming alcohol, or who did so unwillingly (Schuller & Wall, 1998; Stewart & Jacquin, 2010). Overall, research has shown that society's perception of women who drink alcohol could influence a victim's decision to report a rape, in part because she may fear that she will be stigmatized in a judicial setting based on her alcohol use prior to the assault.

Female Gender Roles and Rape Blame

In addition to cognitive schemas that individuals hold about rape scenarios, traditional gender-role stereotypes may also influence a woman's perception of blame toward a victim of a rape. Gender role stereotypes represent culturally-defined beliefs about men and women that become internalized over time through socialization (Krause & Roth, 2011). Feminine gender role behaviors include being nurturing (Nolen-Hoeksema, 2004), thin and attractive (Mussap, 2007), cheerful, compassionate, not using harsh language, feminine, loves children, loyal, sensitive to others needs, and understanding (Bem, 1974). Alcohol involvement among women is seen as a violation of feminine gender role behavior (Huselid & Cooper, 1992; Ricciardelli et al., 2001) because individuals' often believe that alcohol use is a sign of masculinity and that men can tolerate greater alcohol use (Lemle & Mishkind, 1989). Consistent with the victimology literature discussed previously, rape victims who consume alcohol to the point of being drunk or intoxicated may be classified as "bad" by society because traditional gender roles are violated. Victims who identify more strongly with feminine gender roles may be more likely to classify DAFR/IR as "bad" if alcohol is consumed at

the time of the rape, as this behavior would be a violation of traditional gender roles (Marin & Guadagno, 1999). For example, one study found that, compared to women who held less traditional feminine gender role attitudes, women with traditional attitudes were more likely to blame the victim of an alcohol involved rape and attribute more responsibility for the event to the victim when the victim was consuming alcohol, rather than a non-alcoholic drink (Snell & Godwin, 1993).

In terms of reporting relevant crimes to the police, several studies found that women who hold conservative gender-role attitudes are less likely to report sexual harassment than women with more liberal gender role attitudes (Baker, Terpstra, & Larntz, 1990; Malovich & Stake, 1990). It may be more consistent with gender role stereotypes for a woman to respond passively to sexually aggressive behavior from a man. Furthermore, victims who hold stronger feminine gender roles may not report a rape to police and assign more responsibility to a DAFR/IR victim (Check & Malamuth, 1983) because they believe that women should capitulate to a man's sexual advances. Thus, women with stronger feminine gender roles may not only assign more blame to themselves, but also fear that others' will hold the same beliefs and therefore assign more responsibility to them.

Hyperfemininity Characteristics

Hyperfemininity (HF) is one personality variable that is related to female gender role behavior that may influence whether or not a victim attributes blame to a rape victim or reports a rape to police. HF is an extreme adherence to a stereotypic feminine gender role, and is defined along three dimensions: 1) focusing on the importance of relationships with men to an exaggerated degree, 2) preferring to date men who exhibit

traditional masculine or hyper-masculine behavior, and 3) using sex to gain or maintain a romantic relationship (Murnen & Byrne, 1991). Only two studies have looked at whether HF influences a woman's attribution of blame and propensity to report a rape to police. Murnen, Perot, and Byrne (1989) examined coping and response strategies to unwanted sexual experiences in a sample of undergraduate rape victims, and found that women high in HF were more likely to blame themselves for an unwanted sexual experience than women who were lower in HF. In a second study, also conducted by Murnen and colleagues (1991), also using a sample of undergraduate college women, results suggested that women who were high on HF would not report a rape to police and would advise a lesser punishment to the perpetrator compared to women low on HF. Overall, these findings suggest that women high in HF may not perceive that an unwanted sexual incident is a rape or a crime and believe that the incident is not worthy of reporting. However, given that only two studies have examined the link between HF, attributions of blame following a sexual assault, and police reporting, more research is needed to further explicate the mechanisms or processes that underlie this relationship.

There could be several reasons to explain the link between HF and greater attributions of blame toward the victim of an alcohol involved rape. First, research has indicated that women high in HF use their sexuality and physical attributes as "tools" to attract men and maintain an intimate relationship with a male partner (Murnen & Byrne, 1991). Thus, if a woman is raped by an acquaintance after consuming alcohol, and she is high in HF, she may be more likely to feel responsible for the incident due to the beliefs that (a) women sustain relationships with men by engaging in sexual acts and (b) women do not get drunk to the point of incapacitation. Second, according to the rape scripts

literature, women high in HF, who already strongly adhere to exaggerated feminine gender roles, may perceive any level of intoxication as a gender role violation, and thus perceive herself in a more negative light. Third, since women high in HF may be attracted to men who exhibit extreme masculine behavior (Maybach & Gold, 1994; Parrott & Zeichner, 2003), they may be at greater risk for experiencing a sexual assault, more generally. Thus, a female rape victim who is high in HF may attempt to justify a rape by her male partner in an attempt to avoid her own negative feelings of guilt. Overall, high HF could lead to self-blame or assigning more responsibility to the victim of a DAFR/IR because of conservative feminine gender roles that HF women hold.

Implicit Cognitions and the Implicit Association Task

Implicit cognitions may help us understand more about the rape scripts that women who are higher and lower on HF hold about alcohol related sexual assault, attributions of rape blame, and subsequent reporting. Implicit cognitions represent underlying motivational processes that operate outside of conscious awareness with relative cognitive ease and are difficult to control (Gawronski & Payne, 2010). Measurements of implicit processes provide information on individual thought patterns and cognitive schemas that are not subject to the demands of social desirability (Houwer, 2006). In contrast, explicit thought processes, such as those obtained through self-report questionnaires and most widely measured in the literature of rape attributions and blame, operate in one's conscious awareness (Banaji & Greenwald, 1995; Kahneman, 2003; Gawronski & Payne, 2010). The measurement of these processes is therefore limited by the fact that respondents may provide answers that are consistent with socially accepted norms. Thus, on the one hand, explicit measures (i.e., questionnaires) assess verbal

expressions of attitudes that may be influenced by many factors, including socially prescribed scripts and scenarios. Implicit measures of the same attitudes, on the other hand, do not require direct report, are less vulnerable to biased interpretation, and may ultimately shed light on attitudinal scripts that are not altered by social norms (Gawronski & Payne, 2010).

There are several reasons why it may be important to measure attributions of rape blame using implicit assessment methods. First, there is a plethora of data to suggest that implicit and explicit assessments of attitudes and behaviors do not always correspond. For example, Jackson (2010) found that men explicitly reported a negative view of the victim of a domestic violence scenario, but implicitly men held a positive view of the victim. This finding means that assessment of implicit attributions of rape blame may add to our conceptualization and understanding of the factors that may impede victims from reporting a rape to police, above and beyond knowledge gained from current self-report questionnaires that only measure explicit attitudes. Second, respondents may attempt to present themselves in a socially desirable manner on explicit measures (Fazio & Olson, 2003). Furthermore, implicit attitudes are thought to be affectively-based, thus prone to impulsive, rash, and imprudent processes. In contrast, explicit attitudes are thought to be cognitively-based and thus prone to cognitive decision-making processes like balancing reasons, processing facts, and weighing pros and cons (Fazio & Olson, 2003). That is, reports of attributions of rape blame, as measured by implicit assessment, may be more strongly impacted by emotional processes, such as feminine gender role beliefs, whereas reports on explicit measures are subject to cognitive manipulation and a bias toward altering responses to appear in a positive light.

In this case, because rape is illegal, most individuals would outwardly (explicitly) place blame on the perpetrator of the incident, as that is the socially acceptable behavior. Moreover, individuals may feel that they are under social pressure to hold sympathetic attitudes towards the victim of a sexual assault. In actuality though, individuals may view the victim of a sexual assault as more responsible for the rape if she was consuming alcohol beforehand. Therefore, embedded with their assessment of the scenario, but not explicitly stated, are feelings, emotions, beliefs, and opinions about both the victim and the perpetrator; some of which may be over looked or distorted in consideration of providing the publicly suitable response. Taken together, individuals' may not be comfortable assigning blame to the victim of a rape, despite holding a preconceived bias that a woman who has been consuming alcohol is partially to blame for the incident.

The implicit association tasks (IAT) is a recently developed method that allows researchers to measure underlying rape scripts, rather than relying solely on explicit assessments of these attitudes. This methodology has been applied to a wide range of psychological processes and attitudes (Jajodia & Earleywine, 2003; Levinson, Cai, & Young, 2010; Wiers, Beckers, Houben, Hofmann, 2009). Participants are asked to categorize groups of stimuli as quickly as possible (see Greenwald, McGhee, & Schwartz, 1998) when completing an IAT. A reaction time is then computed to assess memory association between two or more stimuli that are purportedly paired together in a cognitive network. A primary assumption of the IAT method is that it is quicker for an individual to sort well-associated pairings, in this case alcohol stimuli and blame-related words, than it is to sort categories that are not associated, in this case as alcohol pictures and innocent words (Swanson, Swanson, & Greenwald, 2001). A stronger association

between two familiar or frequently paired stimuli should lead to shorter reaction times, whereas weaker associations between two categories (unfamiliar) should lead to longer reaction times, and therefore a weaker IAT effect.

Intimate Partner Violence IAT

To our knowledge only one study has used an IAT to examine attitudes about blame toward the victim of an assault-related scenario. In this study, Jackson (2010) examined the association between two types of emotions (pleasant/unpleasant) and two characters from a domestic violence scenario depicting the victim or the perpetrator, after participants read a vignette depicting a domestic violence scene. Results showed that women, compared to men, implicitly held a significantly more favorable view of the victim, as evidenced by faster reaction times for the pairing of pleasant words with the victim's name, compared to the pairing of pleasant words with the perpetrator's name. Noteworthy is that Jackson (2010) found no gender differences on blame for the domestic violence incident when blame was assessed through explicit measures, as both men and women assigned more blame to the perpetrator than to the victim. To our knowledge, implicit views have never been examined using a rape scenario, specifically measuring attributions of rape blame when the victim has consumed alcohol at the time of the incident.

Chapter Three

Method

Participants

The study used multiple methods to recruit a sample of 70 female undergraduate students (internet, flyers, respondent driven sampling). Participants were eligible for the study if they were: 1) at least 18 years of age; 2) currently enrolled as a student at the University of South Florida (USF; full or part-time); and 3) were female. Males were excluded from the current study because victim blame has been examined more extensively in reference to women's attitudes (Koss et al., 2002; Stewart et al., 1996). In addition, women are more likely to be victims of sexual assault compared to men, and a focus of the present study was to determine factors that may impede a victim's decisions to report a rape to authorities. As this effort is the first known study to examine implicit beliefs of rape blame, we wanted to begin by analyzing females' implicit cognitions.

Recruitment

Three different forms of recruiting were used: flyers, announcements in undergraduate classrooms, and respondent-driven sampling. First, flyers were posted around the USF campus, including the student center, library, and academic buildings. Flyers asked for women who were undergraduates at USF and 18-65 years old to participate in a research study about alcohol and cognitions entitled Implicit and Explicit Cognitions Associated with an Unwanted Sexual Experience. The flyers stated that individuals would be compensated for their participation, and that the study included

answering questionnaires and a brief computerized task that would take 1 hour to complete. Second, individuals were recruited through undergraduate classrooms from the Criminology department (with permission from instructors). Third, respondent-driven-sampling was used to recruit individuals who were participating in other studies currently being conducted at the Behavioral Health Research Lab, where the proposed study took place. Sixty-three undergraduate criminology majors who were recruited via classrooms were compensated with course extra credit, if this was stipulated in the instructor course syllabus; seven other participants were entered into a raffle and eligible to receive one of two \$50 Target gift cards. Two separate raffles were held at the conclusion of the study. To be entered into the raffle, eligible students were assigned a number upon study entry. At each raffle, one number was randomly drawn and the student to whom the chosen number belonged was contacted to receive her gift card. Participants had the option to pick up the gift card in person, or have it mailed to a desired address. We examined participant incentive type (course credit versus raffle) as a possible covariate to include in our primary data analyses (described below). The number of participants in the different incentive types was unbalanced. For example, only seven participants were entered into the raffle and the rest received extra course credit. One-way Analysis of Variance (ANOVA) tests revealed that incentive type was not related to any of the dependent variables of interest.¹

¹ Incentive type was significantly related to several demographic variables, including, marital status, religion, current residence, and sorority membership. However, given the small number of individuals in the raffle versus the other forms of incentives, we did not include these variables as covariates.

Measures

The present study used multiple measures to examine independent and dependent variables, as well as possible covariates. The measures used included: a demographic form, a daily drinking questionnaire, sexual experiences survey, hyperfemininity scale, alcohol-sex expectancies questionnaire, rape myth acceptance questionnaire, a post-vignette scenario questionnaire, and a rape scenario follow-up questionnaire. Each of these measures is discussed in more detail below (see appendix).

A *Demographic Form* was used to obtain general demographic information, such as age, current relationship status, educational attainment and class rank (e.g., college freshman, sophomore, junior, or senior), employment status, racial/ethnic background, religion, political affiliation, current residence (e.g., residence hall, campus apartment, off campus), and Greek-Life membership. Items of the demographic form were examined in relation to the dependent variables of interest. Variables that were found to be significantly related to these outcomes were included as covariates in analyses (see Results for more detail).

Daily Drinking Questionnaire (DDQ; Collins, Parks, & Marlatt, 1985) was used to measure frequency and alcohol quantity (in standard drink conversions) of beer, wine, and spirits over an average week in the past 90 days. Participants were also asked to report on the amount of time they spend drinking during their average heavy drinking episode over the past month, as well as their perceptions of how other students drink (“Overall, what percentage of students do you think consumed five or more drinks in a row on at least one occasion in the last two weeks?”). The DDQ yields several different indices of alcohol consumption, including number of drinking days, number of drinks per

drinking day, and total drinks per week. This measure has demonstrated adequate convergent validity with other measures of drinking behavior (Collins et al., 1985; Cahalan, Cisin, & Crossley, 1969). Research shows that heavier alcohol use is positively related to sexual assault victimization (Bedard-Gilligan et al., 2011; Kaysen et al., 2006); therefore indicating that individuals' who consume more alcohol may be more likely to have experienced a sexual assault in the past, which may influence their attributions of blame toward the victim. The current study cronbach reliability coefficient for the average amount of alcohol consumed in the past 90 days was $\alpha = .65$ and number of hours spent drinking in the past 90 days was $\alpha = .86$.

Sexual Experience Survey (SES; Koss, Gidycz, & Wisniewski, 1987) was administered to measure women's sexual victimization history after the age of 14, ranging from non-vaginal penetration assault to rape victimization. These items were examined as possible covariates in statistical models, given prior research suggesting that prior sexual assault history may impact perceptions of rape blame (Coller & Resick, 1987; Jenkins & Dambrot, 1987). The SES consists of 10 questions that are assessed in a dichotomous (yes/no) manner. Sample items include "Have you had sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?", "Have you had sexual intercourse when you didn't want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to make you?", and "Have you had sex acts (anal or oral intercourse or penetration by objects other than the penis) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding down, etc.) to make you?" The SES

has demonstrated adequate reliability (Koss & Gidycz, 1985). Because data from a nationally representative sample of college students indicates that nearly half of all college students have been sexually victimized (Ullman, Karabatsos, & Koss, 1999), we would expect that approximately 50% ($n = 35$) of our sample would report experiencing a sexual assault in the past. Therefore, because some participants may have experienced several forms of sexual aggression or victimization in the past, participants were classified based on the most serious type of sexual aggression or victimization they have experienced, which includes no sexual aggression or victimization. This variable was examined as a potential covariate because prior research indicates that previous sexual victimization may influence rape blame (Coller & Resick, 1987; Jenkins & Dambrot, 1987).

Hyperfemininity Scale (HFS; Murnen & Byrne, 1991) is a 26-item single factor measure that was used to examine women's identification with attitudes and behaviors that focus on obtaining and maintaining a male romantic partner. This measure requires participants to choose a single statement, among pairs, that is most similar to their own beliefs. (e.g., they would select either: "I never use my sexuality to manipulate men;" or "I sometimes act sexy to get what I want from a man"). Scores were calculated by summing together the number of hyperfeminine responses. Murnen and Byrne (1991) found that the HFS demonstrated good internal and test-retest reliability and convergent validity with social desirability.

Alcohol Expectancies Regarding Sex, Aggression, and Sexual Vulnerability Questionnaire (AESASVQ; Abbey, McAuslan, Ross, & Zawacki, 1999) is designed to assess participant's expectancies about alcohol use and sexual assault. This 25-item

measure contains 4 domains, and participants respond to each item on a 5-point Likert-type scale ranging from 1 “not at all” to 5 “very much”. The four domains include (1) *Aggression*, which contains 7 items which tap into verbal and physical aggressive actions that an individual may portray while drinking. A sample item includes “When drinking alcohol, I become hostile”; (2) *Sexual affect*, which has 6 items which tap into romantic actions an individual may display while drinking alcohol (A sample item from this subscale includes “When drinking alcohol, I say and do romantic things”); (3) *Sexual drive*, which includes 6 items which tap into sexual actions that an individual may think about or initiate while consuming alcohol (A sample item includes “When drinking alcohol, I feel sexually aroused”); and (4) *Vulnerability to sexual coercion*, which has 6 items which tap into an individuals’ belief that they are at risk for sexual victimization while drinking alcohol. A sample item includes “When drinking alcohol, I am more sexually vulnerable”. The AESASVQ has high internal consistency reliability, moderate test-retest reliability, and good discriminant validity with measures of socially desirability and normative masculine and feminine gender role beliefs (Abbey et al., 1999). These variables were examined as potential covariates for the primary analyses since research suggests that individuals who hold higher alcohol expectancies may be more likely to anticipate that sexual intercourse follows alcohol consumption (Benson, Gohm, & Gross, 2007; Patrick & Maggs, 2009). Thus, women who hold higher expectancies that alcohol acts as a catalyst for sexual intercourse, or sexual behavior, may be more likely to blame the victim of an alcohol involved rape. The current study cronbach reliability coefficient for the *Aggression* scale was $\alpha = .83$, *Sexual Affect* scale was $\alpha = .95$, *Sexual Drive* scale was $\alpha = .97$, and *Vulnerability* scale was $\alpha = .90$.

Illinois Rape Myth Acceptance Scale (IRMA; Payne, Lonsway, & Fitzgerald, 1999) is a 45-item questionnaire that was used to measure beliefs that support and enable sexual violence. The IRMA has 7 factors: *She asked for it* (SA) which includes 8 items designed to measure if an individual believes that certain flirtatious or provocative actions of a woman are reasons for why she was victimized. An example for this subscale includes, “A woman who teases men deserves anything that might happen”. *It wasn't really rape* (NR) contains 5 items which are designed to tap into characteristics that may or may not occur during a rape. A sample item from this subscale is, “If the rapist doesn't have a weapon, you really can't call it a rape.” *He didn't mean to* (MT) consists of 5 items and is designed to examine characteristics of the rapist, and excuses for their behavior that people may believe. An example item of this subscale is, “Rape happens when a man's sex drive gets out of control.” *She wanted it* (WI) has 5 items, and taps into beliefs that a female victim may actually enjoy the rape. A sample item includes, “Many women actually enjoy sex after the guy uses a little force.” *She lied* (LI) subscale is made up of 5 items that examines the belief that a victim is over exaggerating and the incident really wasn't a rape. An example item from this subscale is, “A lot of women lead a man on and then they cry rape.” *Rape is a trivial event* (TE) has 5 items which are designed to tap into beliefs that rapes are not as severe as other crimes. A sample item includes, “Rape isn't as big a problem as some feminists would like people to think.” *Rape is a deviant event* (DE) contains 7 items which tap into beliefs that a rape cannot occur to “good” people in “good” areas. A sample item from this subscale includes, “Rape mainly occurs on the bad side of town.” *Filler items* (FI) contain 5 items that are not scored. An example of an item from this subscale is, “Most rapists are not caught by the police”.

Items are scored on a 7 point Likert-type scale that ranges from 1 “totally disagree” to 7 “totally agree”, with higher scores indicating higher acceptance of stereotypic rape myths. Payne et al., (1999) found that the internal consistency for this scale is high at .93; and construct validity has been demonstrated with high correlations to measures of sex-role stereotyping, adversarial sexual beliefs, hostility toward women, and attitudes toward violence, ranging from .50 to .74 (Payne et al., 1999). The current study cronbach reliability coefficient for the *She asked for it* scale was $\alpha = .83$, *She wanted it* scale was $\alpha = .84$, *He didn't mean to* scale was $\alpha = .69$, *Rape is a trivial event* scale was $\alpha = .34$, *She lied* was $\alpha = .77$, *Rape is a deviant act* was $\alpha = .79$, and *It wasn't really rape* scale was $\alpha = .47$.

Post-Vignette Assessment was created specifically for this study and used to ensure that participants retained critical information from the vignette. Respondents provided “yes” or “no” responses to four questions: “Were Carl and Michelle drinking soda (or beer) at the party before heading to Carl’s apartment?”, “Did Carl grab a soda (or make a mixed drink) when they got back to his apartment?”, and “Did the scenario end with sexual intercourse?” Participants who provide any incorrect answers were dropped from data analyses.

Rape Scenario Follow-Up Questionnaire (RSFQ) items were adapted from Sims, Noel, & Maisto (2007) and Osman (2003) studies and used to measure explicitly reported attributions of rape blame. The RSFQ is a 14-item questionnaire, with answers ranging from 1 “definitely not” to 7 “definitely” for 10 items, and 0 “no responsibility” to 7 “complete responsibility” for 2 items (RSFQ13 and RSFQ14). Questions include: 1) “Do you think Michelle was flirting with Carl?” 2) “Do you think Michelle wanted to have

sex with Carl?” 3) “Do you think Michelle was “leading Carl on?” 4) “Should Carl have had sex with Michelle?” 5) “Do you think Michelle enjoyed having sex intercourse with Carl?” 6) “Did Michelle do anything wrong?” 7) “Did Carl do anything wrong?” 8) “Do you think Michelle’s rights were violated by Carl?” 9) “Do you think Carl raped Michelle?” 10) “Do you think Michelle was intoxicated due to her alcohol consumption?” 11) “Should Michelle disclose the incident between her and Carl to friends and/or family?” 12) “Should Michelle report the incident between her and Carl to police?” Questions seven, eight, nine, and thirteen were reverse coded. In addition, two questions were included to assess explicit blame: 13) “Michelle and Carl have had sex. To what extent is this Carl’s responsibility?” and, 14) “Michelle and Carl have had sex. To what extent is this Michelle’s responsibility?”

Written Scenario. Participants were randomized to read one of two written vignettes containing a rape scenario that included either alcohol cues (drinking beer) or no alcohol cues (drinking soda). Vignettes were created and modified from written scenarios used by Kahn et al. (2011), Noel, Maisto, Johnson, and Jackson (2009), and Norris and Cubbins (1992). In one vignette a male and female dyad were depicted drinking soda (no alcohol cues) during and after a party, while the second vignette depicted the dyad drinking alcohol. All other aspects between the two vignettes remained consistent. The scenario depicted a scene of a male and female college student (Carl and Michelle) who were acquaintances and drank alcohol (or soda), have conversation, and dance together at a party. See below for the entire written vignette of the alcohol condition.

Michelle, a college student, attends a party held by her friend. Early in the evening, Michelle meets Carl, a fellow

college student. The two have several mutual friends and, therefore, see each other often. Toward the end of the last semester, they began to hang out just the two of them, but when the summer came, they lost touch. At the party, Carl asks, "I'm going to get a beer. Would you like anything to drink?" She replied, "Sure – how about a beer?" When he returned with her drink, they talked to friends and danced for a while, each having three or four more beers over the next few hours. They end up talking for most of the night, and they find that they have a lot in common and are both attracted to each other. Because there are a lot of people at the party, Carl ask Michelle "Would you like to head back to my apartment to have another drink and watch a movie together?"

"Okay," Michelle agrees, and the two leave the party and walk to Carl's apartment, which is nearby.

When they enter the apartment, Michelle admires Carl's comfortable looking sofa, wide-screen TV, and his extensive collection of movies. While Carl makes two vodka and cranberry drinks, Michelle picks out a movie to watch from his collection and relaxes on the sofa.

While sitting down on the sofa next to Michelle, Carl says "I hope you like vodka, these drinks are strong!" Michelle asks for a backrub then instigates a short wrestling match on the sofa trying to grab Carl's wallet, to look at his driver's license photo. After finishing her drink, Michelle suggests they begin to watch the movie. Carl presses play, as they cuddle on the couch.

During the movie, Michelle and Carl begin to kiss, and make out for about half an hour. Carl then unbuttons Michelle's pants while kissing her stomach; he then starts to remove her underwear. Michelle decides that she is pretty intoxicated and wants to go home. She says, "Please stop, I don't want to go any further than kissing," but Carl continues. "I want to go home, I've had too much to drink," Michelle insists. "No!" Michelle says, more firmly, but Carl then puts his weight on Michelle, holds her down, and begins having sexual intercourse with her. She tries to get away, but realizes Carl is too strong.

Cognitive Assessment using the IAT

Participants completed an Implicit Association Task (IAT) designed to test the strength of association between alcohol use and victim blame for a sexual assault. In this computer-based task, participants were presented with a word that described Carl or Michelle, or a picture of alcohol or soda on the computer screen. The stimuli for this IAT consisted of 5 “guilt” related words associated with Carl and 5 “innocent” related words associated with Michelle (words are listed below); 5 alcohol picture stimuli, and 5 soda picture stimuli. Participants are given instruction to correctly classify the word/picture into a target category (*alcohol* or *soda*, *Carl* or *Michelle*) based on predefined rules. In the beginning, target categories were shown individually (as shown in Figure 1); then target categories were paired (as shown in Figure 3). The reaction time for each participant was recorded and analyzed. It is hypothesized that participants will be faster at classifying congruent concepts (*Carl/alcohol* and *Michelle/soda*) than incongruent concepts (*Carl/soda* and *Michelle/alcohol*). The task takes approximately 15 minutes to complete. The IAT score is calculated as a difference score between a congruent (*Carl/alcohol* and *Michelle/soda*) block and an incongruent (*Carl/soda* and *Michelle/alcohol*) block response times, with larger scores indicating stronger alcohol-blame associations for Michelle.

The IAT was presented in seven blocks (described below) and per the recommendations of Greenwald, Nosek, and Banaji (2003): (a) a 20-trial target discrimination block (presented on the screen: left = alcohol pictures and right = soda pictures); (b) a 20-trial attribute discrimination block (presented on the screen: left = Carl

words and right = Michelle words); (c) an 20-trial practice congruent combination block (left = alcohol pictures + Carl words and right = soda pictures + Michelle words); (d) a 40-trial critical/test block of the same combination in (c); (e) a 20-trial target discrimination block in which the target categories are reversed (left = soda pictures and right = alcohol pictures); (f) a 20-trial practice incongruent combination block (left = soda pictures + Carl words and right = alcohol pictures + Michelle words); and (g) a 40-trial critical/test block of the same combination in (f). The stimuli for the target and attribute discrimination blocks were presented randomly. The stimuli for the combination blocks were presented randomly with the restriction that the trials alternate between target and attribute stimuli. Each stimulus was presented twice in the critical combination blocks. Two lead-in trials preceded each of the critical combination blocks. A 250-ms interval separated each trial after a response was made in all blocks. Two IAT orders were used: one with the soda and Michelle (and alcohol and Carl) combination (the congruent block) first and one with the alcohol and Michelle (and soda and Carl) combination (the incongruent block) first. The two IAT orders were counterbalanced across participants and error feedback was provided.

In each IAT trial, a single word or picture stimulus is presented at the top of a computer screen and participants are instructed to correctly classify each stimulus into a target category using either the “D” key (for the left side of the screen) or the “K” key (for the right side of the screen). Instructions appeared at the top of the screen to say “When a picture of alcohol (or soda, or word associated with Carl, or word associated with Michelle) appears on the screen, press the ‘K’ key.” Stimuli were presented in a random order on the screen and the goal of the participant is to correctly classify them as

fast as they can. Additionally, participants were able to choose to terminate the IAT at any time. The word stimuli in each Carl/Michelle category that were presented are:

Carl Words – Guilty, Perpetrator, Accountable, Responsible, Blameworthy

Michelle Words – Innocent, Victim, Blameless, Attacked, Helpless

The first step of the IAT requires participants to determine whether a target picture, presented at the bottom-center of the screen, is that of soda or alcohol. As shown in Figure 1, participants were asked to press “D” for alcohol pictures and “K” for soda pictures. If the participant responds correctly, she was immediately taken to the next trial. If the participant made a mistake a red “X” appeared on the screen, and they must correctly classify the word or picture before moving on to the next stimuli. The correct answer for Figure 1 would be to press the “D” key.

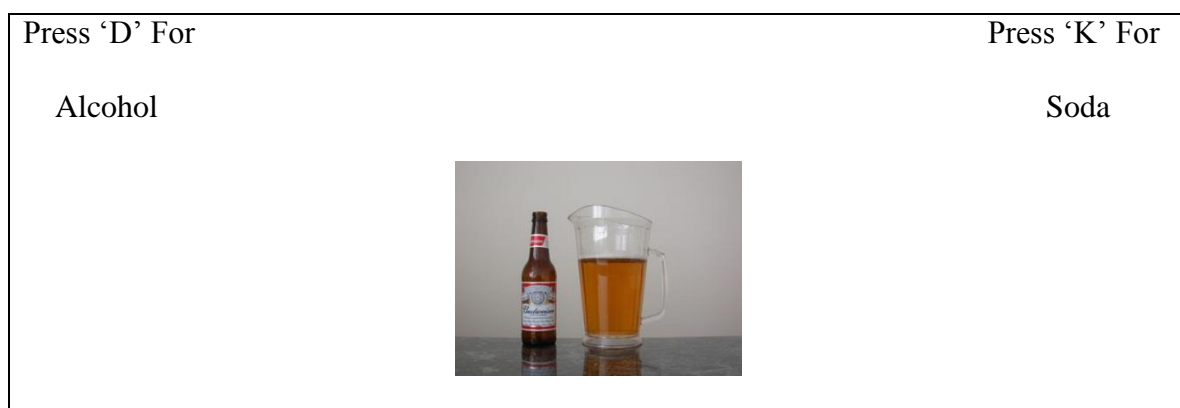


Figure 1 IAT Example Step One

The second step of the IAT required participants to determine whether a target word, presented at the bottom-center of the screen, described Carl, the perpetrator from the vignette or Michelle, the victim from the vignette. As shown in Figure 2, participants were asked to press “D” for words that describe Carl and “K for words that describe Michelle. If the participant responds correctly, she was immediately taken to the next

trial. If the participant makes a mistake a red “X” appeared on the screen, and they must correctly classify the word or picture before moving on to the next stimuli. The correct response for Figure 2 would be to press the “D” response key.

Press ‘D’ For	Press ‘K’ For
Carl	Michelle
Blameworthy	

Figure 2 IAT Example Step Two

After participants classified alcohol/soda pictures correctly and Carl/Michelle words correctly, participants were then asked to combine the previous two steps so that a correct response key is now shared. As shown in Figure 3, participants were asked to correctly classify the same words/pictures, but the correct response for “Carl words” or “alcohol pictures” is the “D” key, and “Michelle words” or “soda pictures” is the “K” key. This step is considered a practice trial. For the example, Figure 3, the correct response is to press the “K” key.

Press ‘D’ For	Press ‘K’ For
Carl or Alcohol	Michelle or Soda
Helpless	

Figure 3 IAT Example Step Three and Four

No error feedback was provided during the trials that combined categories. After the participant responded to the trial, the next trial was immediately started. In the next

(fourth) stage, the participant completed the same pairing of words again, but this time it was considered a test trial.

In the fifth step, participants were presented with only the soda/alcohol pictures, but this time the pictures were switched so that soda was presented on the left (“D” response key) and alcohol were presented on the right (“K” response key). Participants were presented with the same pictures, and required to classify them as quickly as possible to their correct category. An “X” was presented on the screen during this trial if the participant classified the picture incorrectly, and had to correctly classify the picture before moving onto the next trial. The correct response for Figure 4 was to press the “K” key.

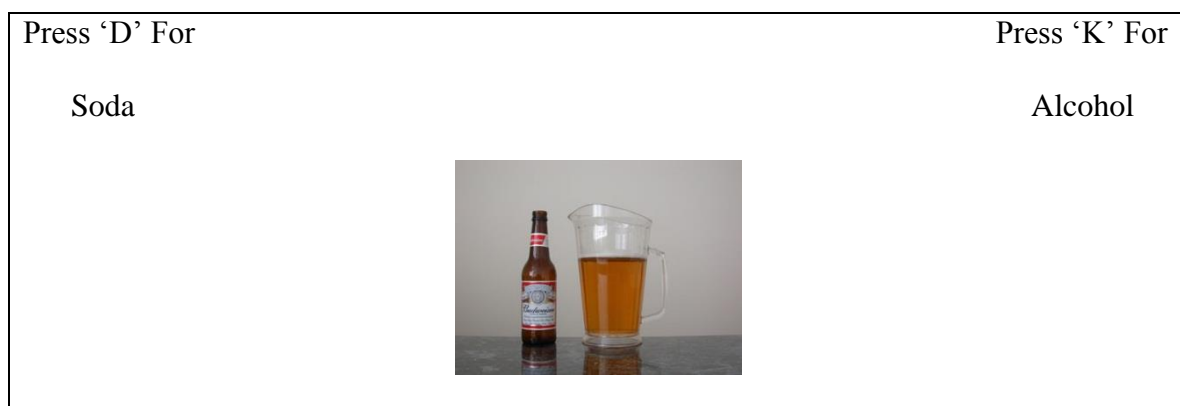


Figure 4 IAT Example Step Five

The sixth step was similar to the third, but during this step, the target stimuli on the left (“D” key) was “Carl words” and “soda pictures” and on the right (“K” key) was “Michelle words” and “alcohol pictures”. This step was considered a practice trial. As in the third and fourth stage, words or pictures were displayed at the bottom-center of the screen, and participants had to categorize them as quickly and accurately as possible. No

error feedback was given during this step. The correct answer for Figure 5 was to press the “D” key.

Press ‘D’ For	Press ‘K’ For
Carl or Soda	Michelle or Alcohol
Guilty	

Figure 5 IAT Example Step Six and Seven

During the seventh step, the same sorting task from stage six was given to participants to complete. Step seven was considered the test trial for this pairing of words.

Hypotheses

In a sample of 70 undergraduate female research participants, who were randomized to read a rape scenario in which the victim consumed either alcohol or soda (herein termed “beverage condition”), we proposed and investigated the following hypotheses.

Hypothesis 1: Using an implicit association paradigm, it was hypothesized that participants’ implicit attitudes of rape blame toward the victim would show a weak or non-significantly correlation with explicit attitudes of rape blame.

Hypothesis 2: It was hypothesized that participants higher in HF, as compared to those lower in HF, would assign more blame to the victim, when the victim is depicted consuming alcohol rather than soda.

Hypothesis 3: It was hypothesized that participants who endorse higher levels of HF and those who were assigned to the alcohol beverage condition would be less likely to

suggest that the victim report the incident to police, compared to participants lower in HF and who read a vignette depicting a victim who was consuming soda.

Hypothesis 4: It was hypothesized that participants higher in HF, and who hold stronger attitudes of blame toward the victim would be less likely to suggest that the victim report the assault to police, compared to those lower in HF, are assigned to the soda beverage condition, and who held weaker implicit attitudes of blame toward the victim.

Hypothesis 5: It was hypothesized that participants who read the vignette of the victim consuming alcohol, compared to soda and who held a stronger association of blame words and alcohol pictures would be less likely to recommend that the victim report the assault to police.

Procedure

Participants who met qualifications for the study as deemed eligible by a brief screen (at least 18 years old, current undergraduate student at USF, and female gender) were scheduled for a 1-hour appointment at the Behavioral Health Research Lab located on the USF campus. Upon arrival for the experimental session, and after providing informed consent, participants completed the battery of questionnaires described above. Afterwards, they were randomized to either an alcohol or soda condition through a pre-determined list of randomly generated numbers (www.random.org). After reading the assigned vignette, participants completed the post-vignette assessment and then the

follow-up scenario questionnaire.² Then, participants completed the IAT task, and after the IAT task, participants were thanked given course credit (if applicable), and instructed that they would be contacted for the gift card raffle for those not receiving course credits.

Data Analytic Plan

Power Analysis

For this study the power of IAT scores by victim alcohol use were compared. No prior studies have examined whether victim alcohol use influences implicit cognitions of rape blame. Thus, group sizes for the alcohol versus soda conditions were based on the demonstration of a moderate to large effect size of the association between pleasant and unpleasant words and victim and perpetrator stimuli using an IAT paradigm, as reported in Jackson (2010). A power simulation using G*Power 3.1.3 revealed that a sample size of 30 participants per condition (a total N of 60) would allow for .80 power ($\alpha = .05$) to detect a moderate effect size for condition type (alcohol versus beverage) on implicit cognitions. Given the exploratory nature of this study, we estimated a moderate effect size, such that a sample of 70 was adequate to detect this effect using a standard alpha level of .05.

Manipulation Check

Participants' responses on the post-vignette assessment were examined to determine whether the manipulation was successful (that participants believe Michelle was raped by Carl). Those who responded incorrectly (answered no) to the following items were excluded from subsequent analyses: "Were Carl and Michelle drinking at the

² We had considered giving these questionnaires after they completed the IAT. However, we did not want explicit responses to be influenced by the assignment of guilt/innocent words to Carl/Michelle for the IAT.

party?"; "What type of drink Carl and Michelle drink when they got back to Carl's apartment?"; and "Did the scenario ended with Carl and Michelle having sexual intercourse?".

The majority of participants (n = 69; 98.6%) responded correctly to the follow-up questions, indicating that the vignette was successful. Only one participant responded incorrectly to two of the questions, and therefore, her data was not included in the analysis. Thus, the final sample size consisted of 35 participants in the alcohol condition, and 34 participants in the soda condition.

Experimental Group Equivalence

To ensure that the experimental groups were equivalent, chi-square analyses were conducted to examine differences between the experimental conditions (alcohol vs. soda) on relationship status (e.g., Single, Married, Divorced, Separated, Not married but living with intimate partner, Other), class rank (e.g., college freshman, sophomore, junior, or senior), employment status, race/ethnicity, current residence (e.g., residence hall, campus apartment, off campus), and Greek-Life membership. Additionally, because HF is a primary independent variable of interest, an ANOVA was conducted to make certain that HF was not significantly different across groups. Finally, an ANOVA was conducted to determine if IAT scores differed across groups. Results for all analyses were considered significantly different if the p-value was less than .05, indicating that there was a less than a 5% probability that results were due to chance.

Inter-Experimental Group Correlations of Hyperfemininity, Alcohol Consumption, Alcohol Expectancies, Rape Myths, Demographic Variables, RSFQ items, and IAT Scores

Participants were divided into two groups based on condition. Pearson product-moment correlation coefficients were computed separately for each experimental condition (soda versus alcohol) to examine the association between the independent measures (e.g., alcohol expectancies) and the dependent measure (participants' IAT score). The association between implicit attitudes of rape blame and explicit attitudes (taken from the Rape Scenario Follow-up Questionnaire) were also examined to determine the degree of overlap between implicit and explicit attitudes. If significant correlations were found among the groups, Z tests employing Fisher r to z transformations were performed (Rosenthal & Rosnow, 1991) to examine whether correlation coefficients were significantly different between the experimental conditions. If Fishers transformation tests revealed significant differences, those variables were included as covariates in regression models.

Outliers and Distribution of Data

Frequency and descriptive data were analyzed to determine the existence of any outliers and whether data needed to be transformed based on skewness and kurtosis. Outliers were determined based on Tabachnick and Fidell's (2001) recommendations, which define an outlier as any standardized residual value above 3.3 and less than -3.3. If outliers were identified that significantly influenced the data, the cases were dropped from the analysis. We examined alternative transformation methods to determine which technique aligns the data with the best distribution. This included log+1 transformation,

the square root transformation, polynomial transformation, and centering. No outliers were identified that significantly influenced the data.

IAT Scoring Algorithm

As noted earlier, the speed and accuracy of participants' associations of two categories of stimuli (alcohol pictures and blame words) was measured in order to obtain an overall IAT effect. The modified IAT scoring algorithm by Greenwald et al. (2003) was followed. Of the seven steps, the "practice" steps (steps 3 and 6) and the "test" steps (steps 4 and 7) were utilized in the analysis. Trials were eliminated if there was any indication of responding too quickly, anticipation, or momentary inattention (Greenwald et al., 1998). Therefore, according to the modified algorithm, responses with latencies greater than 10,000 ms were eliminated, and responses were eliminated for individuals whom more than 10% of trials had a latency of less than 300 ms (Greenwald et al., 2003). The next step involved computing the mean of correct latencies for each step. Then, one pooled standard deviation was computed for the "practice" trials in steps 3 and 6, and another for the "test" trials in steps 4 and 7. Next, all error latencies were replaced with its respective step mean + 600 ms. Then, an average of the resulting values for each of the four steps was computed.

After the averages were calculated, two difference scores were computed. The first difference that was calculated was for the "practice" trials, the second difference that was calculated was for the "test" trials. The following equations were used to compute the difference scores: (average of step 6 – average of step 3) and (average of step 7 – average of step 4). Next, each difference score was divided by its associated pooled-trials standard deviation that was calculated earlier. Finally, the IAT effect (*D* score) was

determined by averaging the two quotients. Higher D scores indicate a greater association between the victim's name (innocent words) and soda pictures. In other words, faster reaction times to categorize Michelle words and soda pictures would lead to higher D scores because people inherently assign blame when alcohol is involved, rather than a non-alcoholic drink.

Block order presentation (either congruent or incongruent block presented first) was counter-balanced and assigned randomly. To ensure that this order did not have a significant impact on IAT scores an ANOVA was conducted. Results showed that IAT order did not vary between the incongruent first block ($M = 0.45$, $SD = 0.39$) and incongruent second block ($M = 0.35$, $SD = 0.37$), $F(1, 68) = .41$, $p > .05$.

Hypothesis Testing

Hypothesis 1: We tested hypothesis 1 by examining the correlation between explicit rape blame attribution via scores from the RSFQ and implicit rape blame attribution via IAT scores. Based on prior research, we expected that these measures to have a small or non-significant association.

Hypothesis 2: Given that HF is a continuous variable, we tested hypothesis 2 (the interaction of HF x Beverage Condition as predictors of implicit attributions of rape blame/IAT scores) through the use of multiple regression analyses, following the recommendations of Aiken and West (1991). An interaction term was calculated by obtaining the product of the moderator and independent variable (IV) of interest: HF x Beverage Condition (alcohol vs. soda). Beverage Condition was dummy coded (0 = alcohol, 1 = soda), therefore mean-centering the IV's was not necessary. Next, we entered the variables (HF, beverage condition, and the interaction variable) into the

regression equations in a model building fashion. Variables that were significantly correlated with the dependent variable (DV; IAT scores) and those that differed significantly across experimental conditions, were included as covariates in the first step of the regression model, main effects were entered in second step, and the interaction term was entered in the last step of the model. A significant interaction term indicated that the joint effect of Beverage Condition and HF explained a significant amount of variance in IAT scores, above and beyond main effects and covariates.

To explicate a significant interaction, simple effects were examined by investigating the association between the IV and DV at each level of the moderator (alcohol or soda condition). Following the recommendations of Aiken and West (1992), two new variables were created: One variable was called “Alcohol”, and had values of 0 and 1, where those in the alcohol condition were labeled as 0 and those in the soda condition were 1; the second variable was called “Soda”, in which participants in the soda condition were labeled as 0 and those in the alcohol condition were 1. Next, two new interaction terms were created (HF x Alcohol or HF x Soda). Regression analyses were computed again in a model building fashion: covariates were included in the first step of the model, main effects in the second step, with the new variable either Alcohol or Soda included instead of Beverage Condition, and finally the new interaction term in the last step of the model (HF x Alcohol or HF x Soda). If moderation was not significant, regression coefficients for main effect were examined.

Hypothesis 3: Similar to hypothesis 2, because HF is a continuous variable, we tested hypothesis 3 (the interaction of HF x Beverage Condition as predictors of police reporting) through the use of multiple regression analyses, following the

recommendations of Aiken and West (1991). First, we determined any covariates, and created the interaction term of HF x Beverage Condition. Next, we entered the variables (HF, beverage condition, and the interaction variable) into the regression equations in a model building fashion: covariates were included in the first step of the model, main effects in the second step, and finally the interaction term in the last step of the model. An interaction term that was significant indicated that the joint effect of Beverage Condition and HF explained a significant amount of variance in recommended police reporting, above and beyond main effects. If moderation was not significant, regression coefficients for main effect were examined. Alternatively, if moderation was significant, regression coefficients for simple effects were tested to determine whether they are significantly different from 0.

Hypothesis 4: We tested hypothesis 4 (the interaction of HF x Implicit Attitudes as predictors of recommended disclosure or reporting) through the use of multiple regression analyses, following the recommendations of Aiken and West (1991). Because the independent variable and moderator were both continuous measures, scores were first standardized (i.e., z-transformed) to reduce multicollinearity between the interaction term and lower-order terms, and to allow for interpretation of regression coefficients using the same metric (i.e., *b*). The interaction term was then calculated by obtaining the cross-product of the two variables. Unstandardized regression coefficients (*b*) were interpreted for these models. Next, we entered the variables (covariates, HF, IAT score, and the interaction variable) into the regression equations in a model building fashion: covariates were entered in the first step, main effects were entered in the second and third step, and the interaction term was entered in the last step of the model. An interaction term that

was significant indicated that the joint effect of IAT score and HF explains a significant amount of variance in recommended police reporting, above and beyond main effects. If moderation was not significant, regression coefficients for main effect were examined. Alternatively, if moderation was significant, regression coefficients for simple effects were tested to determine whether they were significantly different from 0.

Hypothesis 5: We tested hypothesis 5 (the interaction of Beverage Condition x Implicit Attitudes as predictors of recommended disclosure or reporting) through the use of multiple regression analyses, following the recommendations of Aiken and West (1991). First, we determined any covariates, and created the interaction term of Beverage Condition x IAT scores. Next, we entered the variables (beverage condition, IAT scores, and the interaction variable) into the regression equations in a model building fashion: covariates were included in the first step of the model, main effects in the second step, and finally the interaction term in the last step of the model. An interaction term that was significant indicated that the joint effect of Beverage Condition and IAT scores explained a significant amount of variance in recommended disclosure or reporting, above and beyond main effects. If moderation was not significant, regression coefficients for main effect were examined. Alternatively, if moderation was significant, regression coefficients for simple effects were tested to determine whether they are significantly different from 0.

Chapter Four

Results

*Sample Characteristics**Demographic Characteristics*

The mean age of participants was 24 years old (SD = 6.37; range 19 to 57). The majority of participants were single (n = 53; 76.8%), heterosexual (n = 64; 92.8%), White (n = 29; 42.0%), and lived in an off campus apartment (n = 61; 88.1%). Additionally, 62% of the sample (n = 43) reported a prior history of sexual victimization, which was a larger proportion than expected based on prior research. Table 1 shows the frequencies for the demographic variables.

Table 1. *Demographic Characteristics of Participants (N = 69)*

Characteristic	n	%
Marital Status		
Single	53	76.8
Cohabiting	7	10.1
Married	4	5.8
Divorced	4	5.8
Separated	1	1.4
Sexual Orientation		
Heterosexual	64	92.8
Bisexual	3	4.3
Homosexual	2	2.9
Hispanic (yes)	19	27.5
Race		
White	29	42.0
Black	25	36.2
American Indian	2	2.9
Asian	2	2.9
Other	11	15.9

Table 1 (continued)

Education Level		
Sophomore	5	7.2
Junior	29	42.0
Senior	34	49.3
Other	1	1.4
Employment Status		
Full Time Student	28	40.6
Part Time	28	40.6
Full Time	12	17.4
Unemployed	1	1.4
Income (\$)		
Under 10,000	39	56.5
10,000-19,999	16	23.2
20,000-29,999	10	14.5
30,000-39,999	0	0
40,000-49,999	0	0
50,000-59,999	1	1.4
60,000-69,999	2	2.9
70,000+	1	1.4
Residence		
Apartment Off-campus	61	88.4
Apartment On-campus	1	1.4
Other Off-campus	4	5.8
On-campus	3	4.3
Sorority Member (yes)	5	7.2
Athlete (yes)	4	5.8
Sexual Victimization (yes)	43	62.3

Descriptive Statistics for Independent Variables

The means, standard deviations, median, minimum possible scores, and maximum possible scores are displayed in Table 2 for alcohol consumption, hyperfemininity, alcohol expectancies, and rape myth acceptance variables. For the alcohol consumption variable, participants wrote in the typical number of drinks they consume in a week. Results showed that women drank an average of approximately 4 standard drinks per week.

Findings also showed that on average participants endorsed seven hyperfeminine statements, out of a possible 26 items. The alcohol-sex expectancy subscales of *Sexual Affect*, *Sexual Drive*, and *Vulnerability* were all comprised of six questions. Out of these three subscales, the belief that alcohol increases sexual affect was the expectancy most frequently endorsed. This finding indicates that women are most likely to believe that alcohol increases the likelihood that they will say and act in romantic or sexual ways after drinking. The belief that alcohol increases their sexual drive was ranked slightly less than sexual affect. However, the mean score for the belief that alcohol makes the person sexually vulnerable was scored lowest among the three subscales; indicating that women were not likely to believe that alcohol makes them sexually vulnerable. Similarly, the *Aggression* subscale was measured using seven items indicating that the maximum possible score was 35. The mean for this subscale was approximately ten, indicating that participants were not likely to endorse the belief that alcohol increases aggression. The belief that alcohol increases a persons' sexual drive and sexual affect may be considered more positive expectancies from alcohol, whereas becoming aggressive and sexually vulnerable are more negative expectancies. Because the averages were higher for the sexual affect and sexual drive scores, relative to the aggression and vulnerability subscale, perhaps women are more likely to hold positive expectancies of alcohol. Women were the least likely to hold the rape myths that rape is a trivial event and that it wasn't really rape, and the most likely to hold the rape myth of she asked for it and he didn't mean to. These findings indicate that women believe that rape is a serious event and recognize commonly held characteristics of rape. However, women may be more

likely to blame the victim based on certain characteristics that may not fit with their held rape scripts.

Table 2. Means, Standard Deviations, Median, Minimum, and Maximum Values for Alcohol Consumption, Hyperfemininity, Alcohol Expectancies, and Rape Myth Acceptance

Variable	Mean	SD	Median	Min	Max
DDQ	3.97	5.08	2.00	0.00	29.00
HF	7.00	3.04	7.00	2.00	17.00
Agg	10.23	4.36	8.00	7.00	24.00
Sex_Aff	18.35	7.62	18.00	6.00	30.00
Sex_Drive	16.91	8.64	18.00	6.00	30.00
Vul	10.62	5.50	9.00	6.00	26.00
SA	16.58	5.44	8.00	8.00	39.00
WI	10.21	5.44	8.00	5.00	26.00
MT	14.59	6.39	15.00	5.00	29.00
TE	6.46	2.06	5.00	5.00	15.00
LI	13.87	5.77	13.00	5.00	29.00
DE	11.30	5.43	9.00	7.00	29.00
NR	6.09	1.92	5.00	5.00	14.00

Note. DDQ = Alcohol Quantity; HF = Hyperfemininity; Agg = Alcohol Expectancy – Aggression; Sex_Aff= Alcohol Expectancy – Sexual Affect; Sex_Dr = Alcohol Expectancy – Sexual Drive; Vul = Alcohol Expectancy – Vulnerability; SA = *She asked for it*; WI = *She wanted it*; MT = *He didn't mean to*; TE = *Rape is a trivial event*; LI = *She lied*; DE = *Rape is a deviant event*; NR = *It wasn't really rape*;

Descriptive Statistics for Rape Scenario Follow-Up Questions

The means, standard deviations, median, minimum, and maximum scores are displayed in Table 3 for the Rape Scenario Follow-Up Questions (RSFQ). Although the majority of participants believed that Michelle was flirting with Carl, explicitly they assigned more blame towards Carl for the rape. Additionally, a large majority recommended that Michelle should disclose the rape to friends and/or family or report the incident to police. Many participants did not believe that Michelle enjoyed or wanted to have sex with Carl, but a slightly larger average of participants assigned responsibility for

the rape on Michelle. Collectively, participants explicitly were more likely to blame Carl for the incident and recommend that Michelle report and/or disclose the incident.

Group Equivalence

Chi-square analyses revealed no significant differences between experimental conditions on any of the demographic variables. One-way Analysis of Variance (ANOVA) test's revealed a significant difference for HF and Ethnicity [$F(12,56) = 2.23$, $p < .05$], and Athletic team membership [$F(12,56) = 2.37$, $p < .05$], indicating that women higher on HF were more likely to report being Hispanic and the member of an athletic university team. ANOVA and correlation analyses revealed no other significant differences between HF and other demographic variables were found. In addition, ANOVA and Chi-square analyses did not show any significant differences between IAT scores and demographic variables.

Experimental Group Correlations

Separate Pearson product-moment correlations were computed for each experimental group to assess associations among the variables of interest. Inter-group correlations are presented in Table 4 and Table 5.

Table 3. Means, Standard Deviations, Median, Minimum, and Maximum Values for Rape Scenario Follow-Up Questions

Variable	Mean	SD	Median	Min	Max
Do you think Michelle was flirting with Carl?	6.23	1.25	7.00	3.00	7.00
Do you think Michelle wanted to have sex with Carl?	2.62	1.51	2.00	1.00	7.00
Do you think Michelle was leading Carl on?	2.68	2.08	3.00	1.00	7.00
Should Carl have had sex with Michelle?	1.03	0.17	1.00	1.00	2.00
Do you think Michelle enjoyed having sexual intercourse with Carl?	1.19	0.72	1.00	1.00	6.00
Did Michelle do anything wrong?	2.70	2.02	2.00	1.00	7.00
Did Carl do anything wrong?	6.71	1.24	7.00	1.00	7.00
Do you think Michelle's rights were violated by Carl?	6.43	1.70	7.00	1.00	7.00
Do you think Carl raped Michelle?	6.58	1.43	7.00	1.00	7.00
Do you think Michelle was intoxicated?	4.30	2.68	6.00	1.00	7.00
Should Michelle disclose the incident between her and Carl to friends and/or family?	6.20	1.71	7.00	1.00	7.00
Should Michelle report the incident between her and Carl to the police?	6.78	0.73	7.00	3.00	7.00
Michelle and Carl have had sex. To what extent is this Michelle's responsibility?	2.57	2.05	2.00	0.00	7.00
Michelle and Carl have had sex. To what extent is this Carl's responsibility?	6.72	1.14	7.00	0.00	7.00

Correlations for Individuals in the Soda Condition

Examination of correlation coefficients for the soda condition showed a significant negative association between alcohol consumption and the RSFQ item 3 “*Do you think Michelle was leading Carl on?*” ($r = -.38, p < .05$), indicating that participants in the soda condition who drank more alcohol were more likely to believe that Michelle was leading Carl on. There was also a significant negative relationship between sexual victimization history and the RSFQ item 13 “*Michelle and Carl have had sex. To what extent is this Carl’s responsibility?*” ($r = -.38, p < .05$), indicating that women without a history of sexual assault were more likely to explicitly blame Carl for the rape. HF was significantly and positively associated with the following RSFQ items, “*Do you think Michelle was flirting with Carl?*” ($r = .46, p < .05$), “*Do you think Michelle wanted to have sex with Carl?*” ($r = .51, p < .05$), and “*Did Michelle do anything wrong?*” ($r = .37, p < .05$), indicating women higher on HF in the soda condition may have held Michelle more accountable for the sexual assault, relative to low HF women. In addition, the Vulnerability subscale of the AESAQ was significantly and positively related to the *She wanted it* subscale of the rape myths questionnaire ($r = .48, p < .05$), indicating that alcohol expectancies and rape scripts may be related. Additionally, there were several highly correlated independent variables for those in the soda condition. First, the rape myth acceptance subscale of *She wanted it* was highly correlated with the *She asked for it* ($r = .72, p < .05$) and *She lied* ($r = .79, p < .05$). Second, the *Rape is a deviant event* and the *It wasn’t really rape* subscales were highly correlated ($r = .74, p < .05$). Finally, the alcohol-sex expectancy that alcohol increases sexual drive was highly correlated with sexual affect ($r = .77, p < .05$).

Correlations for Individuals in the Alcohol Condition

For the alcohol condition, results indicated a significant positive correlation between alcohol consumption and RSFQ item 2, “*Do you think Michelle wanted to have sex with Carl?*” ($r = .41, p < .05$). Findings also showed a significant positive association between sexual victimization history and HF ($r = .37, p < .05$), indicating that women who reported higher levels of HF were more likely to have a history of sexual victimization relative to women with lower levels of HF. In addition, there was a significant positive relationship between the alcohol expectancy subscale of Aggression and the rape myth subscale *She Wanted It* ($r = .41, p < .05$). Finally, the Sexual Affect subscale of the alcohol expectancy questionnaire was significantly and positively associated to the *She Asked for It* ($r = .37, p < .05$), *He didn't mean to* ($r = .35, p < .05$), *Rape is a trivial event* ($r = .49, p = .004$), *She lied* ($r = .39, p < .05$), and *Rape is a deviant event* ($r = .41, p < .05$) subscales of the rape myth acceptance questionnaire. It is important to note that results indicate that alcohol expectancies were significantly related to all of the rape myth subscales except for two (*She wanted it* and *It wasn't really rape*). Perhaps those who hold certain beliefs about alcohol hold specific rape myths as well.

Table 4. Means, Standard Deviations, and Inter-Correlations of Alcohol Consumption, Sexual Victimization History, HF, IAT Scores, and Rape Scenario Follow-up Questions as a Function of Experimental Condition ($n = 35$ for alcohol and $n = 34$ for soda)

Measure	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. DDQ	5.11	6.18	--	.04	.02	.05	.06	.41*	.04	.63***	.08	.09	.09	.18	.02
2. SES ^a	-	-	.22	--	.37*	.21	.16	.28	.18	.01	.28	.10	.01	.19	.17
3. HF	6.83	2.88	.12	.01	--	.22	.18	.24	.28	.01	.06	.11	.03	.05	.19
4. IAT	0.40	0.29	.02	.07	.22	--	.13	.23	.03	.04	.22	.12	.20	.26	.00
5. RSFQ1	6.14	1.38	.10	.01	.46**	.09	--	.43*	.42*	.15	.21	.21	.16	.08	.03
6. RSFQ2	2.63	1.56	.05	.11	.51**	.04	.41*	--	.36*	.46**	.02	.10	.17	.11	.14
7. RSFQ3	3.54	2.08	.38*	.19	.31†	.08	.08	.13	--	.28	.42*	.05	.18	.04	.00
8. RSFQ5	1.09	0.37	.18	.31†	.08	.08	.13	.36*	.36*	--	.13	.04	.05	.20	.06
9. RSFQ6	2.60	1.90	.19	.20	.37*	.16	.17	.40*	.56**	.16	--	.29†	.16	.37*	.08
10. RSFQ11	6.66	0.68	.15	.17	.29†	.10	.20	.24	.18	.17	.04	--	.05	.07	.01
11. RSFQ12	6.43	1.44	.22	.08	.05	.07	.22	.23	.11	.01	.04	.20	--	.00	.65***
12. RSFQ13	2.63	2.28	.14	.38*	.31†	.05	.11	.66***	.46*	.45	.61***	.22	.21	--	.01
13. RSFQ14	6.94	0.24	.19	.32†	.07	.06	.16	.14	.39*	.67***	.13	.52*	.12	.25	--

Note. DDQ = Alcohol Consumption; SES = Sexual Victimization History; HF = Hyperfemininity; IAT = Implicit Association Task Scores; RSFQ1 = *Do you think Michelle was flirting with Carl?*; RSFQ2 = *Do you think Michelle wanted to have sex with Carl?*; RSFQ3 = *Do you think Michelle was leading Carl on?*; RSFQ 5 = *Do you think Michelle enjoyed having sexual intercourse with Carl?*; RSFQ6 = *Did Michelle do anything wrong?*; RSFQ11 = *Should Michelle disclose the incident between her and Carl to friends and/or family?*; RSFQ12 = *Should Michelle report the incident between her and Carl to police?*; RSFQ13 = *Michelle and Carl have had sex. To what extent is this Michelle's responsibility?*; RSFQ14 = *Michelle and Carl have had sex. To what extent is this Carl's responsibility?*

Correlation coefficients for the soda condition in bold; for the alcohol condition in italics

^a = Dichotomously coded variable (yes = sexual victimization history)

* $p < .05$; ** $p < .01$; *** $p < .001$; † marginally significant

Table 5. Means, Standard Deviations, and Inter-Correlations of Rape Myth Acceptance and Alcohol Expectancies as a function of Experimental Condition ($n = 35$ for alcohol and $n = 34$ for soda)

Measure	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. SA	16.11	7.44	--	.39*	.39*	.45**	.56***	.43*	.34*	.13	.37*	.24	.06
2. WI	10.09	5.11	.72***	--	.58***	.37*	.42*	.21	.11	.41*	.20	.12	.04
3. MT	14.49	6.07	.52**	.44**	--	.40*	.35*	.37*	.25	.17	.35*	.10	.05
4. TE	6.00	1.33	.62***	.45**	.45**	--	.57***	.10	.57***	.04	.49**	.16	.03
5. LI	13.37	5.06	.60***	.79***	.53**	.56**	--	.29†	.19	.03	.39*	.05	.07
6. DE	10.63	3.98	.56**	.63***	.34†	.56**	.38*	--	.28	.10	.41*	.21	.25
7. NR	6.03	1.74	.44**	.58***	.22	.59***	.40*	.74***	--	.11	.30†	.16	.13
8. Agg	9.57	3.78	.00	.24	.08	.07	.00	.30†	.30†	--	.07	.03	.08
9. Sex_Aff	18.51	7.17	.07	.02	.06	.16	.08	.09	.02	.21	--	.63***	.46**
10. Sex_Dr	16.11	7.98	.04	.21	.03	-.01	.05	.08	.20	.30†	.77***	--	.53**
11. Vul	11.34	5.99	.29	.48**	.11	.02	.27	.35*	.17	.29†	.29	.50**	--

Note. SA = She asked for it; WI = She wanted it; MT = He didn't mean to; TE = Rape is a trivial event; LI = She lied; DE = Rape is a deviant event; NR = It wasn't really rape; Agg = Alcohol Expectancy – Aggression; Sex_Aff = Alcohol Expectancy – Sexual Affect; Sex_Dr = Alcohol Expectancy – Sexual Drive; Vul = Alcohol Expectancy – Vulnerability

Correlation coefficients for the soda condition in bold

Correlation coefficients for the alcohol condition in italics

* $p < .05$; ** $p < .01$; *** $p < .001$; † marginally significant

Fisher Transformation Results

To determine whether correlation coefficients among IAT scores, RSFQ items, alcohol expectancy subscales, sexual victimization history, alcohol consumption, and HF were significantly different between the experimental conditions, Z tests employing Fisher transformations of the correlation coefficients were performed (Rosenthal & Rosnow, 1991). Analyses revealed no significant differences between the experimental conditions on the correlation coefficients between HF and IAT scores, HF and sexual victimization history, or HF and alcohol consumption. Additionally, there were no significant differences between the alcohol and soda groups in the correlation coefficients between sexual victimization history and IAT scores, sexual victimization history and alcohol consumption, or between alcohol consumption and IAT scores. Since Fisher transformations did not indicate any significant differences between the groups, the variables were not included in the regression analyses as covariates.

Correlations among Implicit and Explicit Associations of Rape Blame

Hypothesis 1 was to examine the relationship between implicit and explicit measures. Pearson product-moment correlations indicated a small but positive correlation between IAT scores and the RSFQ item 9, “*Do you think that Carl raped Michelle?*” ($r = .24, p < .05$), indicating individuals who were more likely to explicitly state that Carl raped Michelle, held stronger implicit alcohol-blame associations associated with the perpetrator than the victim. In addition, Pearson product-moment correlations indicated a significant negative correlation between IAT scores and the rape myth subscale *He didn't mean to* ($r = -.31, p = .01$), suggesting that participants who were more likely to believe a perpetrator intends to rape a victim held stronger implicit alcohol-blame associations

toward the perpetrator than the victim. As expected, RSFQ item 6, “*Did Michelle do anything wrong?*” ($r = .02, p > .05$), RSFQ item 7, “*Did Carl do anything wrong?*” ($r = .01, p > .05$), RSFQ item 13, “*Michelle and Carl have had sex. To what extent is this Michelle’s responsibility?*” ($r = .16, p > .05$), and RSFQ item 14, “*Michelle and Carl have had sex. To what extent is this Carl’s responsibility?*” ($r = -.05, p > .05$) were not significantly correlated to implicit attitudes of rape blame. These findings indicate that IAT scores may tap into unique dimensions of rape blame attributions that are not readily explained by explicit measures.

Moderating Effects of HF on the Association between Beverage Condition and IAT Scores, Recommended Disclosure, and Reporting

As stated in Hypothesis 2, the present study intended to examine the moderating effects of HF on the association between beverage condition and implicit attitudes of rape blame towards the victim. Specifically, it was hypothesized that participants higher in HF and who were randomly assigned to the alcohol condition (as opposed to the soda condition) would implicitly associate alcohol pictures and guilt words more quickly than soda pictures and guilt words. In addition, Hypothesis 3 stated that women higher in HF and who were randomly assigned to the alcohol condition (as opposed to the soda condition) would be less likely to suggest that the victim disclose the incident to friends/family, or report the incident to police. Disclosure and reporting were measured from the RSFQ items 11 (disclosing) and 12 (reporting). Three separate linear regression models were conducted: one that used IAT scores as the DV; a second that used disclosing as the DV; and a third that used reporting as the DV.

Table 6 shows that there are no significant Condition X HF interactions when IAT scores were examined as the dependent variable [$R^2 = .10$, $F(5,63) = 1.40$, $p > .05$]. In main effects models, neither experimental condition ($\beta = -.01$, $p > .05$) nor HF ($\beta = -.23$, $p > .05$) were significantly and uniquely related to IAT scores. There was no significant Condition X HF interaction for disclosure [$R^2 = .09$, $F(5,63) = 1.27$, $p > .05$] or when reporting the incident was used as the DV [$R^2 = .08$, $F(5,63) = 1.07$, $p > .05$]. Neither experimental condition ($\beta = .15$, $p > .05$) nor HF ($\beta = -.09$, $p > .05$) significantly predicted recommendations of disclosure. Similarly, neither experimental condition ($\beta = -.11$, $p > .05$) nor HF ($\beta = .02$, $p > .05$) significantly predicted recommendations of reporting.

Table 6. *Linear Regression for Moderating Effects of Hyperfemininity on the Association between the Alcohol Condition and IAT Scores, Recommended Disclosure, and Reporting*

	HF X Alcohol	HF	Alcohol	Overall model		
DV	β	β	β	R^2	$F(5,63)$	ΔR^2
IAT	.07	-.23	-.01	.10	1.40	.00
Disclose	-.35	-.09	.15	.09	1.27	.02
Report	.10	.02	-.11	.08	1.07	.00

Note. HF = Hyperfemininity; Alcohol = alcohol condition; IAT = implicit association task scores measuring attributions of rape blame toward the victim. Beta weights represent standardized regression coefficients.

Moderating Effects of HF on the Association between IAT Scores and Recommended Disclosure and Reporting

Hypothesis 4 was to examine moderating effects of HF on the relationship between IAT scores and recommended police reporting. Specifically, it was hypothesized that participants who reported higher levels of HF and who demonstrated stronger IAT

scores of blame toward the victim would be less likely to recommend that the victim disclose or report the incident. The first step of a hierarchical regression analysis included z-HF, the second step included z-IAT score, and the third step included the interaction term, z-HF X z-IAT. Two separate linear regression models were conducted: one that used disclosing as the DV; and a second that used reporting as the DV.

Table 7 shows there was no significant z-HF X z-IAT interaction as predictors of disclosing [$R^2 = .06$, $F(5,63) = .80$, $p > .05$] or reporting [$R^2 = .08$, $F(5,63) = 1.12$, $p > .05$]. Neither HF ($b = -.42$, $p > .05$) nor IAT scores ($b = -.07$, $p > .05$) significantly and uniquely predicted recommendations of disclosure. Similarly, neither HF ($b = .02$, $p > .05$) nor IAT scores ($b = -.04$, $p > .05$) significantly predicted recommendations of reporting.

Table 7. *Linear Regression for Moderating Effects of Hyperfemininity on the Association between IAT Scores and Recommended Disclosure and Reporting*

DV	z-HF X z-IAT		z-HF		Overall model	
	(b)	High (b)	Low (b)	R^2	$F(5,63)$	ΔR^2
Disclose	-.02	-.08	-.05	.06	.80	.00
Report	-.05	-.09	.01	.08	1.12	.00

Note. HF = Hyperfemininity; IAT = implicit association task scores measuring attributions of rape blame toward the victim. Beta weights represent z-transformed scores.

Moderating Effects of Beverage Condition on the Association between IAT scores and Recommended Disclosure and Reporting

Experimental condition was entered in the first step of the model, IAT score was entered in the second step of the model, and the interaction term (Condition X IAT score) was entered in the third step of the model. Two separate linear regression models were run: one that used disclosing as the DV; and a second that used reporting as the DV.

Table 8 indicates there was no significant Condition X IAT interaction for disclosing [$R^2 = .03$, $F(3,65) = .65$, $p > .05$] or reporting the incident [$R^2 = .03$, $F(3,65) = .57$, $p > .05$]. Neither experimental condition ($\beta = -.28$, $p > .05$) nor IAT score ($\beta = -.11$, $p > .05$) significantly predicted recommendations of disclosure. Additionally, neither experimental condition ($\beta = -.27$, $p > .05$) nor IAT score ($\beta = -.20$, $p > .05$) significantly predicted recommendations of police reporting.

Table 8. *Linear Regression for Moderating Effects of the Alcohol Condition on the Association between IAT Scores and Recommended Disclosure and Reporting*

	Alcohol X IAT	Alcohol	IAT	Overall model		
DV	β	β	β	R^2	$F(3,65)$	ΔR^2
Disclose	.21	-.28	-.11	.03	.65	.01
Report	.27	-.25	-.20	.03	.57	.02

Note. Alcohol = alcohol condition; IAT = implicit association task scores measuring attributions of rape blame toward the victim. Beta weights represent standardized regression coefficients.

Exploratory Analyses

Moderating Effects of Sexual Victimization History on the Relationship between Rape Myth Acceptance and IAT Scores

In an exploratory analysis, we examined the moderating effects of sexual victimization history on the relationship between rape myth acceptance and IAT scores. These analyses were explored for several reasons. First, prior research suggests that stronger rape myth acceptance is associated with negative attitudes towards women for those without a history of sexual victimization (Baugher, Elhai, Monroe, & Gray, 2010). Additionally, rape myth acceptance may assign more blame to the victim of a sexual

assault (Mason, Riger, & Foley, 2004) and perceive themselves as less vulnerable to being rape victims (Bohner & Lampridis, 2004). Therefore, women who have not been victims of sexual assault may be more likely to hold stronger rape myths and be more likely to blame the victim of a sexual assault.

Moderating Effects of Sexual Victimization History on the Association between Rape Myth “She asked for it” and IAT scores

Because education status was significantly correlated with sexual victimization history, this variable was included as a covariate and entered in the first step of the model. The rape myth subscale *She asked for it* (SA) was entered into the second step, sexual victimization history (SES) was entered in the third step of the model, and the interaction term (SES X SA) was entered in the fourth step of the model.

Table 9 shows that results indicated a significant SES X SA interaction as predictors of IAT scores and explained an additional 15% of the variance above and beyond main effects [$R^2 = .15$, $F(4,64) = 2.71$, $p < .05$]. Explication of the interaction indicated a significant and negative association between SA and IAT scores for those with a history of sexual victimization ($\beta = -.35$, $p < .05$), but no significant association between SA and IAT scores for those without a history of sexual victimization ($\beta = .29$, $p > .05$). These findings suggest that women with a history of sexual victimization, who hold stronger beliefs that victims “ask” to be raped, showed weaker alcohol-blame associations toward Carl. That is, they were quicker when pairing soda pictures and guilt words, rather than alcohol pictures and guilt words. In contrast, the belief that victims “ask” to be raped was not related to implicit attributions of alcohol related rape blame toward the perpetrator for women without a history of sexual victimization.

Moderating Effects of Sexual Victimization History on the Association between Rape Myth “She wanted it” and IAT scores

Education status was entered in the first step of the model, the rape myth subscale *She wanted it* (WI) was entered into the second step, sexual victimization history (SES) was entered in the third step of the model, and the interaction term (SES X WI) was entered in the fourth step of the model. The dependent variable was IAT scores.

Table 9 shows that results indicated a significant SES X WI interaction as predictors of IAT scores and explained an additional 21% of the variance above and beyond main effects [$R^2 = .21$, $F(4,63) = 4.22$, $p < .05$]. Explication of the interaction indicated there was a significant negative association between WI and IAT scores for those with a history of sexual victimization ($\beta = -.48$, $p < .05$), and a significant positive association between WI and IAT scores for those without a history of sexual victimization ($\beta = .37$, $p < .05$). These findings indicate that women with a history of sexual victimization and who have greater rape myth beliefs that women enjoy rape, held weaker alcohol-blame associations toward Carl. That is, they were quicker when pairing soda pictures and guilt words related to the perpetrator. In contrast, women with a history of sexual victimization who were more likely to believe that women enjoy rape held weaker alcohol-blame associations; indicating that they were quicker at pairing soda pictures and guilt words related to the perpetrator.

Moderating Effects of Sexual Victimization History on the Association between Rape Myth “She lied” and IAT scores

Education status was entered in the first step of the model, the rape myth subscale *She lied* (LI) was entered into the second step, sexual victimization history (SES) was

entered in the third step of the model, and the interaction term (SES X LI) was entered in the fourth step of the model. The dependent variable was IAT scores.

Table 9 shows that results indicated a significant SES X LI interaction as predictors of IAT scores and explained an additional 11% of the variance above and beyond main effects [$R^2 = .11$, $F(4,63) = 1.91$, $p > .05$]. However, there was a significant cross-over interaction (SES X LI), and explication of the interaction that indicated a significant cross-over interaction. There was a negative association between LI and IAT scores for those with a history of sexual victimization ($\beta = -.30$, $p > .05$), and a positive association between LI and IAT scores for those without a history of sexual victimization ($\beta = .26$, $p > .05$). These findings indicate that women with a history of sexual victimization, who hold stronger beliefs that victims over exaggerate the rape, held weaker alcohol-blame associations toward Carl. In contrast, women without a history of sexual victimization, who hold stronger beliefs that victims over exaggerate the rape, held stronger alcohol-blame associations.

Moderating Effects of Sexual Victimization History on the Association between Rape Myth “Rape is a deviant act” and IAT scores

Because voter registration status was significantly related to the rape myth subscale *Rape is a deviant act* (DE), this variable was also included as a covariate and included in the first step of the model; along with education. DE was entered into the second step, sexual victimization history (SES) was entered in the third step of the model, and the interaction term (SES X DE) was entered in the fourth step of the model. The dependent variable was IAT scores.

Table 9 shows that results indicated a significant SES X DE interaction as predictors of IAT scores and explained an additional 16% of the variance above and beyond main effects [$R^2 = .16$, $F(5,63) = 2.44$, $p < .05$]. Explication of the interaction indicated a significant and positive association between DE and IAT scores for those without a history of sexual victimization ($\beta = .41$, $p < .05$), but no significant association between DE and IAT scores for those with a history of sexual victimization ($\beta = .41$, $p > .05$). These findings indicate that women without a history of sexual victimization, who hold stronger beliefs that rape cannot happen to “good” people, held stronger alcohol-blame associations toward Carl. In contrast, the belief that rape cannot happen to “good” people was not related for women without a history of sexual victimization.

Moderating Effects of Sexual Victimization History on the Association between Rape Myth “It wasn’t really rape” and IAT scores

Education was entered in the first step of the model, the rape myth subscale *It wasn’t really rape* (NR) was entered into the second step, sexual victimization history (SES) was entered in the third step of the model, and the interaction term (SES X NR) was entered in the fourth step of the model. The dependent variable was IAT scores.

Table 9 shows that results indicated a significant SES X NR interaction as predictors of IAT scores and explained an additional 18% of the variance above and beyond main effects [$R^2 = .18$, $F(4,64) = 3.62$, $p < .05$]. Explication of the interaction indicated a negative significant association between NR and IAT scores for those with a history of sexual victimization ($\beta = -.49$, $p < .05$), and a positive significant association between NR and IAT scores for those without a history of sexual victimization ($\beta = .31$, $p < .05$). These findings indicate that women with a history of sexual victimization, who

hold stronger beliefs that rapes must contain certain characteristics, held weaker alcohol-blame associations toward Carl. In contrast, women without a history of sexual victimization, who hold stronger beliefs that rapes must contain certain characteristics, held stronger alcohol-blame associations.

Table 9. *Linear Regression for the Moderating Effects of Sexual Victimization History on the Association between Rape Myth Acceptance and IAT scores*

Model	Step	Variable	β	R^2	$F\Delta$	$R^2\Delta$	(df)
1	1	Education	.17	.04	2.70	.04	(1,67)
	2	SA	-.34*	.04	.36	.01	(2,66)
	3	Assaulted	-.74**	.05	.04	.00	(3,65)
	4	SA X Assaulted	.85**	.15	7.50	.10	(4,64)
2	1	Education	.17	.04	2.70	.04	(1,67)
	2	SA	.31†	.04	.36	.01	(2,66)
	3	Not Assaulted	.74**	.05	.04	.00	(3,65)
	4	SA X Not Assaulted	-.76**	.15	7.50	.10	(4,64)
3	1	Education	.05	.05	3.16	.05	(1,66)
	2	WI	-.48**	.05	.28	.00	(2,65)
	3	Assaulted	-.87**	.05	.11	.00	(3,64)
	4	WI X Assaulted	1.00**	.21	12.76	.16	(4,63)
4	1	Education	.05	.05	3.16	.05	(1,66)
	2	WI	.37*	.05	.28	.00	(2,65)
	3	Not Assaulted	.87**	.05	.11	.00	(3,64)
	4	WI X Not Assaulted	-.97**	.21	12.76	.16	(4,63)
5	1	Education	.11	.04	2.70	.04	(1,66)
	2	LI	-.26	.04	.14	.00	(2,65)
	3	Assaulted	-.71*	.05	.32	.01	(3,64)
	4	LI X Assaulted	.70*	.11	4.37	.06	(4,63)
6	1	Education	.11	.04	2.70	.04	(1,66)
	2	LI	.26	.04	.14	.00	(2,65)
	3	Not Assaulted	.71*	.05	.32	.01	(3,64)
	4	LI X Not Assaulted	-.73*	.11	4.37	.06	(4,63)
7	1	Voter Status	-.13	.01	.35	.01	(1,67)
	2	Education	.17	.04	1.41	.04	(2,66)

Table 9 (continued)

	3	DE	-.24	.06	1.45	.02	(3,65)
	4	Assaulted	-.78**	.07	.77	.01	(4,64)
	5	DE X Assaulted	.90*	.16	6.71	.09	(5,63)
8							
	1	Voter Status	-.13	.01	.35	.01	(1,67)
	2	Education	.17	.04	1.41	.04	(2,66)
	3	DE	.41*	.06	1.45	.02	(3,65)
	4	Not Assaulted	-.78**	.07	.77	.01	(4,64)
	5	DE X Not Assaulted	-.71*	.16	6.71	.09	(5,63)
9							
	1	Education	.19	.04	2.70	.04	(1,67)
	2	NR	-.49*	.04	.05	.00	(2,66)
	3	Assaulted	-1.32**	.05	.43	.01	(3,65)
	4	NR X Assaulted	1.49**	.18	10.88	.14	(4,64)
10							
	1	Education	.19	.04	2.70	.04	(1,67)
	2	NR	.31*	.04	.05	.00	(2,66)
	3	Not Assaulted	1.32**	.05	.43	.01	(3,65)
	4	NR X Not Assaulted	-1.28*	.18	10.88	.14	(4,64)

Note. DV = IAT scores; implicit association task scores measuring attributions of rape blame toward the victim. SA = *She asked for it*; WI = *She wanted it*; LI = *She Lied*; DE = *Rape is a deviant act*; NR = *It wasn't really rape*.

Beta weights represent standardized regression coefficients.

* $p < .05$; ** $p < .01$; † marginally significant

Chapter Five

Discussion

The primary aim of the present study was to examine the relationships among Hyperfemininity (HF), victim alcohol consumption, and implicit attributions of blame toward the victim of an alcohol involved rape. Explicit and implicit measures were used to assess attributions of blame. Implicit measures of alcohol related blame were assessed using the Implicit Association Task (IAT); a computerized task that was designed to measure the speed and accuracy with which participants associated blame-related words and alcohol pictures to the victim or perpetrator of a rape depicted in a written vignette. Implicit beliefs are biases individuals' hold, which they may not be readily aware of (Gawronski & Payne, 2010), and which may impact blame for an alcohol related sexual assault.

Personality characteristics may also impact biases that people hold regarding whom is to blame for an alcohol involved rape. Research has shown that women who endorse higher levels of the personality characteristic HF, have an exaggerated adherence to traditional feminine gender roles, and are more likely to blame themselves or other women for a sexual assault (Murnen et al., 1989). Therefore, it was hypothesized that women who were higher in HF who read a rape scenario in which alcohol was involved would be more likely to attribute blame to the victim compared to the perpetrator. A second aim of the current study was to examine the associations of HF, implicit attributions of rape blame, and victim alcohol consumption to recommended disclosure

and police reporting. Prior research has shown that women who are higher in HF are less likely to encourage victims to report or disclose the incident (Murnen et al., 1991). For the present study it was hypothesized that women randomly assigned to read a rape scenario that included alcohol and who were higher in HF, would be less likely to recommend that the victim disclose or report the incident.

Correlation coefficients showed that women randomized to the alcohol condition who were heavier drinkers were more likely to believe that Michelle wanted to have sex with Carl and that she enjoyed having sex with Carl. It could be that women who consume greater amounts of alcohol may hold different rape scripts and may have related the vignette to their own personal experiences. That is, women who drink at higher levels may have more familiarity with social situations that involve alcohol and the risk that may be involved, including unwanted sexual incidents. Findings from correlational analyses also revealed that women who were higher in HF were more likely to have a history of sexual victimization. Research has shown that women higher in HF report a greater number of drinking occasions and consuming a larger number of drinks per day, relative to women lower in HF (Jones, 2008). Further, positive expectancies that alcohol increases sexual behavior have been shown to predict alcohol use in sexual situations (Derman & Cooper, 1994). Because women higher in HF are willing to use their sexuality as a means to maintain relationships with men, they may consume more alcohol or drink more frequently due to more positive alcohol-sex expectancies. That is, women higher in HF may use alcohol to excuse their sexual behaviors. However, the majority of sexual assaults occur after alcohol consumption thereby indicating the women higher in HF may be at increased risk of sexual assault victimization.

Contrary to expectations, correlational analyses showed that women randomized to the soda condition and who reported heavier alcohol use were less likely to believe that Michelle was leading Carl on. It may be that lighter drinkers may believe that Michelle was culpable for the incident because she was in a sober state of mind and should have attended to relevant “danger” cues and been able to resist Carl’s advances. Similarly, women who have a history of sexual victimization were less likely to explicitly blame Michelle for the rape. It may be that women who have been victims of a prior sexual assault perceive that the victim in the study vignette was not at fault for the incident, because they have modified their “rape scripts” to include rape perpetrated by an acquaintance. Moreover, women who have had a prior sexual victimization experience may notice pertinent cues of “resistance” in the incident between Carl and Michelle that women without a history of sexual assault would not have attended to. Finally, women higher in HF and who were assigned to the soda condition were more likely to explicitly blame the victim of the non-alcohol involved rape scenario by indicating that they believed that Michelle was flirting with Carl, that Michelle wanted to have sex with Carl, and that Michelle did something wrong. Taken together, results showed that women who are higher on HF were more likely to blame the victim of a rape when alcohol was not involved. Perhaps women who are unable to relate to a victim who consumed soda at a party may view the victim as more responsible for the incident, and women higher in HF women may be more likely to blame themselves for the rape. Therefore, HF may partially explain why rates of reporting a sexual assault remain low.

Results related to hypothesis 1 revealed that explicit responses were weakly or non-significantly associated with implicit blame attitudes, as hypothesized. The only

explicit response that was related to implicit attitudes was the belief that Carl raped Michelle. None of the other explicit follow-up questions about the responsibility for the rape depicted in the vignette were correlated with implicit beliefs about rape blame, which is consistent with previous research (e.g., Jackson, 2010). These findings further exemplify that implicit cognitions tap into different constructs than explicit reports. Specifically, the IAT measures unique beliefs that cannot be captured through traditional paper pencil reports. Individuals are not readily aware of implicit beliefs or biases they hold which may unknowingly influence their judgments and decisions. Although an individual may know that rape is a crime and that the perpetrator is bad, implicitly certain factors related to the assault may influence their reactions to the rape. Further, programs should be implemented to educate individuals, especially first responders and criminal justice officials, on implicit attitudes that they may unintentionally possess. By making individuals aware of implicit beliefs, they may be able to alter how they respond to situations, particularly sensitive issues such as cases of rape.

Counter to expectations proposed in hypotheses 2 through 5, regression analyses showed no interaction effects or significant main effects relating HF and experimental condition to implicit attributions of rape blame (IAT scores) or other outcomes (disclosure and reporting). There may be several reasons why the present study did not support the predicted hypotheses. First, Fisher z-transformation results did not indicate significant differences between beverage conditions (alcohol or soda) on any of the variables (IAT scores or responses to the Rape Scenario Follow-up Questionnaire). Prior research suggests that individuals assign more blame to the victim of a sexual assault when alcohol is consumed prior to the incident (Snell & Godwin, 1993). Therefore, while

it was expected that women who read the alcohol condition would assign more blame to the victim, no significant difference was found between the conditions. Regardless of beverage condition, all women assigned similar levels of blame toward the victim and were equally like to recommend that the victim in the vignette disclose and report the incident. These findings seem to indicate that, perhaps, the manipulation did not work. For example, participants in the alcohol condition may not have viewed the victim as intoxicated. In addition, separately examining differences of victim blame and HF among a sample of women with and without a history of sexual assault may yield different results.

Finally, several exploratory analyses were conducted to examine the relationship between sexual victimization history, IAT scores, and different dimensions of rape myths. First, women with a history of sexual assault who held stronger beliefs that the victim “asked” to be raped were less likely to associate alcohol pictures with blame toward the perpetrator of the rape scenario. This finding suggests that women who have been victims of a sexual assault in the past, and believe that victims put themselves in situations that increase the likelihood of rape, were quicker at pairing soda pictures and words that described Carl, than pairing alcohol pictures and words that described Carl. Similarly, women without a history of sexual victimization and who held greater rape myth acceptance that rape only occurs to “bad” people in “bad” areas showed stronger associations between alcohol pictures and guilt words. That is, more blame was assigned to the perpetrator.

There was not a significant association between believing that rape is a deviant act and IAT scores for women with a history of sexual victimization. Additionally, women with a history of sexual victimization and who held stronger beliefs that the victim wanted to have sex with the perpetrator also showed weaker IAT scores, indicating less propensity to associate alcohol pictures with the victim of the vignette. Likewise, women with a history of sexual victimization and who held stronger beliefs that certain characteristics must be included to constitute the rape showed weaker IAT scores. However, there was a stronger alcohol picture-guilt word association (stronger IAT scores) for women without a history of sexual assault and who believed that the victim wanted to have sex with the perpetrator. A final exploratory analysis revealed that women without a history of sexual assault and who believed that pertinent characteristics must be included during a rape showed stronger IAT scores.

It could be that women with a history of sexual victimization who are more likely to hold the belief that the victim “asked” to be raped acknowledge a rape when factors related to the assault align with a commonly held rape script (e.g., no alcohol involvement). However, a large majority of rapes occur when alcohol is involved (Kahn et al., 2003). Therefore, victims who hold rape myths may not be as likely to acknowledge an alcohol involved rape and consequently assign equal blame towards the victim and perpetrator when they have been drinking. This suggestion is consistent with prior research that indicates that unacknowledged victims were less likely to experience a rape that involved physical force or injury to the victim (Fisher et al., 2003) and more likely to consume alcohol prior to the rape (Kahn et al., 2003; Littleton et al., 2009a; Zinzow et al., 2010). Taken together, a victim may be less likely to acknowledge a rape

and blame the perpetrator when alcohol is involved due to acquired rape scripts. In addition to rape scripts theory, according to alcohol expectancy theory, individuals decide to drink based on learned relationships among factors related to alcohol (e.g., cues, drinking behavior, and drinking outcomes; Goldman, Del Boca, & Darkes, 1999). Women who have been victims of sexual assault report increased positive alcohol related sex expectancies (Corbin et al., 2001; Marx et al., 2000). Thus, they may blame the perpetrator and the victim of a rape involving alcohol consumption equally. In contrast, women without a history of sexual victimization who believe that rape only happens to “bad” people may hold stronger associations of alcohol and guilt because they expect negative consequences to follow alcohol consumption.

In sum, results from this study found that women randomized to the soda condition who were higher in HF were more likely to explicitly blame the victim of the rape. Similarly, women in the soda condition and who did not report a history of sexual victimization were more likely to explicitly blame the victim. In addition, women who were heavier drinkers and who were assigned to the alcohol condition were more likely to blame the victim for the rape, while heavy drinking women randomized to the soda condition were less likely to blame victim. Taken together, heavier drinking women may be able to relate to the alcohol scenario and may have been in similar situations in which they could avoid a unwanted sexual interactions. Further, heavier drinking women in the soda condition may notice pertinent cues of resistance and therefore assign less blame to the victim when alcohol is not involved.

HF and beverage condition were not related to implicit associations of rape blame or the recommendation to disclose or report the incident. However, findings from exploratory analyses showed that, irrespective of experimental condition, women with a history of sexual victimization who also held a variety of rape myths showed evidence of weaker implicit attributions of blame toward the victim relative to the perpetrator. Thus, women with and without a history of sexual victimization may hold different rape scripts that influence victim blame.

Implications and Limitations

Findings have important implications for the criminal justice system and mental health/clinical outcomes. In relation to the criminal just system, when a rape case goes to trial, it is important to consider that female jurors who possess certain dispositional tendencies (such as being high on HF) may create barriers for the prosecution of the perpetrator. Women higher in HF may be less likely to convict a perpetrator based on beliefs that they hold about women and the importance of maintaining relationships with men. Moreover, female rape victims who have higher levels of HF may not report a rape to police, thereby undermining the criminal justice system from apprehending the offender or appropriately adjudicating the crime. Rape myth acceptance may also impact jurors' perceptions of rape blame, attitudes of first responders, and police officers. Women who hold stronger rape myths may be more or less likely to convict the perpetrator of a sexual assault based on particular elements of the rape (e.g., alcohol consumption). In addition, women with a history of sexual victimization may create barriers for the prosecution. Although it may be a challenge to ethically determine

whether a woman has been the victim of a rape or not, perhaps giving a questionnaire that taps into a variety of unwanted sexual interactions (i.e., unwanted touching, unwanted kissing, etc.) would be beneficial when selecting a jury for a rape case. Specifically, if a woman has a history of sexual assault, she may be less likely to find the offender guilty and therefore the prosecutors may want to carefully consider if she is an appropriate fit for the jury.

Implicit cognitions may also partly explain why victims of alcohol involved rape are more likely to perceive negative reactions from police officers. First responders who believe certain rape myths may unknowingly express more blame towards a victim who was consuming alcohol during the incident. Educating police officers and first responders about implicit attitudes they may hold about rapes and alcohol involvement in these events may increase awareness of such beliefs and reduce biased interactions with victims. Therefore, first responders may be able to modify how they interact with victims of sexual assault and show less bias when interacting with victims of alcohol-involved rape.

Implications for mental health and clinical outcomes should also be considered. For example, clinicians could help women modify irrational beliefs about rape blame by providing psycho-education about certain rape myths. In addition to educating police officers about implicit biases, programs should also target educating victims and women in general about implicit cognitions and rape myths. Victims may be less likely to blame themselves for an alcohol involved rape if they are aware of implicit beliefs that are inaccurate. Additionally, women higher in HF may be less likely to acknowledge a rape

that involves alcohol. Prior research has shown that the psychological trauma of rape can cause a variety of mental health problems, such as depression and alcohol use disorders (Campbell, 2008; Grayson & Nolen-Hoeksema, 2005). Victims who do not acknowledge a rape may be less likely to seek mental health treatment or rape crisis services and may therefore be at increased risk to experience psychological problems related to sexual trauma. Public health awareness campaigns should focus on educating women about rape myth acceptance in an attempt to modify rape scripts. Finally, education programs should inform women about ways to reduce their risk of sexual victimization. For example, rather than suggesting that women remain abstinent from alcohol, perhaps educating them on monitoring the amount of alcohol they drink would reduce their risk of assault. Further, groups such as one in four help educate women about ways to recognize risky situations as well as educating men about the toll that rape has on women and how to prevent a rape. Because many rapes occur after both the victim and perpetrator consume alcohol, it may help reduce the likelihood of rape by educating men about pertinent cues that may be associated with resistance to sexual interactions.

There are several limitations to the current study. First, the sample was comprised of college student women. How these findings generalize to a more an adult population of females not in college, or to men's attributions of rape is unknown. Second, the cross-sectional design of this experiment limited the investigation of the possible causal nature of the associations of the variables. Because questionnaires about alcohol consumption and sexual assault were administered before the IAT, it is unknown if questionnaires that assessed for sexual victimization history or alcohol use influenced explicit or implicit responses. Third, IAT scores did not differ between the two conditions (alcohol and

soda). Therefore, it is possible that the manipulation was not effective in portraying different factors related to alcohol and non alcohol involved sexual assaults. Participants may not have believed that the victim in the scenario was intoxicated, and therefore those assigned to the alcohol condition did not differ from those in the soda condition. Future studies should consider explicitly stating that the victim is intoxicated. Fourth, the sample was not entirely heterosexual which may impact scores on the HF scale, rape myth acceptance, as well as interpretation of the written vignette. Both of the questionnaires ask about relations between males and females, therefore a person who identifies as homosexual may not be able to accurately respond to some of the questions because they do not relate to the questions. Additionally, future studies should investigate rape blame towards the victim of a homosexual as well as heterosexual rape scenario. Finally, it is noteworthy that the majority of the sample (62%) had reported at least one incident of sexual victimization since the age of 14. Compared to prior research, this was a larger percentage than expected (Kilpatrick et al., 2007). Therefore, findings related to sexual victimization history may limit generalizability to the general population.

Conclusions

The present study is the first known study to examine associations of implicit attitudes about guilt and alcohol associations and sexual assault incident characteristics. Prior research shows many characteristics are associated with variations in victim blame and sexual assaults. Therefore, it is important to examine underlying cognitive beliefs of which people may not be readily aware. This suggestion may impact the rates of reporting by creating a more comfortable and unbiased atmosphere to which victims may turn. Additionally, future studies should examine victim blaming attitudes in more

generalizable samples, using an IAT that analyzes victim and perpetrator blame separately. Although the primary focus of the current study was to focus on females, men may hold different views about incident characteristics associated with a rape, compared to women. Thus, future studies should consider examining male gender role norms in association to rape blame characteristics. Sexual assault victimization history and rape myths appear to have a pertinent role on various factors related to sexual assault incidences. Effectively measuring attitudes towards sexual assault victims may increase the rates of reporting, which in turn will improve psychological recovery and the ability of the criminal justice system to effectively intervene.

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Appendices

Appendix 1: Demographic Questionnaire

Date: _____

Subject: _____

1. What is your gender?
 Male
 Female
2. Age: _____
3. What is your current marital status? (please check one)
 Single (never married)
 Married
 Divorced
 Separated
 Not married, but living with intimate partner
 Other
4. Please indicate your sexual orientation:
 Heterosexual
 Homosexual
 Bisexual
5. Do you consider yourself to be Spanish, Hispanic, or Latino origin (includes a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or race, regardless of race)?
 Yes
 No
6. How do you describe yourself?
 White (a person having origins in any of the original peoples of Europe, the Middle East, or North America)
 Black or African American (a person having origins in any of the black racial groups or Africa. This term includes Haitian)
 American Indian or Alaskan Native (a person having origins in any of the original peoples of North and South America, including Central America, and who maintain tribal affiliation or community attachment)
 Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam)
 Pacific Islander or Native Hawaiian (a person having origins in any of the

- original peoples of Hawaii, Guam, Samoa, or other Pacific Islanders)
 ___ Other (please specify _____)
7. How are you registered as a voter?
 ___ Republican Party
 ___ Democrat Party
 ___ Independent Party
 ___ Reform Party
 ___ Other (please specify _____)
 ___ I am not registered.
8. What religion, if any, do you identify with?
 ___ Catholicism
 ___ Judaism
 ___ Buddhism
 ___ Muslim
 ___ Protestant If Protestant, please see question #9.
 ___ Other (please specify _____)
 ___ None
9. If Protestant, which denomination are you?
 ___ Baptist
 ___ Lutheran
 ___ Methodist
 ___ Presbyterian
 ___ Episcopalian
 ___ Assembly of God
 ___ Church of Christ
 ___ Other (please specify _____)
10. What is your current educational status?
 ___ Freshman
 ___ Sophomore
 ___ Junior
 ___ Senior
 ___ Other
11. What is your current employment status? (Please check one)
 ___ Full time
 ___ Part time
 ___ Full Time Student
 ___ Unemployed (No work or school)
12. What is your current total income?
 ___ Under \$10,000
 ___ \$10,000 - \$19,999
 ___ \$40,000 - \$49,999
 ___ \$50,000 - \$59,999

\$20,000 - \$29,999
 \$30,000 - \$39,999

\$60,000 - \$69,999
 \$70,000+

13. Where is your current residence?

- Residence Hall (on-campus)
 Campus Apartment (on-campus)
 Apartment or House (off campus)
 Other on-campus
 Other off-campus

14. Are you a member of a sorority?

- Yes
 No

15. Are you a member of an athletic university team?

- Yes
 No

Appendix 2: DDQ

Date: _____

Subject: _____

For all questions, one drink equals:

- 12oz. of beer (8oz. of Canadian, malt liquor, or ice beer or 10oz microbrew)
- 100z. of wine cooler
- 40z. of wine
- 1 cocktail with 1oz of 100 proof of liquor or 1 1/4oz. of 80 proof liquor

1. Think of the occasion you drank the most this past month. How much did you drink?

- | | | |
|-----------------------------------|------------------------------------|-------------------------------------|
| <input type="checkbox"/> 0 drinks | <input type="checkbox"/> 9 drinks | <input type="checkbox"/> 18 drinks |
| <input type="checkbox"/> 1 drink | <input type="checkbox"/> 10 drinks | <input type="checkbox"/> 19 drinks |
| <input type="checkbox"/> 2 drinks | <input type="checkbox"/> 11 drinks | <input type="checkbox"/> 20 drinks |
| <input type="checkbox"/> 3 drinks | <input type="checkbox"/> 12 drinks | <input type="checkbox"/> 21 drinks |
| <input type="checkbox"/> 4 drinks | <input type="checkbox"/> 13 drinks | <input type="checkbox"/> 22 drinks |
| <input type="checkbox"/> 5 drinks | <input type="checkbox"/> 14 drinks | <input type="checkbox"/> 23 drinks |
| <input type="checkbox"/> 6 drinks | <input type="checkbox"/> 15 drinks | <input type="checkbox"/> 24 drinks |
| <input type="checkbox"/> 7 drinks | <input type="checkbox"/> 16 drinks | <input type="checkbox"/> 25 or more |
| <input type="checkbox"/> 8 drinks | <input type="checkbox"/> 17 drinks | drinks |

2. Think of the occasion you drank the most this past month. How many hours did you spend drinking?

- | | | |
|------------------------------------|------------------------------------|-------------------------------------|
| <input type="checkbox"/> 0-1 hour | <input type="checkbox"/> 4-5 hours | <input type="checkbox"/> 8-9 hours |
| <input type="checkbox"/> 1-2 hours | <input type="checkbox"/> 5-6 hours | <input type="checkbox"/> 9-10 hours |
| <input type="checkbox"/> 2-3 hours | <input type="checkbox"/> 6-7 hours | <input type="checkbox"/> 10+ hours |
| <input type="checkbox"/> 3-4 hours | <input type="checkbox"/> 7-8 hours | |

3. On a given weekend evening during the past month, how much alcohol did you typically drink?

Estimate for the past month?

- | | | |
|-----------------------------------|------------------------------------|-------------------------------------|
| <input type="checkbox"/> 0 drinks | <input type="checkbox"/> 9 drinks | <input type="checkbox"/> 18 drinks |
| <input type="checkbox"/> 1 drink | <input type="checkbox"/> 10 drinks | <input type="checkbox"/> 19 drinks |
| <input type="checkbox"/> 2 drinks | <input type="checkbox"/> 11 drinks | <input type="checkbox"/> 20 drinks |
| <input type="checkbox"/> 3 drinks | <input type="checkbox"/> 12 drinks | <input type="checkbox"/> 21 drinks |
| <input type="checkbox"/> 4 drinks | <input type="checkbox"/> 13 drinks | <input type="checkbox"/> 22 drinks |
| <input type="checkbox"/> 5 drinks | <input type="checkbox"/> 14 drinks | <input type="checkbox"/> 23 drinks |
| <input type="checkbox"/> 6 drinks | <input type="checkbox"/> 15 drinks | <input type="checkbox"/> 24 drinks |
| <input type="checkbox"/> 7 drinks | <input type="checkbox"/> 16 drinks | <input type="checkbox"/> 25 or more |
| <input type="checkbox"/> 8 drinks | <input type="checkbox"/> 17 drinks | drinks |

4. On a given weekend evening during the past month, how many hours did you spend drinking?
Estimate for the past month.

- | | |
|------------------------------------|-------------------------------------|
| <input type="checkbox"/> 0-1 hour | <input type="checkbox"/> 6-7 hours |
| <input type="checkbox"/> 1-2 hours | <input type="checkbox"/> 7-8 hours |
| <input type="checkbox"/> 2-3 hours | <input type="checkbox"/> 8-9 hours |
| <input type="checkbox"/> 3-4 hours | <input type="checkbox"/> 9-10 hours |
| <input type="checkbox"/> 4-5 hours | <input type="checkbox"/> 10+ hours |
| <input type="checkbox"/> 5-6 hours | |

5. How many days of the week did you drink alcohol during the past month?

- I do not drink at all
- Once or twice a week
- Once a day or more
- About once a month
- Three to four times a week
- Two to three times a month
- Nearly every day

6. Consider a typical week during the **last 3 months**. How much alcohol, on average (measured in a number of drinks), do **you** drink on each day of a typical week?

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

7. Consider a typical week during the **last 3 months**. Over how many hours do **you** drink the above number of drinks?

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

8. Consider a typical week during the **last 3 months**. How much alcohol, on average (measured in a number of drinks), do **your best friend** drink on each day of a typical week?

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

9. Consider a typical week during the **last 3 months**. How much alcohol, on average (measured in number of drinks *), does a **typical student of your same sex at your university** drink on each day of a typical week?

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

10. How often do you think students of each of the categories below **typically** consume **alcohol** (including beer, wine, wine coolers, liquors, and mixed drinks)? Give your best estimate for each category.

	Never	1-2 times/year	6 times/year	Once/month	Twice/month	Once/week	3 times/week	5 times/week	Everyday
--	-------	----------------	--------------	------------	-------------	-----------	--------------	--------------	----------

Yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students in general	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Overall, what **percentage** of students on your campus do you think consume **no** alcoholic beverages at all? (Just give your best estimate) _____%

12. Overall, what **percentage** of students do you think consumed **five or more drinks in a row** on at least one occasion in the **last two weeks**? (again, just give your best estimate) _____%

13. Think back over the last two weeks. How many times have you had 4 or more drinks in a row? Please circle your answer.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14+
---	---	---	---	---	---	---	---	---	---	----	----	----	----	-----

Appendix 3: SES

Date: _____

Subject: _____

Below are a series of statements about incidents that may have occurred in your lifetime. Please check yes or no to answer each of the following questions:

1. Have you given in to sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?

___ YES

___ NO

2. Have you had sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to mate you?

___ YES

___ NO

3. Have you had sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?

___ YES

___ NO

4. Have you had a man attempt sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to by threatening or using some degree of force (twisting your arm, holding you down, etc.), but intercourse *did not* occur?

___ YES

___ NO

5. Have you had a man attempt sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to by giving you alcohol or drugs, but intercourse *did not* occur?

___ YES

___ NO

6. Have you given in to sexual intercourse when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?

___ YES

___ NO

7. Have you had sexual intercourse when you didn't want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to make you?

YES
 NO

8. Have you had sexual intercourse when you didn't want to because a man gave you alcohol or drugs?

YES
 NO

9. Have you had sexual intercourse when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?

YES
 NO

10. Have you had sex acts (anal or oral intercourse or penetration by objects other than the penis) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?

YES
 NO

Appendix 4: HFS

Date: _____

Subject: _____

Below are a list of statements. There are two statements for each question. Please write the letter (a or b) of the statement that best describes your own beliefs. Please select only one statement for each question.

1. a. These days men and women should each pay for their own expenses on a date. _____
b. Men should always be ready to accept the financial responsibility for a date.
2. a. I would rather be a famous scientist than a famous fashion model. _____
b. I would rather be a famous fashion model than a famous scientist.
3. a. I like a man who has some sexual experience. _____
b. Sexual experience is not a relevant factor in my choice of a male partner.
4. a. Women should never break up a friendship due to interest in the same man. _____
b. Sometimes women have to compete with one another for me.
5. a. I like to play hard-to-get. _____
b. I don't like to play games in a relationship.
6. a. I would agree to have sex with a man if I thought I could get him to do what I want. _____
b. I never use sex as a way to manipulate a man.
7. a. I try to state my sexual needs clearly and concisely. _____
b. I sometimes say "no" but really mean "yes".
8. a. I like to flirt with men _____
b. I enjoy an interesting conversation with a man.
9. a. I seldom consider a relationship with a man as more important than my friendship with women. _____
b. I have broken dates with female friends when a guy has asked me out.
10. a. I usually pay for my expenses on a date. _____
b. I expect the men I date to take care of my expenses.
11. a. Sometimes I cry to influence a man. _____
b. I prefer to use logical rather than emotional means of persuasion when necessary.
12. a. Men need sex more than women do. _____
b. In general, there is no difference between the sexual needs of men and women.
13. a. I never use my sexuality to manipulate men. _____
b. I sometimes act sexy to get what I want from a man.

14. a. I feel anger when men whistle at me. _____
 b. I feel a little flattered when men whistle at me. _____
15. a. It's okay for a man to be a little forceful to get sex. _____
 b. Any force used during sex is sexual coercion and should not be tolerated. _____
16. a. Effeminate men deserve to be ridiculed. _____
 b. So-called effeminate men are very attractive. _____
17. a. Women who are good at sports probably turn men off. _____
 b. Men like women who are good at sports because of their competence. _____
18. a. A "real" man is one who can get any woman to have sex with him. _____
 b. Masculinity is not determined by sexual success. _____
19. a. I would rather be president of the US than the wife of a president. _____
 b. I would rather be the wife of the president of the US than the president. _____
20. a. Sometimes I care more about my boyfriend's feelings than my own. _____
 b. It is important to me that I am as satisfied with a relationship as my partner is. _____
21. a. Most women need a man in their lives. _____
 b. I believe some women lead happy lives without male partners. _____
22. a. When a man I'm with gets really sexually excited, it's no use trying to stop him from getting what he wants. _____
 b. Men should be able to control their sexual excitement. _____
23. a. I like to have a man "wrapped around my finger." _____
 b. I like relationships in which both partners are equal. _____
24. a. I try to avoid jealousy in a relationship. _____
 b. Sometimes women need to make men feel jealous so they will be more appreciative. _____
25. a. I sometimes promise to have sex with a man to make sure he stays interested. _____
 b. I usually state my sexual intentions honestly and openly. _____
26. a. I like to feel tipsy so I have an excuse to do anything with a man. _____
 b. I don't like getting too drunk around a man I don't know very well. _____

Appendix 6: IRMA

Date: _____

Subject: _____

Below are a series of statements and beliefs people sometimes have. Please rate your level of agreement for each using the following scale:

1 2 3 4 5 6 7
 Totally Totally
 Disagree Agree

1. 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
2. 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
3. When men rape, it is because of their strong desire for sex. 1 2 3 4 5 6 7
4. 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. 1 2 3 4 5 6 7
5. Women who are caught having an illicit affair sometimes claim that it was rape. 1 2 3 4 5 6 7
6. Newspapers should not release the name of a rape victim to the public. 1 2 3 4 5 6 7
7. Many so-called rape victims are actually women who had sex and "changed their minds" afterwards. 1 2 3 4 5 6 7
8. Many women secretly desire to be raped. 1 2 3 4 5 6 7
9. Rape mainly occurs on the "bad" side of town. 1 2 3 4 5 6 7
10. Usually, it is only women who do things like hang out in bars and sleep around that are raped. 1 2 3 4 5 6 7
11. Most rapists are not caught by the police. 1 2 3 4 5 6 7
12. If a woman doesn't physically fight back, you can't really say that it was rape. 1 2 3 4 5 6 7
13. Men from nice middle-class homes almost never rape. 1 2 3 4 5 6 7
14. Rape isn't as big a problem as some feminists would like people to think. 1 2 3 4 5 6 7
15. When women go around wearing low-cut tops or short skirts, they're just asking for trouble. 1 2 3 4 5 6 7
16. Rape accusations are often used as a way of getting back at men. 1 2 3 4 5 6 7
17. A rape probably didn't happen if the woman has no bruises or marks. 1 2 3 4 5 6 7
18. Many women find being forced to have sex very arousing. 1 2 3 4 5 6 7
19. If a woman goes home with a man she doesn't know, it is her own fault if she is raped. 1 2 3 4 5 6 7

20. Rapists are usually sexually frustrated individuals. 1 2 3 4 5 6 7
21. All women should have access to self-defense classes. 1 2 3 4 5 6 7
22. It is usually only women who dress suggestively that are raped. 1 2 3 4 5 6
7
23. Some women prefer to have sex forced on them so they don't
have to feel guilty about it. 1 2 3 4 5 6 7
24. If the rapist doesn't have a weapon, you really can't call it a rape. 1 2 3 4 5 6
7
25. When a woman is a sexual tease, eventually she is going to
get into trouble. 1 2 3 4 5 6 7
26. Being raped isn't as bad as being mugged and beaten. 1 2 3 4 5 6 7
27. Rape is unlikely to happen in the woman's own familiar
neighborhood. 1 2 3 4 5 6 7
28. In reality, women are almost never raped by their boyfriends. 1 2 3 4 5 6 7
29. Women tend to exaggerate how much rape affects them. 1 2 3 4 5 6 7
30. When a man is very sexually aroused, he may not even
realize that the woman is resisting. 1 2 3 4 5 6 7
31. A lot of women lead a man on and then they cry rape. 1 2 3 4 5 6 7
32. It is preferable that a female police officer conduct the
questioning when a woman reports a rape. 1 2 3 4 5 6 7
33. A lot of times, women who claim they were raped just have
emotional problems. 1 2 3 4 5 6 7
34. If a woman doesn't physically resist sex—even when
protesting verbally—it really can't be considered rape. 1 2 3 4 5 6 7
35. Rape almost never happens in the woman's own home. 1 2 3 4 5 6 7
36. A woman who "teases" men deserves anything that
might happen. 1 2 3 4 5 6 7
37. When women are raped, it's often because the way they
said "no" was ambiguous. 1 2 3 4 5 6 7
38. If a woman isn't a virgin, then it shouldn't be a big deal if her
date forces her to have sex. 1 2 3 4 5 6 7
39. 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
40. This society should devote more effort to preventing rape. 1 2 3 4 5 6 7
41. 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
42. Rape happens when a man's sex drive gets out of control. 1 2 3 4 5 6 7
43. A woman who goes to the home or apartment of a man on
the first date is implying that she wants to have sex. 1 2 3 4 5 6 7

44. Many women actually enjoy sex after the guy uses a little force. 1 2 3 4 5 6
7
45. If a woman claims to have been raped but has no bruises or
scrapes, she probably shouldn't be taken too seriously. 1 2 3 4 5 6 7

Appendix 7: Post-Vignette Assessment (Alcohol Condition)

Date: _____

Subject: _____

1. Were Carl and Michelle drinking beer at the party before heading to Carl's apartment? **Yes / No**
2. Did Carl make a mixed drink when they got back to his apartment? **Yes / No**
3. Did Michelle want to see Carl's family photo? **Yes / No**
4. Did the scenario end with sexual intercourse? **Yes / No**

Appendix 8: Post-Vignette Assessment (Soda Condition)

Date: _____

Subject: _____

1. Were Carl and Michelle drinking soda at the party before heading to Carl's apartment? **Yes / No**
2. Did Carl grab a soda when they got back to his apartment? **Yes / No**
3. Did Michelle want to see Carl's family photo? **Yes / No**
4. Did the scenario end with sexual intercourse? **Yes / No**

Appendix 9: RSFQ

Date: _____

Subject: _____

Below are a series of statements about the scenario you read. Please rate your level of agreement for each using the following scale:

	1	2	3	4	5	6	7
	<i>Definitely</i>						<i>Definitely</i>
	<i>Not</i>						
1. Do you think Michelle was flirting with Carl?	1	2	3	4	5	6	7
2. Do you think Michelle wanted to have sex with Carl?	1	2	3	4	5	6	7
3. Do you think Michelle was “leading Carl on?”	1	2	3	4	5	6	7
4. Should Carl have had sex with Michelle?	1	2	3	4	5	6	7
5. Do you think Michelle enjoyed having sexual intercourse with Carl?	1	2	3	4	5	6	7
6. Did Michelle do anything wrong?	1	2	3	4	5	6	7
7. Did Carl do anything wrong?	1	2	3	4	5	6	7
8. Do you think Michelle’s rights were violated by Carl?	1	2	3	4	5	6	7
9. Do you think Carl raped Michelle?	1	2	3	4	5	6	7
10. Do you think Michelle was intoxicated?	1	2	3	4	5	6	7
11. Should Michelle disclose the incident between her and Carl to friends and/or family?	1	2	3	4	5	6	7
12. Should Michelle report the incident between her and Carl to police?	1	2	3	4	5	6	7

Using a continuous line, indicate how much each character was responsible for the sexual intercourse that occurred. 1 = no responsibility 7 = complete responsibility

1) Michelle and Carl have had sex. To what extent is this Michelle’s responsibility?
 _____ 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

2) Michelle and Carl have had sex. To what extent is this Carl’s responsibility?
 _____ 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

Appendix 10: Written Scenario (Alcohol Condition)

Michelle, a college student, attends a party held by her friend. Early in the evening, Michelle meets Carl, a fellow college student. The two have several mutual friends and, therefore, see each other often. Toward the end of the last semester, they began to hang out just the two of them, but when the summer came, they lost touch. At the party, Carl asks, "I'm going to get a beer. Would you like anything to drink?" She replied, "Sure – how about a beer?" When he returned with her drink, they talked to friends and danced for a while, each having three or four more beers over the next few hours. They end up talking for most of the night, and they find that they have a lot in common and are both attracted to each other. Because there are a lot of people at the party, Carl ask Michelle "Would you like to head back to my apartment to have another drink and watch a movie together?"

"Okay," Michelle agrees, and the two leave the party and walk to Carl's apartment, which is nearby.

When they enter the apartment, Michelle admires Carl's comfortable looking sofa, wide-screen TV, and his extensive collection of movies. While Carl makes two vodka and cranberry drinks, Michelle picks out a movie to watch from his collection and relaxes on the sofa.

While sitting down on the sofa next to Michelle, Carl says "I hope you like vodka, these drinks are strong!" Michelle asks for a backrub then instigates a short wrestling match on the sofa trying to grab Carl's wallet, to look at his driver's license photo. After finishing her drink, Michelle suggests they begin to watch the movie. Carl presses play, as they cuddle on the couch.

During the movie, Michelle and Carl begin to kiss, and make out for about half an hour. Carl then unbuttons Michelle's pants while kissing her stomach; he then starts to remove her underwear. Michelle decides that she is pretty intoxicated and wants to go home. She says, "Please stop, I don't want to go any further than kissing," but Carl continues. "I want to go home, I've had too much to drink," Michelle insists. "No!" Michelle says, more firmly, but Carl then puts his weight on Michelle, holds her down, and begins having sexual intercourse with her. She tries to get away, but realizes Carl is too strong.

Appendix 11: Written Scenario (Soda Condition)

Michelle, a college student, attends a party held by her friend. Early in the evening, Michelle meets Carl, a fellow college student. The two have several mutual friends and, therefore, see each other often. Toward the end of the last semester, they began to hang out just the two of them, but when the summer came, they lost touch. At the party, Carl asks, "I'm going to get a beer soda. Would you like anything to drink?" She replied, "Sure – how about a soda?" When he returned with her drink, they talked to friends and danced for a while, each having three or four more sodas over the next few hours. They end up talking for most of the night, and they find that they have a lot in common and are both attracted to each other. Because there are a lot of people at the party, Carl ask Michelle "Would you like to head back to my apartment to have another drink and watch a movie together?"

"Okay," Michelle agrees, and the two leave the party and walk to Carl's apartment, which is nearby.

When they enter the apartment, Michelle admires Carl's comfortable looking sofa, wide-screen TV, and his extensive collection of movies. While Carl grabs two cans of soda, Michelle picks out a movie to watch from his collection and relaxes on the sofa.

While sitting down on the sofa next to Michelle, Carl says "I hope you like your soda cold, these are freezing!" Michelle asks for a backrub then instigates a short wrestling match on the sofa trying to grab Carl's wallet, to look at his driver's license photo. After finishing her drink, Michelle suggests they begin to watch the movie. Carl presses play, as they cuddle on the couch.

During the movie, Michelle and Carl begin to kiss, and make out for about half an hour. Carl then unbuttons Michelle's pants while kissing her stomach; he then starts to remove her underwear. Michelle decides that she is pretty tired and wants to go home. She says, "Please stop, I don't want to go any further than kissing," but Carl continues. "I want to go home, I'm too tired," Michelle insists. "No!" Michelle says, more firmly, but Carl then puts his weight on Michelle, holds her down, and begins having sexual intercourse with her. She tries to get away, but realizes Carl is too strong.

Appendix 12: IRB Approval Letter

DIVISION OF RESEARCH INTEGRITY AND COMPLIANCE
 Institutional Review Boards, FWA No. 00001669
 12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
 (813) 974-5638 • FAX (813) 974-5618

April 2, 2012

Sarah Ehlke, B.A.
 Criminology
 7116 N. Habana Ave.
 Tampa, FL 33614

RE: **Expedited Approval** for Initial Review
 IRB#: Pro00005890
 Title: Perceptions of Unwanted Sexual Experiences

Dear Ms. Ehlke:

On 4/2/2012 the Institutional Review Board (IRB) reviewed and **APPROVED** the above referenced protocol. Please note that your approval for this study will expire on 4/2/2013.

Approved Items:

Protocol Document(s):

[USF_Ehlke_Thesis_for IRB.doc](#)

Consent/Assent Document(s):

[Consent Form.pdf](#)

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note, the informed consent/assent documents are valid during the period indicated by the official, IRB-Approval stamp located on the form. Valid consent must be documented on a copy of the most recently IRB-approved consent form.

Your study also qualifies for a waiver of the requirements for the documentation of informed consent for the pre-screening. This meets requirements as outlined in the federal regulations at 45CFR46.116 (d), which states that an IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent, or waive the requirements to obtain informed consent provided the IRB finds and documents that (1) the research involves no more than minimal risk to the subjects; (2) the waiver or alteration will not adversely affect the rights and welfare of the subjects; (3) the research could not practicably be carried out without the waiver or alteration; and (4) whenever appropriate, the subjects will be provided with additional pertinent information after participation.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,



John Schinka, Ph.D., Chairperson
USF Institutional Review Board