"Well, What did you Sexpect?"
The Relationship of Heavy Episodic Drinking with Rape Myth Acceptance, Sexual Expectations, and Sexual-Coercion Alcohol Expectancies

by

Lauren L. Clinton

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Approved by

Chris Correia, Chair, Professor and Director of Clinical Training-- Psychological Sciences
Jeff Reese, Co-Chair, Professor and Department Head—Special Education, Rehabilitation &
Counseling
Brian McCabe, Associate Professor—Special Education, Rehabilitation & Counseling
Han Na Suh, Assistant Professor—Counseling & Psychological Sciences, Georgia State
University

Abstract

Contemporary research has established a strong relationship between heavy episodic drinking and both perpetration and victimization of sexual assault. To better understand this relationship, we aimed to explore the interaction of cognition in sex-related variables, such as rape myth acceptance and sexual-coercion related alcohol expectancies, with heavy episodic drinking. Additionally, we aimed to explore the relationship between binge drinking and Sexpectations, a new measure developed by the primary author that examines cognitive "shoulds and wills" of sexual behavior. It was hypothesized that 1) Heavy episodic drinking is correlated with sex-related variables, and that sex-related variables are correlated with one another, 2) Heavy episodic drinking accounts for unique variance among sex-related variables, and 3) Sexual coercion alcohol expectancies will moderate the relationship between heavy episodic drinking and Sexpectations.

Participants ($N = 972$) completed an online survey examining their endorsement of the sex-related variables and binge drinking. 1) Heavy episodic drinking (HED) was positively correlated with Sexpectations, but not with rape myth acceptance or sexual coercion alcohol expectancies (SCAE). Sexpectations were positively correlated with the sexual coercion alcohol expectancy for perceived vulnerability and negatively correlated with rape myth acceptance. 2) Heavy episodic drinking accounted for unique variance in Sexpectations, but not rape myth acceptance or sexual coercion alcohol expectancies. 3) Though the interaction term of SCAE and HED did not demonstrate a moderation effect, SCAE—Vulnerability accounted for unique variance in each model for Sexpectations when controlling for gender and HED. Implications and future directions are discussed.

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Chapter 1

Introduction

College students represent a unique period of development known as emerging adulthood (Arnett, 2000). During this period, students are prone to experimentation with substances and sexual behavior. Specifically, for many individuals, alcohol use peaks during college years (Fromme, Corbin, & Crus, 2008). Similarly, research has well-documented the phenomenon of college "hook-up culture", or the tendency to engage in sexual or physical behaviors that does not necessarily have romantic attachment (Bogle, 2008). While many college students may engage in drinking and sexual experimentation separately, they are hardly mutually exclusive. "Hooking up" and other forms of sexual behavior (such as within a committed romantic relationship) have been observed to occur simultaneously with partying and alcohol consumption for many college students (Stinson, 2010). While for many students this experimentation is of relative low levels of risk, the intersection of heavy drinking and sexual behavior has been linked to more deleterious consequences.

Heavy alcohol use is associated greater risk in sexual behavior amongst college students, such as increased impulsivity and less attention to STI/pregnancy risk (MacDonald et al., 2000). Additionally, heavy alcohol use amongst college students has been associated with increased risk of sexual assault, with approximately 50% of all college student sexual assaults associated with alcohol in some way (Abbey et al., 1998). Specifically, alcohol consumption of both survivors and perpetrators has been observed to precipitate significant occurrences of college sexual assault (Abbey, 2002). While this finding does not indicate any role of the survivor in the perpetration of assault, it does indicate that heavy drinking may be associated with vulnerability to predators, as well as engagement in sexual aggression.

Current literature supports the notion that sexual aggression and heavy alcohol use have been linked to perceived norms surrounding drinking and hook-up culture. Specifically, heavy alcohol use has been associated with positive alcohol expectancies, or expectations that heavy alcohol use will lead to positive outcomes (Goldman, Del Boca & Darkes, 1999). Moreover, contemporary literature on alcohol expectancies has demonstrated that college students endorse several expectations of alcohol consumption directly related to sexual perpetration and victimization (Starfelt et al., 2015). This suggests that college students who endorse these sexual-coercion related alcohol expectancies (SCAE) are more likely to believe that sexual assault is a common, less nefarious component of hookup and party cultures. Likewise, sexual aggression amongst college students has been associated with endorsement of rape myths, or the belief that nonconsensual and/or violent sexual behaviors may actually fit into norms of hookup culture (Payne, Lonsway & Fitzgerald, 1999). Given the body of research on norms and expectations influence on college drinking and sexual behavior, the present study theorizes that Sexpectations, a new measure created by the author indicating expectations of the self and others in typical and idealized sexual encounters, will also be correlated with norms and expectations regarding the intersection of alcohol use and sexual behaviors amongst college students. Specifically, the present study aims to:

- Examine unique relationships between heavy episodic drinking, rape myth acceptance, sexual-coercion alcohol expectancies (SCAE), and Sexpectations
- Explore how SCAE may moderate the relationship between HED and Sexpectations

Counseling Psychology Relevance

The present dissertation is designed to further clarify the relationships between heavy episodic drinking, rape myth acceptance, SCAE, and Sexpectations in college students.

Professionals in the field of counseling psychology work closely and frequently with the college student population, often within the setting of university counseling centers. In such settings, concerns regarding sexual trauma, heavy alcohol consumption, and sexual behavior are exceptionally common and pertinent to underlying mental health issues. Thus, the present study aims to better understand such presenting concerns. Moreover, results of the present study serve to provide counseling psychologists with a nuanced understanding of the mechanisms of norms and expectations that underly high risk behavior and subsequent mental health consequences in this population. Finally, results of the present dissertation aim to inform education, prevention, and intervention efforts, specifically for decreasing the prevalence of rape myth acceptance amongst college students, which is theorized to ultimately contribute to a reduction in sexual assault and increase in adjudication for perpetrators of sexual violence.

<center>**Chapter 2**</center>

<center>**Literature Review**</center>

Heavy Episodic Drinking

According to the Center for Disease Control and Prevention, binge drinking, or consuming alcohol reaching a 0.08 blood alcohol concentration (BAC) is the most common, costly, and lethal form of excessive drinking (Stacks, Gonzales, Bouchery, Tomedi & Brewer, 2015), and is considered to be a significant, yet preventable, public health concern. Operationally, binge drinking, or "heavy episodic drinking" (HED) may be defined as four or more drinks in a two-hour period for women, and five or more drinks in the same duration for men (National Institute of Alcohol Abuse and Alcoholism (NIAAA), 2004). While this definition has been debated due to its subjective implications on a given individual's BAC, studies have suggested that most individuals will attain a 0.08 BAC or higher when drinking at this rate, thus corroborating this definition (NIAAA 2004; Naimi, Brewer, Mokdad, Serdula & Marks., 2003). Moreover, consumption of this frequency and rate has been associated with greater consequence when compared to drinking beneath this threshold, including increased risk of alcohol dependence (Sloan, Grossman, & Platt, 2011), risk behaviors such as driving under the influence (Hingson, Zha &Weitman, 2009), and increased risk of alcohol related overdose, injury and death (Hingson, Zha, & Smyth, 2017). Similarly, HED is associated with many other deleterious health concerns, such as chronic illness, cancer, memory and learning difficulties, sexually transmitted infections, and poor pregnancy outcomes (Naimi, Lipscomb, Brewer, & Colley, 2003; World Health Organization, 2018).

College Students & HED

College students may be especially prone to HED, with literature supporting that young adults attending college are more likely to consume greater amounts of alcohol than other age groups (Kanny, Naimi, Liu, Lu & Brewer, 2018), as well as their non-attending peers (Johnston, O'Malley, & Bachman, 2001; Lanza & Collins, 2006). In a review of HED in the American college population, Monauti & Bulmer (2014) observed 58% of male identified and 42% of female identified participants reported engaging in HED in the last two weeks alone. Similarly, the National Survey on Drug Use and Health (SAMHSA, 2018) observed that out of the 55% of college students whom reported drinking in the last month, 1 in 3 had engaged in HED in same timeframe. While it was previously theorized that college HED is predominantly dominated by men (Naimi, Nelson, & Brewer, 2010), contemporary research on college drinking suggests that women's rates are converging with that of men's (Keyes, Grant & Hasin, 2008). Similarly, other previously considered "low-risk" groups, such as Asian American college students, are observed to engage in increasingly high levels of alcohol consumption (Iwamoto, Kaya, Grivel & Clinton, 2016), suggesting HED is a public health concern that transcends various demographics of college students.

In 2018, the National Institute on Drug Abuse observed a decrease in HED among college students (28% endorsing HED in the last thirty days, decreased from above 30%), suggesting potential effectiveness of contemporary prevention programs. However, many college students who do engage in HED do so significantly above the standardized measurement of binge drinking. For example, Kanny and colleagues (2018) observed that heavy episodic drinkers consume seven drinks in an average sitting; likewise, Naimi and colleagues (2010) found surveyed respondents who engage in HED consumed eight drinks at a time, on average. Perhaps more alarmingly, a national survey observed nearly 10% of college students engaged in HED

more than 5 times in the last month (NIAAA, 2018). Therefore, while it might be observed that college students may be beginning to binge drink at slightly reduced rates, those who continue to do so are consuming significantly large quantities.

Given the prevalence and severity of HED amongst college students, many experience a heavy burden of alcohol-related consequence. Perkins (2002) observed college students experience heightened rates of alcohol-related consequences, such as blackouts, personal injury, academic impairment, and legal repercussions, across gender identification. Additional research has observed the rates and frequency of such consequences. For example, approximately 25% of college students endorse academic consequences directly related to drinking behavior, such as poor performance on exams and assignments (Weschler et al., 1998). Moreover, heavy episodic college drinkers are 5 times as likely to miss class, and 6 times more likely to have poor academic performance as a result from drinking, than their lower risk counterparts (Thombs et al., 2009). Furthermore, approximately 20% of college students meet DSM V criteria for an Alcohol Use Disorder (AUD; Blanco et al., 2008), which suggests approximately 1 in 5 college students experience clinically significant alcohol-related consequences. Worse yet, nearly 2,000 college students die from alcohol-related injury per year (Hingson, Zha, & Weitzman, 2009). Finally, college students who engage in heavy episodic drinking are more likely to experience consequences relevant to sexual assault and nonconsensual sexual behaviors (Mouilso, Fischer, & Calhoun, 2012; Mellins et al., 2018; Buddie & Miller, 2001).

HED & Sexual Assault

Given the convergent risk of sexual assault with HED, rates on college campuses are exceptionally high. According to the Rape, Abuse, and Incest National Network (RAINN), 23.1% and 5.4% of college women and men (respectively) experience sexual assault through

physical force, violence and/or incapacitation during their time in college (Department of Justice, 2014). Moreover, alcohol consumption is involved in nearly all drug-related assaults on college students (96.1%; Lawyer et al., 2010). According to Hingston and colleagues (1998), nearly 100,000 college students endorse an alcohol-related sexual assault and/or date rape per year. Specifically, approximately 43% of victims of sexual assault have consumed alcohol at the time of assault, along with nearly 70% of perpetrators (Harrington & Leitenberg, 1994). Given these rates, HED heightens the association with increased risk of sexual assault and/or attempted sexual victimization (Testa & Livingston, 2009). Additionally, HED may have a bidirectional relationship with sexual assault. While it has been observed that heavy episodic drinkers are more likely to experience college sexual assault (Messman-Moore, Coates, Gaffey & Johnson, 2008), it has also been suggested that binge drinking is often a source of coping utilized by victims of sexual assault (Ullman, Filipas, Townsend & Starzynski, 2005). This may be especially alarming, given the heightened risk of revictimization associated with drinking to cope (Valenstein-Mah, Larimer, Zoellner & Kaysen, 2015), as well as long term risks of mental health concerns and suicidality (Behnken, Le, Temple, & Berenson, 2010).

Historically, binge drinking has been associated with victims of sexual assault. For example, a study on first-year female college students observed that heavy episodic drinkers were 33% more likely to be victims of sexual assault than their nondrinker, or lower risk counterparts (Mouilso, Fischer & Calhoun, 2012). Moreover, the same study observed that while HED drinking was strongly associated with sexual assault, "frequent" drinking that did not meet the threshold for HED, was not (Mouilso, Fischer & Calhoun, 2012). However, it has been theorized that perpetrator binge drinking may be related to more severe outcomes of sexual assault (completed rape, physical injury, etc.; Martin & Bachman, 1998; Ullman & Brecklin,

2000). In a review on sexual assault and alcohol consumption, Abbey and colleagues (2004) found that current literature highlights two consistent factors associated with perpetration of sexual assault: experiencing childhood trauma, and binge drinking. This suggests the relationship between sexual assault and HED pertains to both victim and perpetrators.

Theoretical Relationship Between HED & Sexual Assault

Studies have highlighted the link between engaging in HED and increased risk of sexual assault in college students (Parks, Hsieh, Bradizza & Romosz, 2008; Testa & Livingston, 2009). Higher rates of alcohol use have been associated with increased risk for incapacitated rape (Kaysen et al., 2006), namely when it interacts with other behavioral, social, and psychological factors of both victims and perpetrators (Ullman, 2003), such as decreasing contact with sober, capable guardians and increasing contact with motivated perpetrators (Meir & Miethe, 1993). For example, college sexual assaults have been observed more frequently in peer environments that encourage heavy drinking, and thus may be more permissive of norms related to sexual assault (Abbey, 2002). College environments with norms surrounding HED and sexual coercion, such as Greek life (Norris et al., 1996) tend to have fewer sober bystanders to intervene with sexual assault (Abbey, 2002), as it is not normalized in the given context.

Perhaps the most prominent theory explaining the link between HED and sexual assault pertains to the use of alcohol as a means of incapacitating victims, and perpetrators targeting potential victims whom are already impaired (Tyler, Hoyt, & Whitbeck, 1998; Ullman, O'Callaghan & Lorenz, 2019) For example, a study by Lawyer and colleagues observed that voluntary incapacitation proceeded 84.6% of drug-related sexual assaults amongst underage college women. Similarly, involuntary incapacitation proceeded 15.4% (Lawyer et al., 2010). This suggests perpetrators of sexual assault amongst college students may intentionally target

binge drinkers, as well as utilize alcohol and other substances to impair victims. Frequent, heavy consumption of alcohol may be associated with an impaired ability to engage in protective strategies against sexual assault, given the extent of cognitive and physical impairments that may be experienced (Stoner, Norris, George, Davis, Masters & Hessler, 2007).

Alcohol may affect both motor and cognitive skills, therefore altering a victims' ability to perceive risk of sexual assault, as well as to resist effectively. In a review by Abbey (2002), multiple studies observed that heavy alcohol use was associated with victims of sexual assault endorsing increased comfort in risky situations, that they may have perceived as risky when sober (i.e. accepting a ride home from a stranger, allowing an intoxicated stranger into their home). Moreover, Harrington and Leitenberg (1994) observed that victims who endorse being even "moderately intoxicated" are less likely to utilize physical resistance strategies against perpetrators than their sober counterparts. Given the well-documented effects of alcohol on cognition and physical ability, it is understandable why alcohol is considered to be the most commonly used substance to facilitate incapacitated sexual assault (Scott-Ham & Burton, 2005), rather than "drug spiking", as suggested by mainstream media (Hindmarch, ElSohly, Gambles & Salamone, 2001)

Additionally, while research on sexual offenders has suggested that it is unlikely for HED/binge drinking to promote sexually aggressive behavior in individuals whom do not already have a predisposition for aggression and/or violence (Abbey, 2011), some studies have observed a tendency for predators to become increasingly violent while under the influence of alcohol, when compared to instances of assault where only the victim had consumed alcohol (Cleveland, Testa & Hone, 2019). For example, in a study by Cleveland and colleagues (2019), the authors observed that college men who engaged in heavy episodic drinking were more likely

to participate in subsequent sexual aggression. However, the authors noted that this relationship may be contingent upon other risk factors, such as impersonal sexuality and aggression. Likewise, Abbey and colleagues (2001) report that perpetrators may utilize heavy alcohol consumption as a means of "justifying" or concealing intentions to perpetrate rape and assault. Findings such as these support the notion that college "hot spots" for HED (Cleveland, Testa & Hone, 2019) may be intentionally preyed upon environments by perpetrators, as well as supports that perpetrators may be more likely to engage in sexual violence while they themselves engage in binge drinking.

Rape Myths

Despite staggering rates, few college students report attacks of sexual assault to law enforcement, with only 20% of female college student survivors endorsing reporting (de Heer & Jones, 2017). Moreover, rationale for not reporting is unsettling; specifically, 10% cite not wanting to their perpetrator to get into trouble, 12% believing their assault was not important enough to report, and 26% stating they believed it was a "personal matter" (Department of Justice, 2014). Such rationale for choosing not to report suggests the existence of "rape myths", or, a "complex set of cultural beliefs thought to support and perpetuate" sexual violence (Payne, Lonsway & Fitzgerald, 1999).

The concept of "rape myths" was first reported in the social sciences research literature in the 1970's, by Brownmiller (1975) and Schwendinger & Schwendinger (1974). Specifically, these myths further perpetuate sexual violence by reframing blame onto victims and away from attackers. Such myths might include that rape occurs because of men's inherent and uncontrollable desire for sex (Schwendinger & Schwendinger, 1974), that false allegations about sexual assault are prominent (Brownmiller, 1975), that all rapists must be strangers, and all

victims must be beautiful (Brownmiller, 1975). Through acceptance of these myths, perpetrators may more stealthily attack, and victims may minimize any assault that does not fit a stereotypic, internalized, rape myth. Consequently, victims of sexual assault often classify their attacks as "bad sexual encounters" or hookups, and do not report or take action against their perpetrators. Ultimately, the perpetuation of rape myths such as this "bad date" myth and by proxy, reduction in reporting, may lead to increased attacks by unreported perpetrators.

The presence of rape myth acceptance, specifically the "bad date" myth, and consequential legal ramifications (and lack thereof) has been observed in contemporary research and current events. For example, in 2015, Stanford student Chanel Miller (formerly known as Emily Doe) was brutally assaulted while unconscious by fellow student Brock Turner (Stack, 2016). Though Turner was caught in the act by two fellow students, he was only sentenced to six months in jail (of which he served three) due to concern of a harsher sentence impacting an otherwise "bright future" (Stack, 2016). Current literature suggests that rape myth acceptance (specifically, "nice/smart guys can't rape") demonstrably carries judicial influence (Temkin, Gray, Barrett, 2018; Gray, 2006), such as in the Stanford Rape case. Specifically, Turner was smart and talented, and therefore his behavior was the product of college drinking culture, rather than motivation to sexually assault (Temkin, Gray, Barrett, 2018). Culturally endorsed beliefs such as these not only protected Brock Turner from a harsher criminal sentencing but suggested that Chanel Miller's assault was merely a sexual encounter gone wrong.

Similarly, many studies have suggested that individuals with high rape myth acceptance endorse beliefs that many legally defined sexual assault cases are, in fact, merely the product of "hookup culture" and "bad dates". For example, Rapaport & Burkhart (1984) observed that of their surveyed male sample, 1 in 3 reported utilizing coercion in order to gain sex but did not

identify their behavior as assault. Likewise, 15% of the sample reported forcing a woman to have sex at least once in their lifetime yet did not identify their behavior as rape (Rapaport & Burkhart, 1984). Additionally, Hayes, Lorenz & Bell (2013) observed that men held higher rape myth acceptance than women, specifically as it pertained to "ambiguous rape scenarios" or "date rape" and tended to view these situations as the result of alcohol and dating culture (2013). Moreover, this body of literature has observed that both perpetrators and survivors hold these beliefs. In a study by Schwartz & Leggett (1999), it was observed that women who were raped by acquaintances while intoxicated experienced similar degrees of emotional trauma as survivors of stranger rape. While this sample did not endorse greater intrapersonal blame for the assault, the majority of the sample did not classify their experience as rape, despite criminal law stating otherwise (Schwartz & Leggett, 1999). Rather, these individuals attributed their experiences to campus drinking culture and poor sexual education of their attackers, resulting in traumatizing hook-up encounters.

Rape Myth Acceptance & Alcohol

An observed predictor of rape myth acceptance within college students is drinking behaviors. For example, Hayes, Abbott & Cook (2016) observed that college students who engaged in HED were more likely to endorse rape myths than their more infrequent drinking counterparts. Similarly, Morrow (2010) observed significant differences between HED and other levels of alcohol consumption, with heavy episodic drinkers endorsing greater rape myth acceptance, even when controlling for other posed predictor factors, such as gender and Greek affiliation. Finally, in a study examining rape myth acceptance across 21 US Universities/Colleges, individuals who engaged in greater alcohol consumption were more likely to endorse rape myths than other groups (Navarro & Tewksbury, 2017).

Additionally, while heavy drinkers are more likely to endorse rape myth acceptance, they are also more likely to be on the receiving end of rape myths. For example, in a review by Grubb & Turner (2012), it was observed that intoxicated victims of sexual assault (as defined legally) were more likely to be blamed for their attacks than their non-intoxicated counterparts. The notion of survivors being blamed for acts of sexual assault, or "victim-blaming", is considered to be the product of rape myth acceptance, specifically the false belief that intoxicated victims put themselves in danger of assault by drinking in excess, or that intoxicated victims are unreliable narrators of their own traumas, potentially giving consent and not being able to recall doing so (Grubb & Turner, 2012).

This link between HED and rape myth acceptance might be explained by alcohol expectancies, or, expectations about the effect alcohol consumption will have on an individual's behavior and experience (Goldman, Del Boca & Darkes, 1999). Alcohol expectancies research has demonstrated that increased aggression and sexuality are commonly expected outcomes of HED (Fromme, Stroot & Kaplan, 1993). Considering these previously documented alcohol expectancies, Starfelt and colleagues (2015) determined the existence of alcohol expectancies directly related to sexual perpetration and victimization. Such expectancies include, "drinking alcohol makes me/men/women more likely to be forceful to get sex", "drinking alcohol makes men/me/women more likely to have sex against their/my will". Moreover, the authors observed that those who endorsed sexual coercion alcohol expectancies also endorsed greater rape myth acceptance, specifically decreased perpetrator blame and increased victim blame (Starfelt et al., 2015).

Similarly, alcohol expectancies have been observed to have a moderating effect on risky sexual behaviors in previous literature. For example, Patrick & Maggs (2009) observed that

positive alcohol-sex expectancies ("drinking alcohol makes people more sexual) moderated the relationship between heavy alcohol use and sexual behaviors, including intoxicated sex and decreased condom use. Likewise, Dermen and Cooper (2000) observed that alcohol expectancy served as a moderating variable between drinking and condom use, independent of alcohol consumption (higher alcohol expectancy and decreased condom use). This suggests that beyond cognitive impairment elicited from heavy drinking, there may be underlying factors (expectations) that facilitate sexual risk taking. Moreover, in addition to the health risks associated with improper condom use, this suggests that "stealthing", a non-violent form of sexual assault pertaining to removal of a condom without a partner's consent, may be further moderated by alcohol expectancies. Thus, it may be theorized that alcohol expectancies may also moderate beliefs around intoxicated sexual behaviors and nonconsensual sexual acts.

This expectation that alcohol will increase sexual aggression and coerciveness may contribute to the acceptance of rape myths, particularly the devaluing of legally defined assault (e.g., "it was just a bad, drunken, hook-up"). Burnett and colleagues (2009) define the high acceptance of rape myths in collegiate settings as "rape culture", or, an environment where sexual assault and date rape are considered to be an inevitable part of campus life, in part due to climate of HED, and thus tolerated and/or accepted. Since there are significantly higher rates of HED on college campuses, this means there may be greater endorsement of alcohol expectancies among students, specifically of sexual coercion and aggression expectancies, thus, greater rape myth acceptance.

Rape Myths & Sexual Scripts

Previous literature has observed a relationship between rape myth internalization and formation of dating expectation. Ryan (2011) observed that rape myths are deeply interwoven

with sexual dating scripts, which may contribute to protection of perpetrators. Likewise, findings by Clark & Carroll (2008) highlight gender differences in what constitutes rape rather than a less desirable sexual experience, which is represented in their interpretation of rape versus "hook-up" scripts. Finally, in a study by O'Donohue, Yeater and Fanetti (2003), rape myth acceptance was linked closely with positive expectancies for a coercive sexual experience (coercion would lead to the desirable sexual outcome). These findings suggest that part of the mechanism behind the acceptance of rape myths is the internalization of nonconsensual behaviors as healthy sexual behavior. Moreover, the intersection of nonconsensual sexual scripts and alcohol expectancies may enable perpetration of sexual assault, specifically, since it is not recognized as such by both victims and perpetrators, despite significant mental health consequence.

Instances of rape myth internalization into dating scripts have been observed heavily in college populations (Martinez, Wiersma-Mosley, Jozkowski & Becnel, 2018; McMahon, 2010). Moreover, studies have indicated that rape myth acceptance into sexual scripts has served as a significant deterrent in reacting aggressively towards perpetrators (Canan, Jozkowski & Crawford, 2018), recognizing nonconsensual behaviors as assault (Littleton, Axsom, & Yoder, 2006), and belief that coercion and manipulation are a part of the sexual script for "seduction" (Littleton & Axsom, 2003). When compounded with rape myths as a component of alcohol expectancies, as well as a culture of HED, college students may be at a significantly heightened risk of experiencing sexual assault and suffering from assault-related trauma, yet are unable to articulate the event as assault, or the reasons for deleterious mental health outcomes. Thus, it is imperative to more fully understand the formation of sexual scripts. Given the role of expectation in the embedding of rape myths into alcohol-related beliefs, it may be theoretically inferred that sexual expectation plays a similar role in the development of potentially harmful sexual scripts.

Sexual Expectations

Current literature on college "hook-up culture" emphasizes the importance of media, university politics, and self-objectification in the development of norms set for sexual scripts (Heldman & Wade, 2010). Moreover, these scripts have been well documented as a factor in perpetuation and development of rape culture (Clark & Carrol, 2008; O'Donohue, Yeater & Fanetti, 2003). However, current literature has been limited in exploration of cognitive principles, such as expectations and motivation, in the role of sexual behavioral norm development.

Previous research has defined expectations as a cognitive mixture of "shoulds and wills"; specifically, what ideally should happen, and what realistically will happen, in a certain situation (Boulding, Kalra, Staelin, & Zeithaml, 1993; Johnson & Mathews, 1997). Based on this conceptualization of general expectations, sexual expectations may be defined as what an individual believes they should, and will, experience, gain, and contribute to a sexual encounter. By nature of this definition, that would include what one believes is expected of them in order to perform adequately in a sexual scenario, as well as what is expected from a sexual partner. Moreover, as an expectation is defined as both a "should" and "will", it may be theorized that one will have expectations of what is likely in an average sexual encounter, as well as expectations regarding an ideal sexual encounter.

The Expectation-Confirmation Theory states that satisfaction is ultimately determined by the interaction between expectations and perception of delivery. Expectation, along with actual performance, would amalgamate into either confirmation or disconfirmation of the original expectation, resulting in either satisfaction or dissatisfaction (Jiang & Klein, 2009; Chen, Chien Hsu, Chau Tseng, & Chen Lee, 2010). If performance meets or exceeds expectations, this results

in satisfaction. However, in the event the performance falls short of expectations, there is greater likelihood for dissatisfaction (Spreng, MacKenzie & Olshavsky, 1996; Jiang & Klein, 2009). This theory has been well documented by research across a variety of performance and product settings (Jiang & Klein, 2009; Bhattacherjee, 2001; George & Robinson, 2010; Hossain & Quaddus, 2011; Pereira et al., 2011). Considering this research, it might be theorized that individuals whom utilize sexual scripts that are comprised of rape myths are more likely to experience decreased sexual expectation; thus enabling themselves to continue engaging in sexual behavior that may otherwise be dissatisfying (e.g. experience an instance of sexual trauma, but rather than cognitively declare it as such, evaluate the experience as an unsatisfying sexual encounter/a "bad date").

Given the body of literature on expectations and sexual scripts, it is apparent that exploration of sexual expectations may be important in the perpetuation of rape myths, and subsequent instances of sexual assault. However, current literature on sexual expectations is sparse. McNulty and Fisher (2008) conducted a longitudinal study examining newlywed couples' sexual expectations and sexual satisfaction through diary entries over 6 months. The authors observed that changes in sexual expectations over time were positively associated with changes in overall satisfaction (McNulty & Fisher, 2008). However, to date, there is no quantitative measure examining expectations for both average and ideal sexual encounters. Moreover, few, if any, studies on sexual expectation sample from a population that is not currently in a legal or long-term partnership, meaning there is little research on sexual expectations formed by college-aged individuals. This gap in literature is alarming, given the role of sexual expectation in formation of dating and sexual scripts that are observed in any types of romantic and sexual

partnerships. Moreover, there is little research on how sexual expectation changes in the context of HED among college students.

Sexpectations

As a response to sparse literature on sexual expectations, or what is anticipated from a *consensual* sexual encounter (McNulty & Fisher, 2008; Mark & Jozkowski, 2013; Snyder & Berg, 1983) the first author of this manuscript developed a quantitative measure examining expectations for a sexual encounter. The proposed measure, "Sexpectations", was developed through thorough analysis of literature on Expectation-Confirmation Theory, namely that sexual scripts and expectations will be derived from cognitive "should" and "wills" about sexual behavior (Boulding, Kalra, Staelin, & Zeithaml, 1993; Chen, Chien Hsu, Chau Tseng, & Chen Lee, 2010; Jiang & Klein, 2009; Johnson & Mathews, 1997). A group of five graduate students, one undergraduate, and a licensed Psychologist developed items for this measure based on self-report of common dating scripts individuals were exposed to as students in a University setting. Therefore, Sexpectations examines both what "should" happen (ideally—Perfect Partner) as well as what "will" happen (typically—Average Partner) in student reported dating/sexual scripts. Moreover, these Sexpectations are explored both person-centered (what I believe is expected of me—Sexpectations of the Self) and partnered-centered (what I expect will/ideally want to happen—Average and Perfect Partners).

An exploratory factor analysis (EFA) was conducted on data derived from a sample of 417 college students at a Predominately White University (PWI) in the South. This EFA produced a single factor structure for each of the three dimensions of Sexpectations: 1) What should happen-- an ideal encounter with a Perfect Partner 2) What will happen—an average or typical encounter with an Average Partner and 3) What is expected of the individual, or

Sexpectations of the Self. In order to verify the factor structure of Sexpectations, a confirmatory factor analysis (CFA) was utilized. Moreover, the CFA tested the hypothesized relationship between Sexpectations and theoretically-like constructs, including rape myth acceptance. The CFA supported the single factor structure suggested by the EFA.

Present Study

As detailed in this document, there is an observed relationship between HED and sexual assault, including both victims and perpetrators. Consequently, environments and cultures where binge drinking is normalized tend to also have high rates of sexual assault. Likewise, it is theorized that as a result of this link, sexual assault (especially occurring in "hook-up" and partying culture), may be similarly normalized. This normalization is theorized to be connected to cognitive concepts such as rape myth acceptance (RMA), alcohol expectancies relevant to sexual behavior and coercion (sexual coercion related alcohol expectancies [SCAE]), and internalization of these into sexual expectations and dating scripts (Sexpectations). Specifically, given the detailed relationship between sexual scripts and rape myth acceptance, it is theorized that expectation of nonconsensual sexual behaviors is an imperative component of integration of rape myths into sexual scripts. Considering the role of SCAE in acceptance of rape myths, it is theorized that sexual expectations, or "Sexpectations", will differ depending on frequency of binge drinking. Considering literature on alcohol expectancies related to sexual aggression and coercion, it is hypothesized that more frequent heavy episodic drinkers will have lower expectations of their consensual sexual behaviors.

The present study is designed to explore inter-relationships between heavy episodic drinking (HED) and the sex-related variables: Sexpectations, rape myth acceptance (RMA), and sexual coercion related alcohol expectancies (SCAE) amongst heavy episodic college-student

drinkers. The authors aim to examine unique relationships between HED and RMA, SCAE, and Sexpectations, while accounting for previously linked variables to HED and sexual risk behaviors (e.g. gender and Greek affiliation). Additionally, the authors aim to examine how SCAE may moderate the relationship between HED and Sexpectations. Specifically, the present study hypothesizes:

1. HED will be positively correlated with RMA and SCAE, and HED will be negatively correlated with Sexpectations. In addition, RMA and SCAE will be positively correlated with one another, and both will be negatively correlated with Sexpectations.

2. HED (controlling for Greek affiliation and gender) will account for unique variance in Sexpectations., RMA and SCAE.

3. SCAE will moderate the relationship between HED and Sexpectations such that:

- Heavy episodic drinkers with high endorsement of sexual-coercion alcohol expectancies (SCAE) will have lower endorsement of Sexpectations.

- Heavy episodic drinkers with low endorsement of sexual-coercion alcohol expectancies (SCAE), will have higher endorsement of Sexpectations.

Chapter 3

Methods

Design

The current study is cross sectional and correlational in design. Analyses were completed based on self-reported data, in a college student sample. The study itself used a web-based survey that was completed at the participants' convenience.

Participants

To determine sample size, a priori power analysis was conducted for Hypothesis 3 (regression with interaction term) since required the greatest number of participants. Tests were run utilizing G*Power analysis (Faul, Erdfelder, Lang, & Buchner, 2007), using a small effect size (.02), power of .80, and an alpha of .05. Total number of predictors was set at 5, and number of tested predictors was set at 3. Current literature has suggested that research observing continuous variables are often underpowered (McClelland & Judd, 1993), informing the decision to use a small effect size. Based on this analysis, a sample size of approximately 550 participants was needed.

The current study was reviewed and approved by the Institutional Review Board at Auburn University, and thus was deemed appropriate to include human subjects. The study was made available to students through the Department of Psychology's SONA system; student's received extra credit for select courses in exchange for participation. The first page of the online survey contained an informed consent form, introducing the study and detailing the means of voluntary participation. Students indicated their consent through the online form before gaining access to the remainder of the survey. Eligible participants were enrolled in the university and over the age of 18. Relationship status, gender identification, and sexual history were screened

for, but ability to participate was not affected. Participants received extra credit for their voluntary participation. Though obtained through convenience, college students were preferred for the current study given the high exposure to drinking culture and potential subsequent internalization of rape myths. Moreover, college students are more likely to be in a phase of the lifespan where exploration and internalization of sexual and dating norms is salient.

Measures

Demographic Questionnaire-- A demographics questionnaire was utilized to obtain relevant background information, including gender identity, sexual orientation, religious affiliation, racial/ethnic backgrounnd year in school, and age. The demographic section also includes a measure of sexual activity history. This set of questions was developed by the present research team for use in sexual behavior research; the psychometrics of the measure have neither been explored, nor has it been published. This was included to obtain relevant information as it relates to explicit history of sexual behaviors in the last month (four weeks) as well as in the lifespan. Additionally, an item regarding history of sexual trauma was included, given the previously documented relationship between prior victimization and rape myth acceptance (Carmody & Washington, 2001). The data on sexual history and behavior was used primarily to describe the sample.

Sexpectations Measure-- The Sexpectations scale (Clinton et al., in preparation) follows the model of expectations set by previous literature, namely that sexual scripts and expectations are derived from cognitive "shoulds" and "wills" about sex (Boulding, Kalra, Staelin, & Zeithaml, 1993; Chen, Chien Hsu, Chau Tseng, & Chen Lee, 2010; Jiang & Klein, 2009; Johnson & Mathews, 1997), and gauges what an individual anticipates from a consensual sexual encounter, both ideally ("In a perfect sexual encounter…" referred to as "Perfect Partner") and typically

("In an average sexual encounter…" referred to as "Average Partner"), as well as what one believes is expected of them ("To be a perfect sexual partner, I must..." referred to as "Sexpectations of the Self"). Twenty-five items are responded to with a 5-point Likert scale, with answer choices ranging from strongly disagree (1) to strongly agree (5). Higher scores are indicative of higher sexual expectations. To assist with content and face validity, items were developed by a licensed psychologist, five graduate students, and one undergraduate researcher.

In a sample of 417 college students, a series of EFAs with maximum rotation, where factors were allowed to correlate, were run, starting with eigenvalues > 1.0 as the rule for extracting factors (Clinton et al., in preparation). This ultimately yielded a single factor solution, which was supported by Scree plot. Minimum factor loading was .30, however, all retained factors loaded between .450-.750, indicating good to excellent loadings (Matsunaga, 2010). Additionally, a minimum of .20 was observed to differentiate loadings in order to retain an item on a factor. Based on the EFA, two items (per dimension) were removed due to low factor loadings for the CFA. The three dimensions of Sexpectations were strongly correlated with one another.

In the present sample, the Sexpectations scale demonstrated high internal consistency (α = .950), as well as strong internal consistency in each of the three subscales: Perfect Partner = .874; Average Partner = .862; Sexpectations of the Self = .888.

Modified Rape Myth Acceptance Scale—The original RMA (Burt, 1980) has been utilized to assess attitudes and beliefs regarding rape. The modified version of the scale (Hammond, Berry, & Rodriguez, 2011) contains 10 items with responses measured on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree), with higher scores representative of greater rape myth acceptance. Example items include "Any healthy woman can successfully resist a rapist if she

really wants to" and "When women go around braless, wearing short skirts, and tight tops, they are just asking for trouble" (Hammond, Berry & Rodriguez, 2011). The original RMA had high internal consistency (α = .875) for its 19 items (Burt, 1980). Similarly, the modified RMA scale has demonstrated moderate internal consistency (α = .764; Hammond, Berry, & Rodriguez, 2011) when utilized with college students, the intended population of study. The modified RMA scale was utilized to gauge participant endorsement (acceptance) of rape myths as factual. The modified RMA in the present sample demonstrated high internal consistency (α = .833).

The Daily Drinking Questionnaire (DDQ)—The DDQ (Collins, Parks, & Marlatt, 1985) is used to gather information on participant drinking, specifically pertaining to average quantity and frequency of alcohol consumed in a typical week, in the last 30 days. To complete the DDQ, participants will report the average number of alcoholic drinks they consume on that day, during a typical week. Additionally, to help participants more accurately estimate their typical alcohol consumption, they will be shown a standard drink conversion table that includes a definition of a standard drink. The DDQ has adequate reliability, with internal consistency ranging from .66 to .75 (Baer et al., 1992). The DDQ was administered to provide data on participant drinking and to support validity of the heavy episodic drinking (HED) item.

Heavy Episodic Drinking (HED)—Participants were asked to respond to the count variable, "during the last three months, how many times did you have four or more drinks in a two-hour sitting" (if female identified participant) or "during the last three months, how many times did you have five or more drinks in a two-hour sitting" (if male identified participant). This measure is consistent with the NIAAA (2007) definition of HED or binge drinking.

Drinking Expectancy Sexual Vulnerabilities Questionnaire *(DESV-Q)*—Like the Sexpectations measure, the DESV-Q (Starfelt et al., 2014) examines both the self and partnered expectations

for sexual behavior, specifically pertaining to alcohol use. The DESV-Q contains five subscales: Sexual Coercion (3 items), Sexual Vulnerability (3 items), Confidence (4 items), Self-Centeredness (3 items), and Negative Cognitive and Behavioral Changes (9 items). Participants respond to items by rating agreement with statements about alcohol's effects on theirs and others sexual behavior, coercion, and vulnerability, on a 5-point Likert scale. The DESV-Q has been established as discriminant from general measures of alcohol expectancies and has adequate internal consistency and reliability in a sample of college students and young adults (α = .77-.85). Moreover, the internal consistency in the present sample is high, α = .931. For the purpose of hypotheses testing, analyses focus on the sexual coercion and sexual vulnerability subscales. In the present sample, each of the subscales demonstrate strong internal consistency (SCAE—Vulnerability = .886; SCAE—Coercion = .845)

Procedure

The present study utilized an online, survey format. Participants were recruited through the web-based system, SONA, specifically housed by the Department of Psychological Sciences. Students selected the present study from a list of options on the SONA system website, and upon selection, were automatically directed to the survey via Qualtrics, a web-based survey software. Before beginning the survey, participants viewed an information letter for the study, which screens for participant eligibility and provides informed consent. Eligible participants were 18 or older and currently enrolled students (as verified by having an active student log-in). Participants then completed the demographic questionnaire, Sexpectations measure, RMA, DDQ, DESV-Q, and HED items. To avoid order effects, the measures were randomized within the survey (withstanding the demographic questionnaire).

Data Analysis

To test Hypothesis 1 (HED is positively correlated with RMA, Alcohol Expectancies/SCAE, HED is negatively correlated with Sexpectations, RMA and SCAE are positively correlated with one another, and negatively correlated with Sexpectations), bivariate correlation analysis was utilized. To Test Hypothesis 2 (HED will account for unique variance in the three Sexpectations scales, RMA, and the two SCAE scales), regression was utilized, resulting in six regressions in total. Finally, to test the moderation of SCAE on HED and Sexpectations, hierarchical regression was conducted. A set of hierarchical regression was tested for each dimension of SCAE (Sexual Coercion, Sexual Vulnerability), resulting in six regressions in total. For each regression, gender identity was the first step, the second step was HED, third step was SCAE, and the fourth step was the interaction term that combines HED with SCAE (coercion or vulnerability). Prior to analysis, predictor variables were mean-centered.

Data Cleaning

A total of 972 participants completed the current study. Participants were deemed eligible for the study through use of an active SONA account, demonstrating university enrollment. Of the original sample of 1012, 40 participants were excluded from the final dataset, resulting in 972 usable cases. Participants were removed if they did not complete more than the demographic information questions (32 participants), as well as if they did not complete the survey in its entirety prior to the end of data collection (8 participants). The data from participants who failed embedded attention checks were automatically removed from consideration by the Qualtrics platform; however, these participants were able to attempt to complete the survey again if they chose to. Thus, all 972 responses used for analyses completed the survey in its entirety.

Standard data cleaning was performed on the 972 usable responses. All necessary reverse coding was completed prior to creating scale variables. For categorical variables utilized in

analysis (i.e., gender), a dummy coded variable was created for inclusion in regression. While

variables were ultimately mean centered to allow for more meaningful interpretation in

hierarchical regression, all means and standard deviations recorded are of non-centered variables.

The mean of reported drinks per week was 6.8 (SD = 9.8). Any participant who reported

consuming more than 36.2 drinks per week, or beyond three standard deviations from the mean,

were recoded to 36.2 drinks (n = 13). This is consistent with recoding procedures outlined by

Tabachnick & Fidell (2019).

Chapter 4

Results

The average age of participants was 19.33 (SD = 1.65; 78 participants identified as over 21 years of age) and 78.4% of the participants identified as female (n = 762; 199 identified as male, 10 chose not to identify gender). Regarding year in school, 51.7% were Freshmen (503), 18.5% were Sophomores (180), 16.1% were Juniors (156), 12.8% were Seniors (12.8) and 0.8% were Grad students (8). The majority of participants were White/Western European (82.5%, n = 802; 3.6% Black/African American, 2.7& Asian American, 2.2% Hispanic/Latinx American, 0.7% Pacific Islander, 0.2% Native American, 1% Multiracial, 1.7% International Student/Other, 1.4% Prefer not to identify) and 86.8% identified as heterosexual (n = 844; 128 identified as LGBTQ+). Most participants identified with as religious (79%), with 77.7% identifying with a subsect of Christianity (in addition: 7.8% Agnostic, 2.6% Atheist, 0.5% Jewish, 0.1% Mormon, 0.3% Muslim, 8.4% no religious affiliation, 2.2% Other). Regarding history of sexual behavior, 44.2% (n = 430) identified as currently sexually active, 29.2% identified as having a history of sexual activity, though not sexually active in the last four weeks (n = 284), and 26.5% reported they had never engaged in any partnered sexual activity (n = 258). When asked about history of sexual trauma, 67.2% of participants reported no history of sexual trauma, while 26% endorsed history of sexual trauma and 6.8% reported being unsure. The Rape, Abuse, and Incest National Network (RAINN) estimates that 28.5% of college students experience sexual assault, supporting the present findings.

Descriptive Statistics

As reported in Table 1, there were no observed gender differences pertaining to HED. This is also supported by current literature, which demonstrates that college women's drinking

rates are converging with that of men's (Keyes, Grant, & Hasin, 2008). Additionally, means, standard deviations, and counts were calculated for the variables of interest in the present study (Table 2). The mean for the count variable, HED, is 4.76, meaning participants engaged in heavy episodic drinking approximately five times every three months, on average.

The mean score on the SCAE-- Coercion subscale was higher than the reported average in other collegiate samples ($M = 2.13$, $SD = 0.85$), suggesting this sample endorses expectations regarding their own coercive behaviors at higher rates than other college students. Likewise, the SCAE-- Vulnerability mean fell above previously recorded collegiate samples ($M = 2.39$, $SD = 0.97$), significantly above the midpoint. This suggests that this particular sample of college students endorses high expectations of alcohol making them vulnerable to sexual assault. This may be related to other sample characteristics, specifically gender, and is further explored in the discussion section.

Mean scores on each of the subscales of Sexpectations were significantly higher than the scales midpoint. Of the three subscales, Sexpectations of the Self yielded the highest mean, indicating the sample carries relatively high beliefs regarding what is expected of them by their sexual partners.

Table 1

Female and Male Participant Differences on Study Variables

	Gender					
	Female			Male		
Variable	*M*	*SD*	*n*	*M*	*SD*	*N*
HED	4.74	7.10	753	4.98	7.33	190
Rape Myths	12.36	3.90	759	15.38	5.16	199
Alcohol Expectancies (SCAE)	11.46	4.73	755	11.02	4.37	199

SCAE Coercion	4.64	2.28	757	4.95	2.37	200
SCAE Vulnerability	6.82	3.35	759	6.07	2.74	199
Sexpect. Perfect Partner	87.90	13.47	718	88.08	11.67	190
Sexpect. Average Partner	84.70	13.47	709	85.43	11.72	184
Sexpect. Self	96.57	14.62	706	99.43	12.20	188

Note: Observed mean differences between female and male participants were not statistically significant.

Table 2

Descriptive Statistics of Variables

Variable	*M*	*SD*	*n*
HED	4.76	7.12	953
Rape Myths	12.96	4.35	968
SCAE	11.37	4.65	964
SCAE Coercion	4.69	2.30	967
SCAE Vulnerability	6.68	3.24	968
Sexpect. Perfect Partner	88.01	13.07	918
Sexpect. Average Partner	84.84	12.98	903
Sexpect. Self	97.17	14.16	902

Note. Higher scores indicate stronger endorsement

Hypothesis 1

To test Hypothesis 1 (HED is positively correlated with RMA, SCAE; HED is negatively correlated with Sexpectations; RMA and SCAE are positively correlated with one another), bivariate correlation analysis was utilized. Contrary to our hypothesis, HED was not correlated with RMA or alcohol expectancies/SCAE. Additionally, while HED was correlated with all three subscales of Sexpectations, a positive, rather than negative, correlational relationship emerged. As predicted, RMA was positively correlated with SCAE—Coercion. However, a similar relationship did not emerge between RMA and SCAE—Vulnerability. Additionally, while negative correlations between RMA and Sexpectations scales did emerge as predicted, only the relationship between RMA and Sexpectations of the Self was statistically significant. No relationship between SCAE—Coercion and Sexpectations was observed, contrary to Hypothesis 1. However, a positive relationship was observed between all three Sexpectations subscales and SCAE—Vulnerability. Correlations among all study variables are reported in Table 3.

Table 3

Correlations Among Study Variables

Variable	1	2	3	4	5	6	7
1. HED	---						
2. Rape Myths	.030						
3. Alcohol Expectancies	.013	.178**	---				
4. SCAE—Coercion	.000	.328**	.768**	---			
5. SCAE—Vulnerability	.021	.021	.890**	.392**	---		
6. Sexpect. Perfect	.126**	-.045	.079*	.004	.112**	---	
7. Sexpect. Average	.129**	-.009	.057	.018	.070*	.816**	---
8. Sexpect. Self	.152**	-.091**	.038	-.058	.099**	.779**	.725**

** Correlation is significant at the 0.01 level (2-tailed)
*Correlation is significant at the .05 level (2-tailed)

Hypothesis 2

To test Hypothesis 2 (HED will account for unique variance, after accounting for gender, in the three Sexpectations scales, RMA, and the two SCAE scales), hierarchical regression was utilized, resulting in six regressions in total. As predicted, HED accounted for unique variance in each of the three dimensions of Sexpectations ($p < .001$ for each subscale). In addition to HED, gender also accounted for unique variance in the model for Sexpectations of the Self, but gender did not contribute to the models for Sexpectations of Average or Perfect partner. Contrary to predictions, HED did not account for unique variance, when controlling for gender, in RMA or either of the SCAE subscales (see Table 4). Additionally, due to clerical error, Greek affiliation was not screened for, and thus was not controlled for in the regression analyses. This may contribute to current findings (observed in Table 4) and is further addressed in the discussion section.

Tables 4

4.1 Variance of HED in Rape Myth Acceptance

Step 1	B	t	p	R²	ΔR²
Gender	0.212	6.667	< 0.001	0.045	0.045**
Step 2					
Gender	0.212	6.679	< 0.001	0.046	0.001
HED	0.033	1.036	0.301		

4.2 Variance of HED in SCAE—Sexual Coercion

Step 1	B	t	p	R²	ΔR²
Gender	0.029	0.885	0.377	0.001	0.001
Step 2					
Gender	0.029	0.884	0.377	0.001	0.000
HED	0.000	0.015	0.988		

4.3 Variance of HED in SCAE—Sexual Vulnerability

Step 1	B	t	p	R²	ΔR²
Gender	-0.066	-2.050	0.041	0.004	0.004*
Step 2					
Gender	-0.066	-2.042	0.041	0.005	0.000
HED	0.021	0.633	0.527		

4.4 Variance of HED in Sexpectations—Perfect Partner

Step 1	B	t	p	R²	ΔR²
Gender	0.018	0.530	0.596	0.000	0.000
Step 2					
Gender	0.020	0.592	0.554	0.016	0.016**
HED	0.127	3.826	< 0.001		

4.5 Variance of HED in Sexpectations—Average Partner

Step 1	B	t	p	R²	ΔR²
Gender	0.019	0.572	0.568	0.000	0.000
Step 2					
Gender	0.023	0.696	0.487	0.017	0.017**
HED	0.129	3.876	< 0.001		

4.6 Variance of HED in Sexpectations—Sexpectations of Self

Step 1	B	t	p	R²	ΔR²
Gender	0.071	2.114	0.035	0.005	0.005*
Step 2					
Gender	0.074	2.230	0.026	0.029	0.024**
HED	0.153	4.625	< 0.001		

Hypothesis 3

To test Hypothesis 3 (SCAE will moderate the relationship between HED and Sexpectations after accounting for gender such that a) heavy episodic drinkers with high endorsement of SCAE will have lower endorsement of Sexpectations, and b) heavy episodic drinkers with low SCAE endorsement will have higher Sexpectations endorsement), hierarchical regression analyses were conducted. A set of hierarchical regression were tested for each dimension of SCAE (Sexual Coercion and Sexual Vulnerability), resulting in six regressions total. Prior to analysis, predictor values were mean-centered, and interaction terms were created by multiplying the mean-centered value of heavy episodic drinking (HED) with mean-centered values of Sexual Coercion and Sexual Vulnerability.

Step 1

The first step of each regression included gender as a predictor variable, but due to procedural error, did not include Greek affiliation (further discussed in chapter five). Contrary to predictions, gender was not observed as a predictor of Sexpectations subscales for Average Partner and Perfect Partner (in models including both dimensions of SCAE) regressions. Gender emerged as a predictor only in the model for Sexpectations—Expectations of the Self, when examining the role of both SCAE—Coercion and SCAE—Vulnerability ($p < .05$, see Tables 5).

Step 2

Step two included heavy episodic drinking. For all six models, the inclusion of HED led to a significant increase in variance ($p < .001$) and HED was the only variable that contributed significantly to the model ($p < .05$ in all six regressions, see Tables 5).

Step 3

Step three of the model examined the contribution of SCAE dimensions SCAE--

Coercion and SCAE-- Vulnerability. The addition of SCAE-- Vulnerability led to a significant

increase in the amount of variable accounted for in all three dimensions of Sexpectations, above

and beyond gender and HED ($p < .05$ for each model). In addition, both HED and SCAE--

Vulnerability made significant contributions to the models for Perfect and Average partner,

while all three included variables (gender, HED, SCAE-- Vulnerability) made significant

contributions to the model for Sexpectations of the Self. However, contrary to our hypotheses,

sexual coercion did not account for significant variance in the model for any of the three

subscales of Sexpectations (see Tables 5).

Step 4

Contrary to Hypothesis 3, the interaction term between HED and SCAE were not

significant predictors of any of the three dimensions of Sexpectations. Thus, no moderation

effect was observed of HED with SCAE (neither Coercion nor Vulnerability) on any of the three

subscales of Sexpectations.

Tables 5

*5.1 Moderation Effects of Sexual **Coercion** Expectancies on Sexpectations—Perfect Partner*

Step 1	B	t	p	R^2	ΔR^2
Gender	0.018	0.531	0.595	0.000	0.000
Step 2					
Gender	0.020	0.592	0.554	0.016	0.016**
HED	0.126	3.800	< 0.001		
Step 3					
Gender	0.019	0.580	0.562	0.016	0.000
HED	0.126	3.797	< 0.001		
SCAE Coercion	0.014	0.421	0.674		
Step 4					
Gender	0.021	0.621	.535	0.017	0.001
HED	0.199	2.414	0.016		
SCAE Coercion	0.031	0.832	0.406		
HEDXCoercion	-0.081	-0.965	0.335		

*5.2 Moderation Effects of Sexual **Vulnerability** Expectancies on Sexpectations—Perfect Partner*

Step 1	B	t	p	R^2	ΔR^2
Gender	0.019	0.572	0.567	0.000	0.000
Step 2					
Gender	0.021	0.630	0.529	0.016	0.016**
HED	0.126	3.810	< 0.001		
Step 3					
Gender	0.028	0.861	0.389	0.029	0.012**
HED	0.124	3.744	< 0.001		
SCAE Vulnerability	0.112	3.378	< 0.001		
Step 4					
Gender	0.027	0.826	0.409	0.031	0.002
HED	0.218	3.019	0.003		
SCAE Vulnerability	0.138	3.672	0.001		
HEDXVulnerability	0.110	-1.468	0.142		

*5.3 Moderation Effects of Sexual **Coercion** Expectancies on Sexpectations—Average Partner*

Step 1	B	t	p	R^2	ΔR^2
Gender	0.020	0.585	0.559	0.000	0.000
Step 2					
Gender	0.024	0.709	0.478	0.017	0.017**
HED	0.130	3.871	< 0.001		
Step 3					
Gender	0.023	0.701	0.483	0.018	0.001
HED	0.130	3.873	< 0.001		
SCAE Coercion	0.024	0.729	0.466		
Step 4					
Gender	0.024	0.711	0.478	0.018	0.000
HED	0.158	1.908	0.057		
SCAE Coercion	0.031	0.822	0.412		
HEDXCoercion	-0.032	-0.380	0.704		

*5.4 Moderation Effects of Sexual **Vulnerability** Expectancies on Sexpectations—Average Partner*

Step 1	B	t	p	R^2	ΔR^2
Gender	0.020	0.606	0.545	0.000	0.000
Step 2					
Gender	0.024	0.725	0.469	0.017	0.017*
HED	0.129	3.866	< 0.001		
Step 3					
Gender	0.029	0.854	0.394	0.022	0.005**
HED	0.128	3.837	< 0.001		
SCAE Vulnerability	0.068	2.025	0.043		
Step 4					
Gender	0.028	0.842	0.400	0.023	0.001
HED	0.193	2.649	0.008		
SCAE Vulnerability	0.086	2.258	0.024		
HEDXVulnerability	-0.076	-1.003	0.316		

*5.5 Moderation Effects of Sexual **Coercion** Expectancies on Sexpectations—Sexpectations of Self*

Step 1	B	t	p	R^2	ΔR^2
Gender	0.072	2.141	0.033	0.005	0.005*
Step 2					
Gender	0.075	2.257	0.024	0.028	0.023**
HED	0.152	4.582	< 0.001		
Step 3					
Gender	0.076	2.294	0.022	0.031	0.002
HED	0.152	4.572	< 0.001		
SCAE Coercion	-0.048	-1.434	0.152		
Step 4					
Gender	0.077	2.325	0.020	0.033	0.002
HED	0.255	3.106	0.002		
SCAE Coercion	-0.023	-0.606	0.545		
HEDXCoercion	-0.115	-1.371	0.171		

*5.6 Moderation Effects of Sexual **Vulnerability** Expectancies on Sexpectations—Sexpectations of Self*

Step 1	B	t	p	R^2	ΔR^2
Gender	0.072	2.152	0.032	0.005	0.005*
Step 2					
Gender	0.075	2.262	0.024	0.029	0.024**
HED	0.153	4.620	< 0.001		
Step 3					
Gender	0.082	2.480	0.013	0.039	0.011*
HED	0.151	4.572	< 0.001		
SCAE Vulnerability	0.103	3.112	0.002		
Step 4					
Gender	0.081	2.460	0.014	0.042	0.003
HED	0.257	3.535	0.001		
SCAE Vulnerability	0.132	3.517	0.001		
HEDXVulnerability	-0.123	-1.633	0.103		

Chapter 5

Discussion

The aims of the current study were to a) examine unique relationships between heavy episodic drinking, rape myth acceptance, sexual coercion alcohol expectancies (SCAE) and the primary author's newly developed measure, Sexpectations, and b) to evaluate how SCAE may moderate the relationship between HED and Sexpectations. The undergraduate population was a preferred sample for this study, given that concerns related to sexual trauma, heavy alcohol use, and sexual behavior are exceptionally common with college students. Moreover, these elements are well documented as contributing factors to other deleterious mental health outcomes in this population, such as trauma, anxiety, and depressive disorders. Findings from the present study aim to expand the body of literature on how study variables relate to one another, provide evidence for the validity of the Sexpectations scale, and to ultimately inform education and prevention efforts targeting collegiate attitudes and behaviors related to heavy drinking and sexual assault.

Hypothesis 1

Based on current literature on the relationship between HED and sexual assault (related to both victimization and perpetration), it was theorized that HED would be positively correlated with rape myth acceptance (RMA) and sexual coercion related alcohol expectancies (SCAE— Coercion and Vulnerability). However, no statistically significant correlational relationship emerged between HED and RMA. This result was surprising, as it differs from current literature on HED and RMA, which has demonstrated that college students who engage in HED may be more likely to endorse acceptance of rape myths (Hayes, Abbott & Cook, 2016; Morrow, 2010; Navarro & Tewksbury, 2017).

Given this result deviates from an established relationship, it is possible the current findings might be related to sample characteristics. For example, the current study utilizes a predominantly female sample in a singular university setting, which differs from related research. In contrast, Hayes, Abbott & Cook (2016) sampled across two college campuses and observed a more gender-balanced sample, with approximately 40% of participants identifying as male. Likewise, Navarro & Tewksbury (2017) examined rape myth acceptance among 727 students across 21 United States campuses. While, like the present sample, the average participant was a White, first-year college student, the authors observed approximately 15% more male college students, resulting in a potentially more balanced exploration of the role of gender in rape myth acceptance. Finally, while Morrow (2010) also utilized a single, collegiate setting, the author observed a sample comprised of 44% male identified participants, compared to the present sample of approximately 20% male and 80% female identified participants.

Given the more balanced samples in studies that have observed a relationship between HED and RMA, it may be prudent to further examine the role of gender. Contemporary literature has demonstrated that while college women's drinking rates are converging with those of men's (Keyes, Grant & Hasin, 2008), they are significantly more likely to reject rape myths (Martini, Tartaglia & De Piccoli, 2022). Moreover, Hayes and colleagues (2016) observed that across multiple college campuses, gender may be a stronger predictor of rape myth acceptance than drinking behaviors. Thus, even a sample of female heavy episodic drinkers may report comparably less rape myth endorsement than a sample of their male counterparts (Hayes, Abbott & Cook, 2016).

While these findings highlight the import role of gender in rape myth acceptance among high-risk drinkers, they do not provide insight regarding the lack of RMA gender differences in

the present study. Considering the current literature on rape myth acceptance, HED and the role of gender, it is possible our findings may be reflective of differences in functionality and interpretation of rape myths across genders. For instance, the Burt Rape Myth Acceptance Scale (1980, Appendix 3) emphasizes rape myths that align with the initial concepts reported by Brownmiller in 1975. As referenced in Chapter 1, myths outlined by Brownmiller (1975) and conceptualized by Burt (1980) specifically focus on victim blaming (e.g., "If a woman gets drunk at a party and has intercourse with a man there, she should be considered 'fair game' to other men who want to have sex with her") and false allegations ("One reason that women falsely report a rape is that they frequently have a need to call attention to themselves"). It may be theorized that current college men may identify more with alternative categories of rape myths articulated by contemporary literature.

As such, in Chapter 1, it was noted that men may hold higher rape myth acceptance than women, specifically pertaining to "ambiguous rape scenarios" and date rape vs. "bad date" myths (Hayes, Lorenz & Bell, 2013; Temkin, Gray, Barrett, 2018). While these constructs are certainly related to those outlined by Brownmiller (1975) and Burt (1980), they may be more directly elucidated by more current and nuanced measures of rape myth acceptance, such as the modified Illinois Rape Myth Acceptance Scale (modified IRMAS; McMahon & Farmer, 2011). The modified IRMAS (2011) assesses rape myth acceptance across several underlying factors, including "It Was Not Really Rape" and "He Didn't Mean To", examining both the "nice guys can't rape" phenomenon and the role of intoxication, ultimately paying closer attention to interpretation of "ambiguous" scenarios and "bad dates", as well as the role of HED. Perhaps because of this more nuanced approach to rape myth measurement, the IRMAS (2011) has been used in current studies that have observed a correlation between RMA and HED (Navarro &

Tewksbury, 2017; Morrow, 2010). Consequently, the present sample may have also exhibited this relationship upon exploration of alternative depictions and components of specific rape myths.

Similarly, no correlation was observed between HED and either dimension of SCAE. Given the observed positive correlation between RMA and SCAE—Coercion (and not SCAE—Vulnerability), this finding may be supported by the aforementioned differences in rape myth assessment and gender-related endorsement. For example, the Burt (1980) construct of rape myths puts greater emphasis on perpetrator hostility towards women (Lonsway & Fitzgerald, 1995; e.g., "A woman who is stuck-up and thinks she is too good to talk to guys deserves to be taught a lesson") than other measures of rape myths, such as the more contemporary modified IRMAS (2011). Thus, the Burt (1980) RMA scale may be theoretically more consistent with the DESV-Q SCAE (Starfelt, Young, White & Palk, 2015) Sexual Coercion items (e.g. "Drinking alcohol makes me more likely to be forceful to get sex") than the Sexual Vulnerability items (e.g., "Drinking alcohol makes it difficult for me to say no to sex in a clear and consistent way") which would support the observed findings on SCAE and RMA. Additionally, this would also lend support to the lack of correlation between HED and SCAE, as the DESV-Q measure of sexual coercion related alcohol expectancies more closely mirrors the Burt (1980) RMA scale than current measures of rape myths that may put greater emphasis on victim vulnerability through intoxication. It may be prudent for future research to observe if the correlation between SCAE—Coercion and rape myth acceptance can be duplicated with the modified IRMAS or other more nuanced measures.

Another possible contribution to the surprising, non-significant correlational findings might be the measurement, depiction, and categorization of heavy episodic drinkers. The present

study examined HED utilizing a continuous approach, specifically a count variable gauging self-reported cases of binge drinking within a three-month period. This differs from the categorical approach to HED utilized by the previously mentioned studies, which observed relationships between rape myth related variables and HED (Hayes, Abbott & Cook, 2016; Morrow, 2010). Likewise, previous studies that have observed a relationship between HED and alcohol expectancies have also utilized a categorical approach to binge drinkers during analysis (Derman & Cooper, 2000). This may shed light onto differences in correlational patterns; future analyses may benefit from recoding HED into categorical groups (i.e. "high risk", "low risk" etc.) for analyses.

It is worth optimistically noting that many heavy episodic drinkers in the present sample were likely to have been exposed to university-held sexual assault prevention programming, and thus may in fact, have lower levels of rape myth acceptance. According to the American Psychological Association, increasing numbers of colleges are implementing programming aimed at reducing sexual assault (Winerman, 2018). Programs such as these tend to be most commonly facilitated for high-risk groups for binge drinking, such as Greek organizations. These education efforts aimed at changed attitudes and beliefs around sexual assault, specifically directed towards binge drinkers, may lend support to a decreasing connection to HED.

In contrast, HED was correlated with each of the three subscales of Sexpectations, as predicted. However, contrary to Hypothesis 1, a positive, rather than negative, correlational relationship emerged. This suggests that heavier drinkers may also endorse greater expectations of their idealized sexual encounters, their typical sexual behaviors, and what they believe is expected of them in a sexual "hook-up". This was initially surprising, especially considering that

the other cognition-based variables, SCAE and RMA, were not correlated with HED. However, other variable relationships may provide insight into this inverse correlational relationship.

Based on current research regarding sexual scripts and rape culture (Clark & Carrol, 2008; O'Donohue, Yeater & Fanetti, 2003), it was theorized that individuals with internalized sexual scripts comprised of rape myths may be more likely to experience decreased sexual expectation. This theoretical relationship was observed in one correlational finding—RMA and Sexpectations of the Self. As predicted, RMA and Sexpectations of the Self were observed to be negatively correlated, suggesting that the more one experiences rape myth acceptance, the less they believe is expected of them in sexual encounters and/or vice versa. Given the pre-existing literature on heavy drinking and rape myth acceptance, it had been theorized that heavier drinkers would internalize more rape myths into their sexual scripts, and therefore experience lower Sexpectations. However, the present sample did not demonstrate the predicted relationship between RMA and HED, suggesting that the role of rape myths in sexual expectation of oneself may not be related to alcohol use in the way it was predicted to be. Rather, the relationship between RMA and Sexpectations of the Self may be better explained by the Expectation-Confirmation theory (Jiang & Klein, 2009; Chen, Chien Hsu, Chau Tseng, & Chen Lee, 2010) depicted in Chapter 1, which suggested that expectations are reduced to better prevent against dissatisfaction, rather than norms related to binge drinking.

While the complexities of HED and RMA may shed light on the absence of a negative correlation between HED and Sexpectations, it does not explain the positive correlational relationship. Rather, this finding may be reflective of previously observed relationships between heavy alcohol use and *positive* alcohol-sex expectancies. There is a well-documented positive relationship between favorable alcohol expectancies (e.g., "Alcohol will make things more fun")

and drinking behaviors (Brown, Goldman & Christiansen, 1985). In Chapter 1, it was noted this relationship may extend to positive expectations regarding the intersection of sexual behavior and drinking. Patrick & Maggs (2009) observed that positive expectations of the role of alcohol in sex ("drinking alcohol makes people more sexual") moderated the relationship between heavy drinking and risky sexual behaviors. This suggests that heavy drinkers may believe that alcohol may facilitate more successful sexual interactions, thus, more frequent binge drinking may be associated with a paralleled increase in expectations for sexual behavior, specifically while intoxicated. The present study examined *negative* alcohol-sex expected outcomes (SCAE); future research on the new Sexpectations scale may benefit from exploring relationships with *positive* alcohol expectancies. Moreover, it may be worth exploring the relationship between HED and sexual *behavior*. If heavier drinkers are endorsing more frequent intoxicated sex (as suggested by Patrick & Maggs, 2009), this may support the theory that Sexpectations mirrors positive alcohol-sex expectations for binge drinkers, as well as the present finding.

In addition to HED, all three dimensions of Sexpectations were positively correlated with SCAE—Vulnerability. This was also the inverse of what was predicted, as the finding suggests that higher endorsement of Sexpectations is connected to higher endorsement of perceived sexual vulnerability while intoxicated. This is especially interesting, given that neither SCAE subscale was correlated with HED, suggesting frequency of binge drinking does not explain the relationship between SCAE—Vulnerability and Sexpectations. Rather, considering the theorized mirroring of Sexpectations to other alcohol-sex expectancies, this may reflect that vulnerability while intoxicated may *become* a general Sexpectation. Regardless of frequency of HED, vulnerability to unwanted sexual activity while intoxicated may be an increasingly accepted expectation of both sexual behavior and alcohol use. This is outlined in Chapter 1; namely, that

sexual vulnerability and date rape are considered inevitable parts of campus life, in part due to HED, and thus is accepted, tolerated, and ultimately integrated into general sexual expectations (Burnett, Mattern, Herakova, Kahl, Tobola & Bornsen, 2009). Moreover, while prevention programs may be increasing awareness of use of alcohol in sexual assault (Winerman, 2018), this may contribute to integration of perceived vulnerability in sexual expectation. Consequently, endorsement of Sexpectations may include other anticipated norms for sexual behavior, including vulnerability while intoxicated. Future research may benefit from further exploring this internalization and the role sexual vulnerability plays among other (consensual) Sexpectations.

Hypothesis 2

As predicted, HED accounted for unique variance in each of the three dimensions of Sexpectations when controlling for gender. This is supported by the observed correlation examined in Hypothesis 1, as well as current literature on the relationship between binge drinking and "hook up culture" (Heldman & Wade, 2010), which may influence the development of sexual scripts. In contrast, HED did not account for unique variance, when controlling for gender in RMA or either SCAE subscale. This is supported by correlations observed in Hypothesis 1, as HED was neither correlated with RMA nor SCAE. As in Hypothesis 1, this absent relationship may suggest nuance in conceptualization of rape myths and sexually related alcohol expectations that the present study does not capture. Future research may benefit from utilizing measures that capture more contemporarily observed rape myths ("nice guys don't rape, the bad date myth, etc), as well as exploring alternative constructs that may theoretically explain greater variance, such as Greek affiliation and sexual trauma history.

Relatedly, as predicted, gender contributed to unique variance in Sexpectations of the Self, though did not for the remaining subscales, Average or Perfect Partner. The relationship

between gender and Sexpectations of the Self may be supported by current literature, which highlights a trend in college women to experience higher expectations of the self, to the point of perfectionism (Slaney, Rice, Ashby, 2002). Likewise, other gender-related variables, such as history of sexual trauma and consensual sexual behavior may also contribute to variance in the relationships between expectations of the self and gender. Future research may benefit from further exploring this relationship.

One possible rationale for gender as a non-significant predictor might be the exclusion of Greek affiliation, which may theoretically carry greater weight on anticipated partnered behaviors than gender alone. Members of Greek organizations may be exposed more heavily to perceived norms, and thus more heavily experience the "social norms theory" and "pluralistic ignorance". Specifically, students tend to assume that peers drink more and have more/more fulfilling sex. Given that groups such as Greek life organizations may be especially prone to these effects, it may be theoretically inferred that Greek affiliation may be a stronger predictor of a closely related construct (attitudes/beliefs about the "other", i.e. sexual partners), than gender alone.

Hypothesis 3

Contrary to our hypotheses, no moderation effect was observed between interaction terms of HED and SCAE with any of the three subscales of Sexpectations. In the context of observed relationships in Hypotheses 1 and 2, this suggests that more frequent heavy episodic drinkers tend to have higher endorsement of Sexpectations, regardless of their endorsement of SCAE. While this result aligns with correlational relationships (and lack thereof) discussed in Hypothesis 1, the missing moderation effect was initially surprising. It has been previously observed that HED is associated with both greater rape myth acceptance (Hayes, Abbott & Cook,

2016; Morrow, 2010; Navarro & Tewksbury, 2017) and greater sex-related alcohol expectancies (Fromme, Stroot & Kaplan, 1993; Patrick & Maggs, 2009). This suggested that sexually based alcohol expectancies, especially related to coercion (SCAE) would be connected to more frequent heavy episodic drinking. Moreover, given the observed role of rape myth acceptance in the development of sexual scripts (Martinez, Wiersma-Mosely, Jozkowski & Becnel, 2018; McMahon, 2010), it was theorized SCAE would moderate the relationship between HED and Sexpectations.

Despite literature supporting Hypothesis 3, there may be several factors contributing to the observed finding. The present study observed a positive correlation between HED and all three subscales Sexpectations (Hypothesis 1) and that HED accounts for unique variance in each Sexpectations subscale when accounting for gender (Hypothesis 2). This supports that a relationship between HED and Sexpectations does exist, as predicted, regardless of alcohol-expectancies related to sexual coercion and vulnerability. Additionally, it is theorized that Sexpectations may be closely related to positive sex-alcohol expectancies, especially among more frequent binge drinkers. Specifically, if participants endorse expectations that alcohol use will enhance their sexual behavior (Leigh, 1990), then heavier drinkers may also have greater expectations for their sexual behavior. Consequently, it is possible for a moderation effect to be observed with *positive* rather than *negative* sex-related alcohol expectancies.

Perhaps in support of this theory, SCAE—Vulnerability contributed to significant model fit for Perfect and Average partner subscales, along with HED. Likewise, SCAE—Vulnerability contributed to significant variance to the model for Sexpectations of the Self, in addition to gender and HED. This suggests that though SCAE might not moderate the relationship between HED and Sexpectations, the expectation of sexual vulnerability while under the influence does

consistently play a role in the overall model fit. This may be supported by the postulation that

sexual vulnerability while under the influence of alcohol *is becoming* normed among college

students, and thus integrated into general sexual scripts and Sexpectations.

As discussed in both Chapter 1 and Hypothesis 1, rape myth internalization into dating

and sexual scripts has been well-documented. However, both the RMA scale (Burt, 1980) and

the DESV-Q SCAE-- Coercion items developed by Starfelt and colleagues (2016) place greater

emphasis on hostility, victim blaming, and false allegations (Lonsway & Fitzgerald, 1995).

While these are still prevalent myths, more contemporary literature suggests that alternate, more

passive, rape myths (bad date myth, "nice guys don't rape myth", etc.) maybe more prominent,

especially among the current sample (Hayes, Abbott & Cook, 2016; Morrow, 2010; Navarro &

Tewksbury, 2017). This may speak to SCAE—Coercion not emerging as a significant predicter;

coercive expectations of the self may be less internalized by this sample as rape myths are

culturally shifting. Moreover, as aforementioned, the present sample may have significant

exposure to sexual assault prevention programming (Winerman, 2018) which may both effect

attitudes and internalization of norms regarding *avoiding* engaging in hostile coercive behaviors,

as well as anticipation of *experiencing* vulnerability under the influence of alcohol.

This also may be critical to the endorsement of SCAE—Vulnerability items, which put

emphasis on the role of *alcohol* ("Drinking alcohol makes me likely to have sex against my

will"), as opposed to victim blaming or perpetrator hostility. The SCAE—Vulnerability items

may, therefore, be more closely related to the identified constructs in the modified IRMAS scale,

such as "He Didn't Mean To", as suggested and supported by Hypothesis 1. Should this be the

case, then this would suggest that certain rape myths are, in fact, being internalized into sexual

scripts/Sexpectations as predicted (supported by HED and SCAE—Vulnerability accounting for

unique variance in the model). However, heavier drinkers may be endorsing more positive alcohol-sex related outcomes overall, while simultaneously accepting sexual vulnerability under the influence as a norm that is tolerated in college culture (Burnett et al., 2009). Ultimately, this suggests that while more frequent binge drinkers associate drinking with better sexual outcomes, participants simultaneously, regardless of HED frequency, expect vulnerability while intoxicated as a component of their sexual expectations.

It is worth noting that of the six regression models, gender only accounted for unique variance in Sexpectations of the Self, and not in partner expectations (Average Partner and Perfect Partner), suggesting that female participant's perceived vulnerability under the influence of alcohol may play a role specifically in development of perceived expectations of oneself. Considering the significant variance accounted for by HED, Gender, and SCAE—Vulnerability in the model for Sexpectations of the Self, it may be worth exploring other gender-relevant variables, such as sexual history, history of trauma, and perfectionism.

In comparison, partner oriented Sexpectations (Average Partner and Perfect Partner) may theoretically be better predicted by Greek affiliation, or other variables associated with higher pluralistic ignorance. Future research may benefit from including other theoretical predictor variables, as well as the possibility of maladaptive perfectionism and/or alternative rape myths moderating the relationship between gender and Sexpectations of the Self. Finally, future research may want to further explore what role sexual trauma history plays in development of alcohol-sex expectations as well as Sexpectations overall.

Limitations

The present study is not without limitations, which should be considered when interpreting results and planning for future directions. First and foremost, data collected for this

study is cross-sectional, and therefore cannot be interpreted as causal in nature. When considering the rapid changes in expectation development, norm internalization, and risk behaviors during college years, it may be beneficial for future research to engage in longitudinal studies. Not only would this provide multiple data points that may better describe and determine relationships between variables, but longitudinal research may also better capture important developments across study variables over time. Additionally, given the sensitivity of the research variables (i.e., underage drinking, sexual coercion, rape myth acceptance, sexual behavior), it is possible the current results are influenced by social desirability bias, and that participants are responding to self-report questions based on perceived "correct" answers, rather than authentic beliefs. This may be especially relevant to the SCAE—Coercion items and Burt (1980) RMA scale, which inquire about more overtly hostile attitudes and behaviors.

Additionally, a primary limitation to the current data set is the present sample. While college students were the desired population for the present research questions, due to convenience sampling, participants were predominantly White, teenage, female students. Current literature has observed that men may be more likely to endorse rape myth acceptance (Hayes, Lorenz & Ball, 2013), as are non-White college students (Mulliken, 2005; Varelas & Foley, 1998). Likewise, Black/African American college women have been observed to endorse fewer positive alcohol expectancies than their White peers (Randolph, Torres, Gore-Felton, Lloyd, & McGarvey, 2009). This suggests that Black women may be theoretically more likely to endorse negative alcohol expectancies, such as SCAE. Considering differences among identity groups in variable endorsement, present findings cannot be generalized to college students/college student drinkers and may only be representative of the highlighted demographics and/or the present sample.

The homogeneity of the present sample may also significantly impact endorsement of stereotypically gender-biased constructs, such as rape myth acceptance and vulnerability to assault while under the influence of alcohol. While gender differences were not observed in the present sample across outcome measures, it is possible the limited number of male participants may have yielded insufficient power to adequately compare groups. Future research may aim to replicate the present study with male samples, as well as among more diverse age and ethnic groups. As previously noted, many of the current findings may be related to developmental differences in expectation development, which may be unique to early college students, perhaps especially a more conservative, Southern US region, such as the present sample.

It is also worth noting that the analyses for the present data set included twelve hierarchical regressions in total. Since the primary goal of the present study was to explore how different variables may predict the three dimensions of Sexpectations, these analyses were appropriate. However, multiple regressions can inflate the risk of a "false positive" result, or a Type 1 Error. This risk may have been highest among the six regressions testing for moderation effects. Alas, none of the interaction terms were significant and SCAE—Coercion did not contribute unique variance to any of the models, ultimately resulting in a smaller number of significant findings and reduced risk for Type 1 error. However, future studies testing mediation or moderation effects among these variables may benefit from utilizing statistical analyses that reduce this risk, so as not to incorrectly report significant findings.

Another limitation was the unintentional exclusion of Greek affiliation as a predictor. Given the previously documented relationship between Greek affiliation and high-risk drinking, as well as risk for sexual assault, this may be an important variable to include in future studies. Additionally, considering Greek affiliations may be exposed to prevention programs with greater

frequency than other groups of college students, it may be useful to explore attitude and expectation differences.

As aforementioned, measures of rape myth acceptance utilized in the present study may not authentically capture *which* rape myths are more commonly endorsed by contemporary college students. The Burt (1980) RMA measure, while informative and relevant, may be comparatively antiquated. Rather than exploring rape myths connected to false allegations, hostility towards women, and overt victim blaming, future research may benefit from identifying endorsement of more passive rape myths, such as the "bad date" myth, "He Didn't Mean To", and "nice/smart guys can't rape". Additionally, given that incidents of sexual assault on college campuses remain exceptionally high, it may be prudent for future research to conduct exploratory studies on how rape myths may have even further shaped and changed in current populations since creation of the Burt (1980) RMA scale and the modified IRMAS (McMahon & Farmer, 2011).

Finally, Sexpectations is a completely new measure developed by the author. While initial, scale development studies have supported criterion and construct validity of the measure, there is very minimal information on psychometric properties or norms of the Sexpectations measure at this time. Furthermore, data on the Sexpectations measure is currently only reflective of nearly identical samples; White, cisgender, teenage, female participants at the same Southeastern institution. In order to better understand norms, and thus have comparative data points, the Sexpectations measure needs to be utilized in other collegiate settings and among more diverse, representative samples of college students at large.

Implications and Future Directions

The findings in the present study aim to provide greater support to the validity of the new measure, Sexpectations, as well as further expand upon existing relationships between HED and sex-related variables. As theorized, Sexpectations demonstrated relationships with related constructs, such as sexual vulnerability and heavy episodic drinking. Future research should explore these relationships among more diverse samples, such as among men, students of color, and additional college environments.

Additionally, it may be important to retest for moderation effects that may provide better model fit. As mentioned, based on existing research on relationships between HED and SCAE, it may be important to examine HED as a categorical, rather than continuous variable. Given the positive correlation between HED and Sexpectations, it may also be important to examine alcohol-sex expectancies for positive outcomes, rather than negative outcomes the DESV-Q SCAE subscales asses. Moreover, given that RMA with negatively correlated with Sexpectations of the Self and SCAE—Vulnerability accounted for unique variance in Sexpectations of the Self, it may be prudent to examine a mediating effect of perfectionism, sexual trauma, or general anxiety on this relationship. Lastly, it may be worth further examining the role of rape myth acceptance in the model, especially through utilization of measures that may reflect more nuanced myths, such as the more passive "He Didn't Mean To" or the "bad date myth".

Relatedly, it may be prudent to examine constructs, especially rape myth acceptance, with multiple construct measures. As detailed above, rape myths may be quite nuanced and multidimensional; even if more current, a single measure may be unlikely to capture them sufficiently. Likewise, the present study may have been improved by multiple measures of alcohol expectancies, specifically including both positive and negative sex-related expectations. Consequently, future research would benefit from inclusion of multiple measures of study

variables to better understand emerging relationships. Moreover, this may allow for more sophisticated and advanced statistical analyses, which may provide significantly more information on these relationships.

For example, canonical correlation analysis (CCA) may provide more thorough information on relationships between variables without the risk of Type 1 error that is posed by multiple regression (Sherry & Henson, 2005). Since the present study only utilized singular measures for criterion, regressions were run for each construct. However, should future research include multiple measures that could be put together in a "set" (e.g. multiple indices of Sexpectations, rape myth acceptance, and alcohol expectancies), a synthetic predictor and synthetic criterion may be created (Sherry & Henson, 2005). Through these synthetic predictors and criterion, CCA allows for all variables to be simultaneously explored in a single multivariate analysis, ultimately becoming less cumbersome and more detailed than the many regressions utilized in the present study. Ultimately, multiple variable sets and CCA may help improve upon the present study both in terms of better capturing the intended relationships, as well as providing more thorough information on relationships between variables.   .

In conceptualization, the present study aimed for findings to inform education programming and treatment for college students related to deleterious alcohol-related outcomes and sexual assault. While SCAE did not appear to moderate relationship between HED and Sexpectations, SCAE—Vulnerability and HED did contribute to significant variance for all three subscales for Sexpectations. Therefore, while the interaction term between HED and SCAE may not be significant, there is still an observed relationship between these constructs. Specifically, expectations of alcohol making one vulnerable to assault may be an increasingly accepted norm in college student sexual experiences. This is an imperative notion for future prevention and

treatment research to explore, as it suggests that college students may be attributing sexual assault more to alcohol-related vulnerability, a tolerated sexual norm or expectation, rather than to perpetrators of sexual assault who may use alcohol as a sedative tool. If so, this may not only contribute to the perpetuation of rape myths, but to survivor minimization of their traumatic experiences, perpetrator dissonance from sexual assault, and continued resistance to reporting or seeking mental health services following sexual trauma. This theory must be further explored, as well as possible intervention strategies targeting cognitive restructuring and re-framing for sexual trauma. Moreover, given that gender only accounted for unique variance in Sexpectations of the Self, it is pertinent for future research to explore intervention efforts that are targeted towards women, maladaptive perfectionism, and beliefs about what is expected from them, especially in sexual contexts. Finally, sex education efforts may want to consider sources of development of sexual scripts and how this may contribute to beliefs around the utility and normalization of alcohol in formative sexual experiences.

Lastly, relationships between expectation development, internalization of norms, and risk behaviors are complex. The present findings suggest that while outcome variables are connected, there may be currently unmeasured factors that account for greater variance. Future research may benefit from exploration of other constructs related to sexual behavior and heavy episodic drinking. Based on literature outlined in the present study, this should include sexual trauma history, perfectionism, positive alcohol expectancies, Greek affiliation, and more contemporary "passive" rape myths.

Conclusion

The present study observed a positive relationship between HED and the new measure, Sexpectations. Moreover, though no moderation effect was observed, both HED and SCAE—

Vulnerability contributed to significant variance to all subscales of Sexpectations. These findings provide insight into the role rape myths and alcohol expectancies may play in the development of sexual scripts. Considering the established relationships between RMA, binge drinking, and sexual script development, as well as the null finding between RMA, partnered expectations (Average Partner; Perfect Partner) and heavy episodic drinking, it may be important to further examine alternative rape myths and how they may interact with positive alcohol-sex related expectancies.

While the present study has articulated an increased understanding of the relationships between alcohol use and various beliefs and expectations, there is more to explore to better understand the interaction of these factors. Counseling psychologists work closely and frequently with the collegiate population, where concerns regarding sexual trauma, heavy alcohol consumption, and sexual behavior are commonly encountered. Present findings may infer clinical interventions, especially as it pertains to identifying and unpacking more subtle and nuanced rape myth acceptance and harmful beliefs about the self in sexual scenarios. Similarly, counseling psychologists may benefit from engaging in both intervention and prevention efforts targeting the acceptance of rape myths as a part of "hook up" and college drinking culture. Finally, future research may continue to help inform counseling psychologists with a more nuanced understanding of how cognitive patterns fuel high risk behaviors and subsequent mental health outcomes. Through increased understanding, greater and more efficacious efforts may be put towards prevention and treatment, especially pertaining to college sexual violence.

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Appendix 1

Sexpectations (Clinton et al.)

From a perfect sexual partner, I expect....

	Always	Most of the time	Sometimes	Rarely	Never
To receive an orgasm					
For them to orgasm					
For the sexual encounter to last at least ten minutes					
For the sexual encounter to last at least thirty minutes					
For the sexual encounter to be emotionally intimate					
For them to have groomed themselves (i.e. shaving, showering)					

	Always	Most of the time	Sometimes	Rarely	Never
For them to be extremely enthusiastic about the sexual encounter					
On this survey, I am answering after reading the items and picking sometimes					
For them to be adventurous with sexual activities					

	Always	Most of the time	Sometimes	Rarely	Never
That they are ready to begin physical contact as soon as I am					
If I do not orgasm, they will be upset					
If they do not orgasm, they will be upset					

	Always	Most of the time	Sometimes	Rarely	Never
Willingness to do whatever I want sexually					
Never pushing me to do things I don't want sexually					
To be turned on by them					
For them to leave as soon as the sexual encounter is over					

Q59

From a perfect sexual partner, I expect...

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
For me to be physically attracted to them					
For my partner to be physically attracted to me					
For them to exhibit strong sexual skills (i.e. right amount of pressure					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
in correct places, good kisser etc.)					
For them to be a "ten" (physically)					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
That they are not engaging in sexual activity with others (monogamy)					
That they are engaging in sexual activity with others					
That we only hook up one time					
That we hook up more than once over time					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Multiple sexual encounters a week					
Multiple sexual encounters a day					
For them not to have any STDs/STIs					

Q60

With a sexual partner in an average or typical sexual encounter, I expect

	Always	Most of the time	Sometimes	Rarely	Never
For them to orgasm					

	Always	Most of the time	Sometimes	Rarely	Never
For me to have an orgasm					
For the sexual encounter to last at least ten minutes					
For the sexual encounter to last at least 30 minutes					
For the sexual encounter to be emotionally intimate					
For them to have groomed themselves (e.g. shaving, showering)					

	Always	Most of the time	Sometimes	Rarely	Never
For them to be extremely enthusiastic about the sexual encounter					
For them to be adventurous with sexual activities					
For them to eat 40 lbs of butter a day and select answer choice rarely					
If I do not orgasm, they will be upset					
If they do not orgasm, they will be upset					
That they are ready to begin physical contact as soon as I am					

	Always	Most of the time	Sometimes	Rarely	Never
	Always	Most of the time	Sometimes	Rarely	Never
That they will be willing to do whatever I want sexually					
That they will never push me to do things I don't want sexually					
To be turned on by them					
For them to leave as soon as the sexual encounter is over					

Q61

In an average or typical sexual partner, I expect....

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
To be physically attracted to my partner					
For my partner to be physically attracted to me					
For them to exhibit strong sexual skills (i.e. touch in right places with right amount of pressure, good kisser, etc.)					
For them to have traveled to Pluto pick answer agree					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
For them to be a "10" (physically)					
That my partner is not engaging in sexual activity with other partners (monogamy)					
That my partner is engaging in sexual activity with other partners					
That we only hook up only one time					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
That we hook up more than once over time					
Multiple sexual encounters a week					
Multiple sexual encounters a day					
For them not to have any STDs/STIs					

Q62

For me to be a perfect sexual partner, I must...

	Always	Most of the time	Sometimes	Rarely	Never
Orgasm					

	Always	Most of the time	Sometimes	Rarely	Never
Make my partner orgasm					
Make the sexual encounter last at least ten minutes					
Make the sexual encounter last at least thirty minutes					
Extend the sexual encounter for longer than I need it to be to please my partner					
Be emotionally intimate					

	Always	Most of the time	Sometimes	Rarely	Never
Be well groomed (shaved, showered, etc.)					
Be extremely enthusiastic					
Be very adventurous					
Be willing to do whatever my partner wants sexually					
Never push my partner to do things they don't want sexually					
Not be upset if I do not have an orgasm					

	Always	Most of the time	Sometimes	Rarely	Never
Be upset if I do not have an orgasm					

	Always	Most of the time	Sometimes	Rarely	Never
Not be upset if they don't have an orgasm					
Be upset if they don't have an orgasm					
Always turn my partner on					

For me to be a perfect sexual partner, I must....

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Be a "10" (physically)					
Be physically attractive to my partner					
Find my partner physically attractive					
Exhibit strong sexual skills (touch my partner in the right places with the right amount of pressure, good kisser, etc.)					

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Not engage in sexual activity with others (monogamy)					
Engage in sexual activity with others					
Only want to hook up one time					

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Hook up with someone multiple times					

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Hook up with someone multiple times a week					
Hook up with someone multiple times a day					
Not to have any STDs/STIs					

Appendix 2

DESV-Q-- Sexual Coercion Alcohol Expectancies (SCAE) in red

"Drinking alcohol makes…"

1= strongly disagree, 2 – disagree, 3 = neither agree nor disagree, 4= agree, 5 = strongly agree

- It hard for me to make good decisions

- It difficult for me to realize when I've done something wrong

- Me do things I later regret

- Me forget about what I need to do to stay safe

- It hard for me to understand right from wrong

- Me forget about how hurtful a word or an action could be

- Me put myself in risky situations

- Me act like I'm a different person

- See a side of myself that I don't normally see

- Me feel confident when I'm around others

- Me sure of myself when meeting new people

- Me sure of myself in social situations

- Me feel comfortable to talk with people that I don't know yet

- Me likely to be forceful to get sex

- It hard for me to stop myself when my partner doesn't want to have sex

- Me likely to be persuasive if my partner says no to sex

- Me jump to the conclusion that others are flirting with me

- Me look for signs that someone wants to have sex with me

- Me care about my own feelings more than others'

- Me care about myself more than others

- Me put my own needs before others'

- Me at risk of being forced into sex

- Me likely to have sex against my will

- It is difficult for me to say no to sex in a clear and consistent way

Appendix 3

Modified Rape Myth Acceptance Scale

A woman who goes to the apartment of a man on their first date implies that she is willing to have sex

One reason that women falsely report a rape is that they frequently have a need to call attention to themselves

Any healthy woman can successfully resist a rapist is she really wants to

When women go around braless or wearing short skirts and tight tops, they are just asking for trouble

In the majority of rapes, the victim is promiscuous or has a bad reputation

If a girl engages in petting and lets things get out of hand, it is her own fault if her partner forces sex on her

Women who get raped while hitchhiking get what they deserve

A woman who is stuck-up and thinks she is too good to talk to guys deserves to be taught a lesson

Many women have an unconscious wish to be raped and may set up a situation in which they are likely to be attacked

If a woman gets drunk at a party and has intercourse with a man there, she should be considered "fair game" to other men who want to have sex with her