

SEXUAL RISK BEHAVIORS AND SEXUAL FUNCTIONING AMONG AFRICAN  
AMERICAN AND EUROPEAN AMERICAN VICTIMS OF SEXUAL ASSAULT

By

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College women are at increased risk for experiencing unwanted and nonconsensual sex including attempted and completed rape (Fisher, Cullen, & Turner, 2000; Krebs et al., 2009). Many sexual assault victims experience negative mental and behavioral health outcomes, such as depression, PTSD, and binge drinking (Brenner et al., 1999; Gidycz et al., 2008; Messman-Moore et al., 2005). Sexual victimization is also associated with widespread disruptions in sexual behavior including avoidance of intercourse as well as increased engagement in sexual risk behaviors, such as having more uncommitted sexual partners (e.g., having sex with someone with whom you do not have a prior relationship) and impulsive sexual behavior (e.g., leaving a social event with someone new; Campbell, Sefl, & Ahrens, 2004; Gidycz et al., 2008; Littleton et al., 2013). Although prior research has found that victims of sexual assault engage in more sexual risk behaviors than non-victims, it is unclear how these risk behaviors relate to sexual functioning and sexual satisfaction. Additionally, existent research has largely ignored the role of culture in perceptions and experiences of sexual encounters. The majority of studies have almost exclusively included White European American women and have largely ignored those of minority women. Therefore, this thesis aimed to address current gaps in the literature by

examining the relationship between engagement in risky sexual behavior and sexual health among victims of sexual assault. Additionally, this thesis aimed to compare the experiences of European American and African American victims. Participants included 203 European American and 25 African American college women who reported a past sexual assault (rape or attempted rape) since the age of 14, and who reported being sexually active within the last 6 months. Participants were recruited through the ECU Psychology department online participant recruitment system and completed an online survey of unwanted sexual experiences, sexual behaviors, adjustment, and sexual functioning. Results suggested that engagement in impulsive sexual behavior predicted less satisfaction and, to a lesser extent, greater dysfunction among victims. However, sex with uncommitted partners only predicted lower satisfaction among victims and was unrelated to sexual functioning. There were no racial differences in engagement in sexual risk behaviors, affect regulation sexual motives, or sexual risk behaviors. Additionally, race did not moderate the relationship between sexual risk behaviors and sexual health. These findings suggest that victims who engage in impulsive and uncommitted sex derive less pleasure and satisfaction from these sexual experiences likely because female pleasure is not prioritized in casual sexual encounters. In comparison, victims who engage in risky sexual behavior do not report greater dysfunction possibly because heavy alcohol consumption associated with casual sexual behavior may reduce the psychological and physiological distress associated with sexual dysfunction. The lack of differences in sexual experiences found between European American and African American victims may result from overall demographic similarities, such as age, grade level, and geographic location, between the two groups. Implications for these findings suggest that sexual health, particularly sexual satisfaction, should be addressed as a component of treatment for victims of sexual assault.



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by

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Sexual assault is a global problem that disproportionately affects young women. While current estimates suggest 1 in 5 women will experience some type of sexual victimization in their lifetime (Kilpatrick, Resick, Ruggiero, Conoscenti, & McCauley, 2007), rates among college-aged women are often much higher. Indeed, studies of rape among college women have found prevalence rates ranging from 11-25% (Banyard, Plante, Cohn, Moorhead, Ward, & Walsh, 2005; Fisher, Cullen, & Turner, 2000; Katz, May, Sorensen, & DelTosta, 2010; Krebs, Lindquist, Warner, Fisher & Martin, 2009; Littleton, Grills-Taquechel, & Axsom, 2009). Looking at sexual assault more broadly among college women, prevalence rates often exceed 40% (e.g., Katz et al., 2010; Ullman, Karabatsos, & Koss, 1999). These findings suggest that college women are at the risk for experiencing all types of sexual victimization, including rape, particularly during the transition to college and within their first year (Kimble, Neacsiu, Flack, & Horner, 2008).

Although forcible rape, which involves sex obtained by the use of physical force, the threat of force, or in which the victim sustains injury during the assault (Kilpatrick et al., 2007), is the most widely recognized type of rape, college women are more likely to experience incapacitated rape or drug-facilitated rape. Incapacitated rape involves sex with a victim who is unconscious or in an altered state and cannot consent, whereas drug-facilitated rape involves the perpetrator giving the victim drugs without consent *or* providing the victim with alcohol or drugs for the purpose of intoxicating the individual and obtaining sex (Fisher et al., 2000; Kilpatrick et al., 2007; Zinzow, Resnick, Amstadter, Ruggiero, & Kilpatrick, 2010). These two types of rape are particularly prevalent among young adult and college populations. For example, one study by Littleton and colleagues (2009) found that 48% of college rape victims reported they were impaired and an additional 21% reported they were incapacitated due to substance use during

their assault. In comparison, only 38% of rape victims did not report some level of impairment by drugs or alcohol during their assaults. Taken together these findings reveal that sexual assault, particularly that involving alcohol or drugs, is a continued, troubling reality for many young women attending college.

Please note that throughout this thesis, I use the term victim to describe women who have experienced a sexual assault. This term was chosen to denote the seriousness of the crime of sexual assault, and not to negate the self-identity of women who have experienced such assaults and who label themselves using another term, such as survivor.

### **Aspects of College Environment that Contribute to Sexual Assault**

#### **Feminist routine activities theory**

Despite efforts to decrease sexual violence on college campuses, incidents of rape have remained stable over the last three decades (Banyard et al., 2007; Basile, Chen, Black, & Saltzman, 2007; Gidycz, Orchowski, King, & Rich, 2008; Koss, Gidycz, & Wisniewski, 1987). In a report for the Department of Justice, Fisher and colleagues (2000) estimated that the annual rate of completed rape among college women was 35 per every 1,000 students, with the majority of these incidents occurring among freshman. Indeed, one recent study found that 44% of women entering college were sexually assaulted during their first or second semester, with 7% experiencing a completed rape during their first year (Jordan, Combs, & Smith, 2014). This suggests that there are aspects of the college environment that place women at increased risk for sexual victimization.

Feminist routine activities theory proposes that there are three components of the college environment that contribute to the high rates of sexual violence on college campuses. The first is the existence of all male peer groups that normalize and encourage rape-supportive attitudes.

College men who endorse rape myths or believe men and women should adhere to strict gender roles are more likely to find peer groups with similar values that normalize sexually-aggressive behavior, such as getting women intoxicated to reduce their ability to resist a sexual advance (Schwartz, DeKeseredy, Tait, & Alvi, 2001). Indeed, men who participate in these all-male peer groups, including within the context of fraternities or athletics teams, are more likely than non-members to report having peers who support and engage in sexually-aggressive behaviors, often in the context of binge drinking (Humphrey & Kahn, 2000; Koss & Gains, 1993; Murnen & Kohlman, 2007).

The second factor, according to feminist routine activities theory, is the lack of supervision and university oversight (i.e. a suitable guardian) to prevent and enact sanctions against individuals who engage in sexually assaultive behaviors. College campuses notoriously lack supervision by parents and other authority figures, particularly in the bar and party scene. Additionally, Schwartz and Pitts (1995) argue that there is a lack of response from university officials and judiciaries to punish sexually assaultive behaviors or enact changes that could reduce sexual violence in high-risk settings. Indeed, college administrations have been scrutinized in their handling of sexual assault cases, many of which do not result in sanctions for the offenders (Koss, 2000; Lonsway & Archambault, 2012). In one study by Franklin, Bouffard, and Pratt (2012) college men were asked to report how many, out of 100 men who committed a rape, they believed would be punished for their crime. On average college men reported between 11 to 14 men would be punished, suggesting they believed that the vast majority of men who commit sexual assault would experience no consequences for their actions. Thus, the lack of foreseen consequences and punishment for sexually assaultive behaviors likely contributes to the high rates of sexual assault on college campuses. Similarly, the lack of university interventions to

reduce sexual assault (e.g., requiring fraternity party monitors) may also contribute to increased rates of sexual assault among college students.

Finally, feminist routine activities theory argues that risky behavior, such as heavy drinking and casual sex, are normalized among college students leading to a high availability of “suitable targets” for sexually aggressive men (Schwartz & Pitts, 1995). Specifically, heavy drinking and intoxication are common in settings such as bars, parties, and dorm rooms where college women are more likely to interact with sexually-aggressive men. In addition, Schwartz and Pitts argue that the underreporting of sexual assaults, particularly among victims who were intoxicated during their assault, increases their appeal as “suitable targets” for motivated offenders (Schwartz & Pitts, 1995; Schwartz et al., 2001).

While feminist routine activities theory highlights several important factors that likely contribute to the increased rates of sexual assault among college students, including the increased prevalence of motivated offenders (i.e. sexually assaultive men in all-male peer groups), lack of supervision or effective punishment to deter sexually assaultive behavior, and a sizable number of women engaging in high-risk behaviors (e.g., binge drinking), it fails to capture other important contributing factors. Indeed, college culture often promotes increased engagement in risk behavior, such as binge drinking and uncommitted sex, which further normalizes sexual assault among students. Therefore, these risk factors should be examined in greater detail to better understand their impact on sexual assault.

### **Risk behaviors**

Although feminist routine activities theory provides a comprehensive argument for the alarming rates of sexual assault on college campuses, it fails to fully capture the extensive participation in high-risk behaviors and widespread effect of these behaviors on sexual assault.

College students, compared to other groups, are especially likely to engage in hazardous drinking and risky sexual behavior, which likely influences the rates of sexual assault among college women. Binge drinking, for example, has become commonplace on college campuses with almost half of college students reporting that they binge drink (consuming more than four standard drinks for women and five standard drinks for men, in one sitting) and a quarter of both college men and women reporting that they binge drink “frequently,” defined as binge drinking three or more times in the past two weeks (NIAAA, 2006; Wechsler et al., 2002). More recent studies similarly confirm the high levels of binge drinking among college students (Byrd, 2016; Carlson, Johnson, & Jacobs, 2010; White & Hingson, 2014; White, Kraus, & Swartzwelder, 2006).

Binge drinking is associated with increased sexual risk-taking, including having sex with unfamiliar partners, having unprotected sex, having sex while intoxicated, having one-night stands, and engaging in “hookups” (Brown & Venable, 2007; Cooper, 2002; Corbin, Bernat, Calhoun, McNair, & Seals, 2001). “Hookups” refer to brief encounters with another individual that can include kissing, fondling, genital stimulation, or intercourse, outside of a romantic relationship without any specific expectations of the formation of a romantic relationship following the encounter (Bradshaw, Kahn, & Saville, 2010; Epstein, Calzo, Smiler, & Ward, 2009; Fielder, Walsh, Carey, & Carey, 2013). Researchers assert that in recent decades hookups have replaced traditional dating relationships as the norm among college students (Bradshaw et al., 2010; Paul, McManus, & Hayes, 2000). For example, one study found that over 60% of college women reported engaging in a hookup during their first semester of college (Fielder & Carey, 2010). Many of these hookups involve heavy alcohol consumption which increases engagement in risky sexual behavior (Labrie, Hummer, Ghaidarov, Lac, & Kenney, 2014).

Indeed, LaBrie and colleagues (2014) in a study of 845 college students found that individuals who reported drinking alcohol prior to hooking up also reported hooking up more frequently with unfamiliar partners and engaging in more physical contact during their hookup compared to individuals who did not consume alcohol. LaBrie and colleagues (2014) found that 34.4% of women and 27.9% of men reported that they would not have gone as far physically during their hookup if they had not been drinking. Additionally, 30.7% of women and 27.6% of men reported that they would likely not have hooked up with their partner if they had not been drinking.

Thus, the combination of heavy alcohol use and the normalization of casual sexual relationships may lead college students to engage in more risky sexual encounters which increases their risk for sexual assault in a number of ways. First, women who engage in more casual sexual relationships, including one-night stands and hookups with unfamiliar partners, may be more likely to encounter sexually-aggressive men, increasing their risk for sexual assault. Secondly, women who are highly intoxicated may be unable to consent or effectively resist unwanted sexual advances during a casual sexual encounter. For example, under the influence of alcohol, a woman may be less able to identify situational risk cues which would prompt preemptive self-protective actions. Indeed, Flack and colleagues (2016) found that 78% of sexual assaults reported by college women occurred during a hookup following drinking. Flack's research suggests that risky behavior related to casual sexual relationships and heavy alcohol consumption, common among college students, place women at risk for sexual assault. These factors, along with those identified by feminist routine activities theory, point to a number of environmental factors that contribute to the high rates of sexual assaults on college campuses.

### **Negative Outcomes Related to Sexual Assault**

#### **Psychological distress**

The impact of sexual victimization is profound and long-lasting; victims often experience persistent psychological and physiological problems as the result of their assaults. Research has consistently found that victims of sexual assault are more likely to develop posttraumatic stress disorder (PTSD), depression, and general anxiety than non-victims (Gidycz et al., 2008; Messman-Moore, Brown, & Koelsch, 2005; Resick, 1993; Sandberg, Matorin, & Lynn, 1999; Vrana & Lauterbach, 1994). For example, in a national sample of over 2,000 college women, Zinzow and colleagues (2010) found that women with a history of incapacitated, drug-facilitated, or forcible rape were more likely to meet criteria for PTSD and/or a major depressive episode than non-victims. Specifically, the authors found that a history of forcible rape was associated with a fourfold increase in the likelihood of developing PTSD, and victims were over three times as likely to experience a major depressive episode. Similarly, women with a history of drug-facilitated or incapacitated rape were two to three times more likely to report PTSD symptoms than non-victims. In addition, one of the most disturbing and consistent findings is the increased rates of suicidal ideation among victims of sexual assault (Chang et al., 2015; Stepakoff, 1998; Ullman & Najdowski, 2009). One study by Ullman & Brecklin, (2009) found that childhood sexual abuse (CSA) and adolescent/adult sexual assault (ASA) were positively associated with suicidal ideation and suicidal attempts in a community sample of sexual assault victims. Taken together, these findings indicate that sexual victimization causes prolonged disruptions to psychological and emotional functioning in victims.

### **Risk behavior and academic performance**

In addition to affecting psychological functioning, sexual victimization is associated with a number of problematic behaviors that affect victims' physical and psychological well-being post-assault. One study by Brener, McMahon, Warren, and Douglas (1999) found that in a

nationally representative sample of college women, victims of sexual assault were more likely to report engaging in various health-risk behaviors including using tobacco products as well as drinking and driving. A more recent study by Gidycz and colleagues (2008) found a higher prevalence of similar risk behaviors, including smoking, marijuana use, and using diet pills or laxatives to lose weight. In addition to health-risk behaviors, victims are more likely to experience significant academic difficulties that lead to higher rates of drop-out among college students. For example, one study by Mengo and Black (2015) found that victims of sexual violence were more likely to experience a drop in their grade point average and leave their university than victims of physical or verbal abuse. Another study by Baker and colleagues (2016) found that sexual victimization predicted poor GPA in a sample of college women even when other contributing factors were accounted for. Similarly, the authors found that sexual victimization uniquely predicted college dropout. These findings suggest that sexual assault, compared to other forms of assault, causes significant challenges for victims that affect their psychological, social, and physiological functioning. These aspects of functioning all converge in the area of sexual health, which has recently received increased attention as an area negatively affected by sexual assault.

## **Sexual Health Outcomes Related to Sexual Assault**

### **Sexual risk behaviors**

Despite initial evidence that sexual health is affected by sexual assault (e.g., Becker, Skinner, Abel, & Treacy, 1982; Ellis, 1981), very little research has examined this issue. In general, research suggests sexual victimization is related to sexual health problems including greater engagement in sexual risk behavior, higher rates of sexual re-victimization, and difficulties with sexual functioning and sexual satisfaction. Sexual risk behaviors can include a

multitude of behaviors that place women at greater risk for contracting a sexually transmitted infection (STI), becoming pregnant, being physically or sexually assaulted, or other negative outcomes (CDC, 2002; CDC, 2011); however, they most commonly refer to having sex without a condom, engaging in sex with a new or unfamiliar partner (e.g. one-night stands, leaving a party with someone you just met), engaging in sex outside of monogamous relationships (e.g. “fuck buddies”; hookups), and/or having multiple simultaneous or sequential partners (Turchik & Garske, 2009). In general, sexual victimization is associated with increased risk-taking behavior (Campbell, Sefl, & Ahrens, 2004; Douglas et al., 1997; Gidycz et al., 2008; Lang et al., 2003; Littleton, Grills-Taquechel, Buck, Rosman, & Dodd, 2013; Ruxana & Thomas, 2013). For example, Brenner and colleagues (1999) found that college-aged victims of sexual assault reported greater engagement in sexual risk behaviors including using alcohol and other drugs prior to intercourse, having more sexual partners, and having earlier first sexual experiences than non-victims. Indeed, other studies have found a similar relationship between victimization and sexual risk-taking. For example, Gidycz and colleagues (2008) found that among college students, sexual victimization was associated with having multiple sexual partners during a 3-month follow-up period. Another study by Combs-Lane and Smith (2002) found that sexual victimization predicted engaging in risky sexual behaviors over a six-month period even after controlling for alcohol use. Additionally, Johnson and Johnson (2013) found that victims of severe assaults (i.e., rape) were more likely to engage in sexual risk behaviors than victims of other unwanted sexual contact (e.g., groping, kissing). Overall, research points to a strong relationship between sexual victimization and sexual risk behavior. To better understand this relationship researchers have identified several potential mechanisms that explain this link.

### ***Mechanisms related to sexual risk behavior***

The most prominent theoretical explanation focuses on *traumatic sexualization*, introduced by Finkelhor and Browne (1985). Traumatic sexualization describes how the experience of childhood sexual abuse (CSA) can lead individuals to develop sexually inappropriate and maladaptive behaviors. For example, Finkelhor and Browne suggest that sexually abused children are often rewarded with affection, attention, and other gifts for sexual behavior. This in turn may lead children to learn that sexual behavior can be used to gain or fulfill other needs. Additionally, Finkelhor and Browne argue that sexually abused children learn developmentally inappropriate sexual repertoires at earlier ages than their peers, which likely leads CSA victims to engage in sexual behavior at earlier ages. Indeed, several studies have suggested that victims of CSA report engaging in consensual sexual intercourse at younger ages than non-victims (e.g. Batten, Follette, & Aban, 2002; Lalor & McElvaney, 2010). This relationship is not limited to childhood experiences of sexual assault but encompasses those in adolescence as well. Indeed, adolescents who experience sexual abuse or assault are also more likely to be exposed to developmentally inappropriate sexual behaviors and relationships which in turn may lead them to use sexual behaviors to fulfill other needs (Champion et al., 2004; Gidycz, Coble, Latham, & Layman, 1993; Humphrey & White, 2000). Early exposure to inappropriate sexual behavior and relationships combined with feelings of betrayal, shame, and guilt that often accompany sexual trauma, can lead both CSA and adolescent sexual abuse and assault victims to engage in riskier sexual relationships and risky sexual behavior overall.

While traumatic sexualization offers one theoretical approach, other researchers have postulated that victims of sexual assault use sexual risk behaviors, in addition to other health-risk behaviors, as a means to cope with distress associated with their victimizing experiences. This

hypothesis, termed the *self-medication* hypothesis, suggests that victims may use risky sexual behavior and other risk behavior, including alcohol and other drug use, to cope with and regulate their emotional distress following an assault. Although the majority of research supporting the self-medication hypothesis has focused on the use of drugs or alcohol (e.g. Garland, Pettus-Davis, & Howard 2013; Messman-Moore, Ward, Zerubavel, Chandley, & Barton, 2015; Miranda, Meyerson, Long, Marx, & Simpson, 2002), a few studies have looked specifically at the use of sexual activity to cope with negative affect among victims of sexual violence.

In one study, Littleton, Grills, and Drum (2014) examined the use of sex as an affect regulation strategy in a sample of college women with histories of adolescent or adult sexual assault. The authors found that victims who reported greater feelings of depression were also more likely to report using sex to reduce negative affect, which in turn increased sexual risk-taking behavior overall. Additionally, the authors found support for a moderated mediation model in rape victims such that the relationship between sex as an affect regulator and sexual risk-taking was stronger among victims than non-victims. This suggests that victims who experience sexual assault in adolescence or adulthood are more likely to use sex as a way to reduce negative affect (e.g. depression, guilt, shame) which in turn leads to greater sexual risk-taking behavior than non-victims. In one study by Munroe, Kibler, Ma, Dollar, and Coleman (2010), the authors found that among 30 undergraduate African American women, higher posttraumatic stress symptoms were associated with more sexual partners, greater frequency of sex without a condom, and having sex while under the influence of drugs or alcohol. Although this study did not examine victims of sexual assault specifically, it nevertheless suggests that individuals who experience high levels of distress (e.g., depression, anxiety, PTSD) may use sexual risk behavior as a coping mechanism. In another study, Orcutt, Cooper, and Garcia (2005)

examined the use of sex to reduce negative affect in a diverse, community sample of women with CSA and ASA experiences. The authors found that victims of CSA were twice as likely to report experiencing ASA as non-victims, and that this relationship was partially mediated by psychological distress and the use of sex to reduce negative affect. This suggests that victims of CSA and ASA may be more likely than non-victims to use sex as a coping mechanism which, in turn, may put them at greater risk for experiencing another sexual assault.

Together, both *traumatic sexualization* and the *self-medication hypothesis* offer theoretical explanations for the increased rates of sexual risk behavior among victims of sexual assault. Research suggests that sexual risk behavior significantly affects victims' health and general psychological well-being after a sexual assault. Most notably, Orcutt and colleagues (2005) findings suggest that victims' engagement in sexual risk behavior places them at a greater risk for re-victimization and thus an increased likelihood of experiencing negative psychological, social, and emotional consequences. Therefore, understanding the relationship between sexual victimization and sexual risk behavior may help to decrease risk for re-victimization among victims of sexual assault.

### **Sexual re-victimization**

Re-victimization rates are staggeringly high among victims of sexual assault. Fisher, Cullen, and Turner (2000) found that 22.8% of college women reported being victims of multiple rapes. Another study by Daigle, Fisher, and Cullen (2008) found that a mere 7% of the college women in their national sample experienced 72.4% of all the sexual victimization incidents, with victims who reported experiencing three or more sexual victimizations accounting for almost half (45.2%) of all sexual assault incidents. Littleton, Axsom, and Grills-Taquechel (2009) found that in a sample of college rape victims, 30% experienced a new attempted rape and 30% a new

completed rape during a 6-month follow up. Similarly, in another study by Littleton and Decker (2016), the authors found that a shocking 22.3% of rape victims reported a new attempted or completed rape within a 2-month follow-up. The rates of re-victimization are notably high and suggest the possibility that the experience of sexual victimization can lead to problematic behaviors that increase vulnerability to future assaults.

Several studies have suggested that sexual risk behavior contributes to the higher rates of re-victimization among victims of sexual assault. For example, in a literature review conducted by Classen, Palesh, and Aggarwal (2005), risky sexual behaviors, including having more sexual partners, engaging more frequently in sex, and having brief or one-time sexual encounters, increased victims' risk for re-victimization. Other studies have found that increased sexual risk behavior, particularly adolescent risky sexual behavior, mediates the relationship between CSA and experiencing another sexual assault in college (Fargo, 2009; Van Bruggen, Runtz, & Kadlec, 2006). Additionally, sexual risk behavior is associated with engaging in other types of risk behaviors such as binge drinking and drug use, both of which are associated with increased re-victimization risk among college women (Combs-Lane & Smith, 2002; Larimer, Lydum, Anderson, & Turner, 1999; McCauley, Calhoun, & Gidycz, 2010; Testa & Livingston, 2009; Ullman et al., 1999; Walsh et al., 2014).

There are many other possible explanations for the link between sexual risk behavior and re-victimization. For example, it is possible that victims who engage in risky sexual behavior are exposed to more dangerous or ambiguous sexual situations that increase their risk for re-victimization. Indeed, simply engaging in more sexual encounters, particularly with unknown or unfamiliar partners, may increase a victim's risk for unwanted sexual experiences. For example, Messman-Moore and colleagues (2005) found that victims of rape and verbal coercion reported

having a greater number of sexual partners and greater use of sex to reduce negative affect than non-victims. Thus, victims may be more likely to engage in sexual situations that could lead to re-victimization. However, another possible explanation is that victims who engage in more sexual risk behavior are less able to identify dangerous or risky situations. In another study by Messman-Moore and Brown (2006) the authors examined victims' and non-victims' reactions to hypothetical sexual scenarios. They found that victims were more likely to remain in these hypothetical risky sexual situations than non-victims. In addition, they found that latency of leaving the situation predicted re-victimization during an eight-month follow-up. This suggests that some women may be unable to identify or label risk cues in sexual situations increasing their risk for initial victimization and subsequent victimization.

While some victims may be less able to identify situational risk, risk recognition may be particularly impaired in situations that involve heavy drinking, such as college parties. Victims who binge drink may be less likely to recognize risky situation including cues from partners or other individuals that may indicate sexual interest. In addition, victims may be less able to leave a risky situation or effectively resist sexual advances if heavy drinking has impaired their motor coordination (Abbey, 2002). Finally, victims who engage in drinking may be viewed by others, particularly sexually aggressive men, as more promiscuous and more acceptable "targets" for sexual advances. Indeed, Abbey (2002) suggests that women who drink are viewed by others as sexually promiscuous and more open to sexual advances which increase their risk of initial victimization and subsequent re-victimization. Taken together, these findings clearly highlight the dangers of sexual risk behavior, particularly when combined with heavy or binge drinking. Indeed, women who engage in risky sexual behavior are more likely to experience an initial sexual assault and are more likely to be re-assaulted in their lifetime (Classen et al., 2005; Fargo,

2009; Katz et al., 2010). This can lead to significant psychological distress as well as engagement in other types of risk behaviors (e.g., alcohol or drug use) further increasing their risk for future assault. Sexual risk behavior may be particularly problematic when used as a coping mechanism for emotional distress because of the increased risk for re-victimization. Therefore, it is important to further examine sexual risk behaviors as a component of a sexual assault experience.

### **Sexual dysfunction and sexual satisfaction**

Despite the large body of research on the consequences of sexual victimization, very little research has been conducted on the relationship between sexual victimization and sexual health more broadly, particularly among college women. Historically, there has been a push to ignore the sexual components of rape because of the frequent misinterpretation of rape as a crime of passion (i.e., the man was so sexually aroused he could not help himself). However, experiencing a sexual assault can produce long-term disruptions in sexual satisfaction, feelings of intimacy and desire, as well as disruptions in sexual functioning, including physiological reactions to intercourse (e.g. pain; Leonard & Follette, 2002; van Berlo, & Ensink, 2000). Additionally, both the traumatic sexualization and self-medication hypothesis suggest that victims' beliefs about sex, sexual behaviors, sexual self-efficacy, and sexual motives are affected by sexual victimization, which has clear implication for sexual health.

In general, rates of sexual dysfunction, defined as psycho-physiological changes, or changes in desire and arousal associated with the sexual response cycle (Laumann, Paik, & Rosen, 1999) vary among the population. One study found that among college women, 69.4% reported experiencing at least one type of sexual dysfunction, with the most commonly reported being lack of orgasm, reported in 25% of sexual encounters (Garneau-Fournier, McBain, Torres,

& Turchik, 2015). However, focusing on sexual dysfunction that may be more indicative of sexual problems, such as lack of arousal or significant pain during intercourse, the prevalence significantly decreases (18.3% and 7.9%, respectively; Garneau-Fournier et al., 2015). In studies that have examined sexual health in victims of sexual assault, results are similar. For example, one study found that over half of victims reported abstaining or significantly decreasing the amount of sexual intercourse they engaged in immediately after an assault (Ellis, 1981). However, significant difficulties in sexual functioning persisted in only a small sample of victims after 48 weeks (Ellis, 1981), suggesting that prolonged disruption in sexual functioning may be less common.

The limited literature examining the relationship between sexual assault and sexual dysfunction has largely focused on community samples of European American women. In one of the few studies that examined the experiences of college women, Garneau-Fournier and colleagues (2015) found that prevalence rates of sexual dysfunction were elevated in college women with sexual victimization histories. For example, 83% of women with sexual victimization histories, compared to 69.4% of the overall sample, experienced at least one type of sexual dysfunction, which included lack of sexual arousal, lack of orgasm, pain during intercourse, difficulty with lubrication, and tightening of vaginal muscles during sex. Similarly, Turchik and Hassija (2014) examined the relationship between sexual victimization, health-risk, sexual risk, and sexual functioning among college women and found that sexual victimization was associated with greater sexual dysfunction. In addition, a recent study by Kelly and Gidycz (2016) found that traumatic symptoms, anxiety, and depression all mediated the relationship between a sexual assault experience and difficulties with sexual desire, pain, and orgasm in a sample of college women. Tansill and colleagues (2012) found a similar mediated pathway.

These findings suggest that sexual assault leads to increased sexual dysfunction among college women, and that this relationship is likely mediated by psychological distress. However, it should be noted that all three studies focused almost exclusively on the experience of European American women and largely ignored cultural or racial differences. Similarly, all three studies focused on the physiological effects of sexual functioning and did not evaluate other aspects of sexual health such as sexual satisfaction.

Sexual satisfaction is defined as an affective response related to the subjective evaluation of both positive and negative dimensions associated with sexual relationships (Lawrence & Byers, 1995; Shpancer, 2014). It can include feelings of contentment, intimacy, and enjoyment in sexual relationships. Although research suggests that sexual satisfaction is related to sexual dysfunction (Sanchez-Fuentes, Santos-Iglesias, & Sierra, 2013) the two are not synonymous. Indeed, it is possible that someone who experiences sexual dysfunction (e.g., difficulty with lubrication during sex) could still have a satisfying sex life. Despite this distinction, most research has failed to account for the role of sexual satisfaction in the sexual health of women, particularly within young adult populations. Research on sexual health in college students has found that college women derive less sexual pleasure and satisfaction from non-committed sexual relationships, which are increasingly common within college campus “hookup” culture (Armstrong, England, & Fogarty, 2012; Owen, Rhoades, Stanley, & Fineham, 2010). One study by Armstrong and colleagues (2012) found that female orgasms are not prioritized in casual sexual relationships or hookups, but are regarded as an important component of sexual intimacy in long-term relationships. This suggest that college women who engage in casual sexual relationships are likely to experience less satisfaction and greater sexual dysfunction than women in traditional, committed relationships. However, it is unclear how this type of “hookup” culture

affects sexual dysfunction experiences among college rape survivors. In general, there is very little research currently available on the effects of sexual victimization on sexual functioning and satisfaction among college women with sexual assault histories; further research is greatly needed.

### **Limitations**

As previously noted, there is a clear need for further work examining the relationship between sexual assault and sexual health outcomes in college women. In general, victims of sexual assault report engaging in higher levels of sexual risk behavior and experiencing higher levels of dysfunction than non-victims (e.g., Gidycz et al., 2008; Littleton et al., 2013; Turchik & Hassija, 2014); however, perceptions of sexual satisfaction among sexual assault survivors has been largely ignored. Sexual health is an important component of physical and psychological well-being and one that may be uniquely affected by sexual assault experiences. It is possible that victims who report high levels of sexual risk behavior may experience similarly high levels of sexual dysfunction and low levels of sexual satisfaction after an assault, which would suggest that sexual behaviors are used for purposes other than sexual gratification (e.g., coping with negative affect, increasing self-esteem). However, it is also possible that there are no changes to sexual functioning or sexual satisfaction after an assault, regardless of sexual risk behavior. In addition, most research on sexual dysfunction and satisfaction among survivors of sexual assault has focused on middle-aged, European American rape survivors and has largely ignored the experiences of emerging adults, including college women, particularly those from ethnic and racial minority backgrounds. It is important to examine both the rape experiences of emerging adults and the role of cultural values and beliefs in forming perceptions of rape experiences in

order to better understand unique risk factors within specific groups and to better assist victims in recovery post-assault.

### **Patterns of sexual assault and risk behaviors in African American women**

One area that has been largely ignored in the sexual assault literature is the influence of race and culture on the experience of sexual assault, including rape, among women. Race, and culture as a whole, play a crucial role in forming values, relationships, and identity from which individuals experience the world around them. African American women in particular have a unique cultural history that shapes their experiences with sexual violence. Indeed, African American women have historically experienced the intersectionality of oppression and stigmatization due to both their race as well as their gender. These experiences shape the identity and values of African American women, which can affect perceptions of consensual and non-consensual sexual experiences. Currently, there is a small body of literature which suggests that experiences of rape, sexual risk behavior, and sexual dysfunction differ among racially diverse women, including between African American and European American women.

For one, whereas overall rates of sexual assault and rape in particular appear largely consistent across different racial groups (Basile et al., 2007; Kalof, 2000), some research has found that differences exist in the type, method, and experiences of sexual assault among women of different racial backgrounds. In general, African American women are more likely to report experiencing rape by physical force or verbal coercion (Bryant-Davis, Chung, & Tillman, 2009; Kilpatrick et al., 2007). In comparison, European American women are more likely to report that they and their assailant were intoxicated during the assault (Gross, Winslett, Roberts, & Gohm, 2006; Kilpatrick et al., 2007; Littleton & Ullman, 2013). One study by Littleton and colleagues (2013) found that European American college rape victims reported significantly higher levels of

hazardous drinking than African American and Latina victims. In addition, the authors found that African American rape victims were significantly less likely than European American victims to report that they were impaired or incapacitated by alcohol or other drugs at the time of their assault. In the same study, Littleton and colleagues (2013) found a moderated mediation pathway such that anxiety and depression mediated the relationship between hazardous drinking and sexual assault for European American women only, whereas among minority college women the authors found that the use of sex to reduce negative affect mediated the relationship between psychological distress (i.e. anxiety and depression) and sexual assault, suggesting that African American women may be more likely to use sex as a coping strategy in managing psychological distress, whereas European American women may be more likely to use alcohol or other substances. In contrast, a study by Krebs and colleagues (2009) found no evidence of any differences in the rates of forcible or incapacitated rape among racially diverse college women. Despite Krebs and colleagues' (2009) findings, the majority of research suggests that race plays a role in moderating the relationship between psychological distress, risky sexual behaviors, and sexual assault. This is particularly salient when examining alcohol use in connection to sexual risk behavior and sexual assault.

In regards to drinking behavior, research suggests that African American college women have less positive expectancies about the effects of drinking alcohol compared to European American college women (Randolph, Torres, Gore-Felton, Lloyd, & McGarvey, 2009). For example, African American women are less likely to report that alcohol will enhance sociability, sexuality, or relieve tension (Ham, Steward, Norton, & Hope, 2005; Patrick & Maggs, 2009; Randolph et al., 2009). Similarly, African American college women are less likely to report frequent use of alcohol or binge drinking episodes than European American women (Clements,

1999; O'Hare, 1990). Given these findings, it is unsurprising that current research suggests European American women are more likely to experience incapacitated rape than minority women, likely due to their more frequent alcohol use, including heavy and hazardous use (Littleton et al., 2013; Testa, Livingston, Vanzile-Tamsen, & Frone, 2003). Despite these differences in alcohol use, overall victimization rates remain consistent across racial groups. This suggests there are other factors that place African American women at risk for sexual assault.

Research has found mixed support for differences in African American and European American's engagement in sexual risk behaviors which are associated with sexual victimization risk (e.g., Buhi, Marhefka, & Hoban, 2010; Littleton et al., 2013; Owen et al., 2010). On average, African American college women report having more sexual partners than other racial groups, including European American, Hispanic, and Asian American women (Douglas et al., 1997; Espinosa- Hernandez, & Lefkowitz, 2009); however, these findings could be confounded by age of sexual initiation which tends to be earlier for African American girls (Douglas et al., 1997). Other research has found that African American women are more likely to contract an STI, including HIV, or have an unintended pregnancy compared to European American women (Buhi et al. 2010; CDC, 2014a; CDC, 2014b; James, Simpson, & Chamberlain, 2008). In contrast, some studies have found that European American college women engage in more oral and anal sex and use condoms less frequently than African American women (Buhi et al., 2010; Davis, Sloan, MacMaster, & Kilbourne, 2007; Littleton & Dodd, 2016; Wyatt, 1992). For example, Owen and colleagues (2010) found that minority students were less likely to engage in hookup behavior than their European American counterparts. Thus, the research on racial differences in sexual risk behavior among non-victim samples is mixed.

In comparison, very few studies have examined racial differences in sexual risk behavior among victims of sexual assault. One study that focused on African American victims of rape found that victims reported significantly less condom use, greater frequency of having sex while intoxicated, and were almost four times more likely to report having multiple sexual partners compared to non-victims (Lang et al., 2011). While Lang and colleagues' (2011) study included young adults aged 15-21, the vast majority of studies have focused on community samples of women. Indeed, few studies have examined racial differences in sexual risk behavior among college-aged women and, to my knowledge, no studies have looked at these differences among college women with rape or other sexual assault histories.

While the research on racial differences in sexual risk behavior is limited and may be confounded by age of sexual initiation, there is almost no research on examining racial differences in sexual functioning and sexual satisfaction, particularly among victims of sexual assault. General studies on sexual dysfunction have suggested that types of sexual dysfunction vary by race. For example, one study by Laumann, Paik, and Rosen (1999) found that within a large nationally representative sample of men and women, African American women reported less sexual arousal and less pleasure during sex than European American women. In comparison, the authors found that European American women tended to report experiencing greater pain during intercourse, suggesting that certain types of sexual dysfunction may be more prevalent among European American women whereas others may be more prevalent among African American women. This study indicates that sexual dysfunction may vary among minority groups; however, no research to date has examined sexual dysfunction or sexual satisfaction in diverse samples of college-aged victims.

Culture often influences the way in which both positive and negative experiences are perceived by an individual and others around them. Cultural values are often communicated through social relationships and societal representations in a way that integrates and normalizes these values for individuals in different cultural subgroups. Thus, the messages that African American women receive are different than those aimed at European American women, which may influence the ways in which victims recognize and explain their sexual experiences. To understand these experiences, it is important to examine cultural differences in processes of gender role socialization and identity formation that often begin early in adolescent development and continue through adulthood.

### **African American Culture, Gender Socialization, Sexual Scripts, and Stereotypes**

#### **Gender role socialization**

Adolescents from all backgrounds receive messages from adults, peers, and society (e.g., through media) regarding expectations about their behavior and morals. In Western societies like the U.S., boys are given messages encouraging them to be strong, independent, and hard-working, whereas girls are expected to be well-mannered, kind, and modest (Hill, 2002; West & Zimmerman, 1987). These messages transcend subcultural boundaries within Western societies and are often universally engrained in children at young ages. According to Townsend (2008), African American girls receive an added set of messages, particularly from their mothers and maternal figures, highlighting the importance of being responsible, self-reliant, and self-sufficient. Indeed, Townsend argues that African American girls are “armored” by their mothers to protect themselves against the oppressive forces of racism, sexism, and classism that specifically target African American women. These “armoring” messages often conflict with the larger societal messages encouraging women to be submissive, chaste, and docile. Yet despite

the conflict, African American girls are expected to embody both messages. Indeed, one qualitative study by Hill (2002) found that African American parents provide mixed messages to their adolescent daughters. Hill found that parents often stress the importance of financial independence and equality (particularly in the workplace) to their daughters while still teaching them to be modest, well-mannered, and dependent on men (e.g., men should be the providers). Hill found that these latter messages were particularly salient among lower-class and highly religious households. Thus, African American girls are taught to be personally responsible, self-reliant, and self-sufficient through the process of “armoring” while still presenting themselves as submissive, well-mannered, and dependent on others. These messages when applied to sexual experiences likely influence the way African American adolescents view their romantic relationships and sexual behaviors, as well as those of their peers. Indeed, these early messages of personal responsibility and self-sufficiency may lead African American girls to feel more personal responsibility than European American girls for their sexual behaviors and relationships, including in preventing unwanted sexual experiences.

### **Inner strength and personal responsibility narratives**

Receiving these messages regarding the importance of personal responsibility may affect African American women’s views and perceptions of consensual and non-consensual sexual encounters. Some research has found that African American women report unique themes related to inner strength and responsibility within their sexual narratives. In one qualitative study, French (2013) examined how African American high school girls navigated their sexual and romantic interactions. French found that nearly every girl endorsed the theme of “personal responsibility.” Specifically, she found that African American girls described feeling personally responsible for keeping themselves safe [from sexual assault, STIs and pregnancy] by resisting

sexual coercion and sexual expectations. Many of the girls interviewed identified themselves as having morals, values, and character strength that would help them avoid sexual victimization. Indeed, French found that girls who did not engage in resistance behavior during unwanted sexual encounters became the targets of ridicule by other girls and were often blamed for their actions because others believed they lacked character strength and morality. This suggests that African American girls may be more likely to see themselves as able to resist sexual coercion due to their internalization of “personal responsibility” which may cause them to minimize their vulnerability to sexual assault. This, in turn, may lead African American girls to engage in greater sexual risk behavior because they believe they can protect themselves in ambiguous or dangerous sexual situations.

The narrative of “personal responsibility” appears significantly stronger in African American women compared to European American women. Indeed, in one qualitative study, Settles and colleagues (2008) asked a sample of African American and European American women about their perceptions of womanhood. They found that African American women, but not European American women, endorsed the theme of “inner strength.” Specifically, “inner strength” was defined by participants as having the courage to stand up for oneself, persevere, and refuse to be taken advantage of by others. This suggests that African American women may value and internalize messages about the strength of Black women and the need for them to be independent, responsible, and in control of their environment, which may play a crucial role in sexual decision-making and sexual behavior.

In many ways internalization of the “strong Black woman” ideal may act as a protective factor for African American women. For example, internalized messages of inner strength and self-reliance may allow African American women to be assertive in their sexual relationships. As

a result, they may be less likely to engage in certain types of sexual risk behaviors, such as having sex without a condom. In comparison, African American women who internalize the “strong Black woman” ideal may be less likely to see themselves as vulnerable to sexual assault or the negative consequences associated with risky sexual behavior, which may place them at greater risk for other negative consequences (e.g., rape). For example, one study by Foreman (2003) found that African American women were able to identify the risks of engaging in non-monogamous sex (e.g. HIV or other STIs) but tended to minimize their personal risk. These findings when applied to sexual assault might suggest that African American women may be less likely to identify their own vulnerability to sexual assault or unwanted sexual experiences which could impede their ability to respond to risky sexual situations. In addition, African American women who do experience an unwanted sexual experience may be more likely to blame themselves after an assault due to internalized messages of “personal responsibility”. Thus, the internalization of these cultural messages may uniquely affect African American women’s perceptions of sexual behavior and sexual encounters. These messages are particularly salient in the formation of consensual and non-consensual sexual scripts.

### **Sexual scripts**

Sexual scripts are internalized messages from the larger culture that dictate expected behaviors in sexual situations (Simon & Gagnon, 1986; Simon & Gagnon, 2003). Sexual scripts enable individuals to understand, enact appropriate behavior within, and conceptualize both consensual and non-consensual sexual experiences. Research on sexual scripts has supported the existence of a “traditional sexual script” that serves to guide behavior, particularly in heterosexual sexual encounters with new partners (Byers, 1996; Simon & Gagnon, 1986; Simon & Gagnon, 2003). Within this script, sexual encounters are initiated and dominated by men

(Littleton, Axsom, & Yoder, 2006). Specifically, men are expected to initiate sexual encounters through persuasive methods that result in sexual interactions where male pleasure is the central focus (Byers, 1996; Littleton, 2011; Littleton & Axsom, 2003). In comparison, women are expected to act as the “gate keepers” of sex, determining how far a sexual encounter is to progress (Byers, 1996; Littleton, 2011; Littleton & Axsom, 2003). Women are expected to resist male advances and those who do not are stigmatized as promiscuous or “loose” (Littleton & Axsom, 2003; Littleton et al., 2006). Similarly, female sexual pleasure is not expected or prioritized in the traditional sexual script (Armstrong et al., 2012). This traditional sexual script fuels a broader cultural trend where female sexual pleasure is not prioritized or expected in sexual encounters, particularly casual sexual encounters (Armstrong et al., 2012). Indeed, women who internalize the traditional sexual script may feel increased pressure to prioritize their partners’ sexual enjoyment over their own. In addition, they may feel pressure to minimize their own enjoyment and sexual assertiveness (e.g., telling their partner what type of stimulation they find pleasurable) to avoid negative labels such as “freak,” “slut,” or “whore.” As a result, women who engage in casual sexual relationships often report greater sexual dissatisfaction and less enjoyment of sex than women in long-term committed relationships, in which sexual assertiveness may be more acceptable (Armstrong et al., 2012; Owen et al., 2010).

Although all women are vulnerable to this narrative, African American women may experience unique pressures due to both historic and current hypersexualized stereotypes. Historically, African American women have been represented by three main cultural figures: The Jezebel, the Mammy, and the Matriarch (Stephens & Philips, 2003). The Jezebel is represented as a hypersexualized, sexually insatiable, and promiscuous woman who continually seeks out sexual relationships with men. In comparison, the Mammy and the Matriarch represent asexual

stereotypes of African American women. These latter stereotypes serve to starkly contrast the sexual behaviors and sexualized image of the Jezebel and further the belief that the sexual expression of African American women is limited to promiscuity. Although these stereotypes have remained prominent over time, recent researchers have adapted these cultural portrayals to fit with modern sexual scripts. Indeed, Stephens and Phillips (2003) labeled several modern adaptations, among them the “Freak” and the “Sister Savior.” According to Stephens and Phillips (2003) the “Freak,” like the Jezebel, is sexually assertive and promiscuous. However, the modern portrayal of the “Freak” emphasizes the enjoyment of and participation in high risk sexual activities, including sex with multiple partners and engaging in unconventional sexual acts (e.g., anal sex). In contrast, the “Sister Savior” stands as an embodiment of the “good girl” image, one who prioritizes morality and spirituality above sexual gratification. These images, in addition to the others identified by Stephens and Phillips (2003), inform young African American woman about expected behaviors in consensual and non-consensual sexual encounters as well as the risks associated with engaging in certain sexual behaviors (e.g., fulfilling negative hypersexualized stereotypes of African American women). Indeed, African American women likely experience greater scrutiny over their sexual experiences and additional pressure from their community to resist sexual advances in order to avoid the label of “Freak”. Similarly, African American women may feel internally conflicted about asserting their own sexual desire and prioritizing their sexual enjoyment due to their concerns of being labeled a freak particularly because African American men report that “Freaks” are unworthy of committed relationships (Stephens & Few, 2007a; Stephen & Few, 2007b). Thus, African American’s sexual scripts likely differ from European American’s sexual scripts to reflect the added importance of

resistance and personal responsibility that stem from these sexual stereotypes and messages about African American women's sexuality.

### **Rape scripts**

In comparison to sexual scripts, which depict expected behaviors and norms in traditional sexual encounters, rape scripts are internalized messages that describe expected behaviors (from both the assailant and victim) within a rape. In general, many individuals' rape scripts involve a highly violent assault by an unknown assailant and strong resistance from the victim (Ryan, 1988; Ryan, 2011), termed the "real rape" script. Research suggests that individuals who strongly endorse the "real rape" script as typifying rape are less likely to label more ambiguous sexual situations (such as when there is consensual sexual intimacy prior to the assault) as rape (Kahn, Mathie, & Torgler, 1994; Littleton & Axsom, 2003; Littleton et al., 2006; Littleton & Dodd, 2016). This rape script is still held by nearly half of all college women (Littleton & Dodd, 2016), with some variability in individual descriptions. For example, Littleton and Dodd (2016) found variations in descriptions of the setting/environment surrounding the rape (e.g., it was dark, the victim was alone, the assault occurred following a party or night out at a bar etc.), victim resistance (e.g., victim screamed, hit, punched), and aftereffects of the rape (e.g., victim feels scared, assailant is remorseful, etc.), although overall themes remained the same.

While African American and European American college women hold similar rape scripts (e.g., the "real rape," the "party rape"), initial research suggests that there are some content differences in these scripts. Indeed, Littleton and Dodd (2016) found that African American college women were more likely to include strong victim resistance (e.g., the victim screaming, physically struggling) in their scripts and less likely to include a theme of universal victim vulnerability (i.e., anyone could be raped) than European American women. This suggests

that African American women may perceive victims as having greater control over their environment and sexual encounters, and expect victims to strongly resist when assaulted. Additionally, African American women appear to be more likely to believe that only certain types of individuals are sexually assaulted (e.g., women who drink heavily, flirt with men, dress provocatively). Consequently, if African American women find themselves in a sexual situation where they do not strongly resist they may be less likely to label that experience as a rape (e.g., a miscommunication, bad night). In turn, they may be more likely to blame themselves (or other victims) for the assault because the assault does not fit with their rape script or because they believe the victim must have behaved in a way that encouraged the assailant. Indeed, Littleton and Dodd (2016) found that African American women placed greater blame on victims who do not resist, or who are unable to resist, than European American women. These findings are unsurprising given the type of messages regarding personal responsibility and self-reliance that African American girls receive throughout development. However, they suggest that African American victims may be more likely to experience some negative consequences after a sexual assault (e.g., greater personal blame) which may lead to greater engagement in maladaptive coping (e.g., using sex to reduce negative affect) and more problems in sexual functioning or sexual satisfaction.

It is clear that African American women receive a unique set of cultural messages that shape their perceptions of consensual and non-consensual sexual encounters and sexual identity development. In addition, African American women face greater pressure and scrutiny over their sexual behaviors due to historic and current sexual stereotypes. Indeed, African American women may be viewed more negatively by others (friends, family, community members) when engaging in enjoyable, consensual sex because their behavior fits within the “Freak” stereotype.

In situations where African American women are sexually assaulted, it is possible they face greater blame from others because their behaviors, character strength, and morality are questioned due to cultural perceptions of African American sexuality. Similarly, the cultural messages of “inner strength” and “personal responsibility” suggest that African American may view their vulnerability and subsequent experience of unwanted sex differently than European American women. For example, African American women may minimize their vulnerability to rape or other unwanted sexual experiences due to internalized messages of “inner strength”. As a result, they may engage in more risky sexual behavior because they see themselves as having greater control over sexual situations. If a sexual assault does occur, African American women may be more likely to blame themselves, particularly if they did not or were unable to resist. Similarly, African American women may minimize their personal rape experiences (e.g., labeling it as a miscommunication) if they did not strongly resist because their experience did not fit within the real rape script. Ultimately this may lead to internalized feelings of shame or guilt, greater depression, and engagement in maladaptive coping behavior (e.g., using sex to reduce negative affect). However, due to a lack of research on African American sexuality, particularly after sexual assault, it is unclear how these cultural messages affect sexual behavior and coping in victims.

What is even more unclear is how sexual functioning is affected in African American victims of sexual assault. Indeed, very little is known about how African American cultural values relate to sexual health and sexual functioning more broadly, but even less is known about how sexual functioning is affected in African American victims of assault. It is possible that African American women may be less likely to alter their sexual risk behavior after a victimizing experience because they are resistant to labeling themselves as a victim. At the same time, they

may experience sexual dysfunction, including lack of enjoyment and sexual satisfaction, after an assault. It is also possible that African American victims may be more likely to use sexual risk behavior as a coping strategy (Littleton et al., 2013) and thus engage in sex to reduce negative affect or affirm their identity, rather than for enjoyment. However, given the lack of research in this area, there is very little understanding of how cultural differences in African American women affect sexual risk behavior and sexual functioning in victims of sexual assault.

### **Goals and aims**

A thorough review of the literature reveals an overall lack of research on the role of sexual risk behavior, sexual dysfunction, and sexual satisfaction in victims of sexual assault. In general, research suggests that victims of sexual assault are more likely to engage in risky sexual behavior than non-victims (Brener et al., 1999; Gidycz et al., 2008; Littleton et al., 2013). One possible explanation for this relationship is the *self-medication* hypothesis, which suggests that victims are using sexual risk behavior as a coping mechanism after an assault. However, it is unclear whether engaging in sexual risk behavior can cause greater sexual dysfunction or low levels of sexual satisfaction compared to victims who do not engage in sexual risk behavior after a sexual assault. Traditionally, research has shied away from examining the role of sexual health, including sexual functioning and satisfaction, in the recovery from sexual assault, despite the important implications sexual health has on social and emotional functioning. Additionally, research has failed to examine the role of culture in the perceptions and experiences of sex, including sexual functioning and sexual satisfaction, among African American women. Indeed, very little research has examined differences in sexual risk behavior, sexual functioning, or sexual satisfaction among African American and European American women. It is possible that the cultural messages and experiences of African American women influence their perceptions of

sexual assault and post-assault adjustment, which can lead to differences in sexual health and sexual risk behavior. Indeed, some of the available research indicates that African American women report lower levels of sexual satisfaction, whereas European American women report higher levels of sexual dysfunction. However, this research is often mixed and unclear.

Similarly, research on sexual risk behavior is also mixed, with some studies suggesting African American women engage in more sexual risk behavior and others suggesting European American women engage in more risk behaviors. Therefore, the goal of this thesis is to examine the relation between sexual risk behavior, specifically engaging in impulsive sexual behaviors (e.g. leaving a party with someone you just met, using drugs or alcohol prior to intercourse) and uncommitted sexual relationships, and sexual health, including sexual functioning and sexual satisfaction, in a sample of European American and African American victims of sexual assault.

The specific aims and hypotheses are as follows:

**Aim one:** Examine the relationship between sexual risk behavior and sexual health, including sexual functioning and sexual satisfaction, in a sample of European American and African American sexual assault victims.

Hypothesis one: Engaging in impulsive sexual behaviors and uncommitted sexual relationships will both predict greater sexual dysfunction in victims of sexual assault.

Hypothesis two: Engaging in impulsive sexual behaviors and uncommitted sexual relationships will both predict lower sexual satisfaction in victims of sexual assault.

**Aim two:** Examine if any differences in sexual health exist, including sexual functioning and sexual satisfaction, and engaging in sex to reduce negative affect, between European American and African American sexual assault victims.

**Aim three:** Examine if differences in frequency of recent sexual risk behaviors, including impulsive sexual behaviors and sex with uncommitted partners, exist between European American and African American sexual assault victims.

**Aim four:** Examine whether race moderates the relation between engaging in sexual risk behaviors and sexual dysfunction.

**Aim five:** Examine whether race moderates the relation between sexual risk behaviors and sexual satisfaction.

## Methods

### Participants

Participants were 203 European American and 25 African American college women who reported a past sexual assault (rape or attempted rape) since the age of 14 and who reported being sexually active within the last 6 months. Participants were drawn from a larger sample of 895 European American and African American women recruited from East Carolina University, a large Southeastern U.S. university, who completed an online survey assessing sexual risk behavior, sexual functioning, and unwanted sexual experiences. Within the larger sample, participants were predominantly European American (85%) women followed by African American women (15%) and had a mean age of 18.5 years ( $SD = 1.1$ ). A total of 82.6% of participants were in their first year of college. Of the initial sample, 234 (26.1%) reported experiencing a sexual assault (rape or attempted rape) since the age of 14; 10.7% ( $n = 25$ ) of these victims were African American women and 89.3% ( $n = 209$ ) were European American. A total of 228 (97.4%) reported being sexually active within the last 6 months, 203 were European American and 25 were African American.

### Procedures

IRB approval was obtained from East Carolina University (ECU; See APPENDIX A). Participants were recruited through the ECU Psychology department online participant recruitment system, SONA, which provides students enrolled in introduction to psychology courses with the opportunity to participate in research studies or other non-research activities for course credit. The study was advertised as a confidential online study of unwanted sexual experiences, sexual behaviors, adjustment, and sexual functioning. Women who were interested in the study signed-up through the SONA system, where they were directed to an external Qualtrics survey site where they could review the online consent (See APPENDIX B). After

providing electronic consent, participants completed a series of self-report measures and questionnaires assessing demographics, sexual risk behaviors within the past six months, sexual functioning within the past two months, and experiences of sexual assault, in addition to other measures outside the scope of this thesis. Skip logic and survey branching was utilized to ensure that participants only completed relevant measures. The online survey took an average of 25 minutes to complete and participants received one hour of research credit. After participants completed the online survey they were provided with a debriefing form explaining the purpose of the study and providing them with contact information for local mental health resources (See APPENDIX C).

## **Measures**

**Demographics.** Participants completed a five-item demographic questionnaire regarding their age, gender, race, academic standing, and sexual orientation (See APPENDIX D). To assess race, participants were encouraged to select all descriptors that apply. Participants who selected White (Caucasian/European American) and no other descriptors were coded as European American and those that selected Black/African American and no other descriptors were coded as African American and included in this study. Participants who selected multiple descriptors (e.g., Caucasian/European American and Black/African American) were coded as multi-racial and were not included in this study.

**Sexual Risk Behaviors.** Sexual risk behavior was assessed using two subscales from the Sexual Risk Survey (SRS; Turchik & Garske, 2009). The SRS assesses sexual risk behavior within the past 6 months using open-ended questions. The two subscales administered assessed impulsive sexual behaviors (e.g., engaging in unexpected and unplanned sexual encounters, leaving a social event with someone) and sexual behavior with uncommitted partners (e.g.,

having sex with someone you don't know well, having sex with untested partners). The SRS has been used and validated with college-aged samples. It has good internal consistency ( $\alpha = .88$ ) with subscale values ranging from .78 to .89. Similarly, scores on the SRS were also positively correlated with lifetime number of vaginal sexual partners ( $r = .65$ ) and lifetime number of oral sex partners ( $r = .64$ ; Turchik & Garske, 2009). The SRS is scored using ordinal categories to reduce the variability and skewness associated with using open-ended questions. Turchik and Garske recommend the following guidelines: 1 = bottom 40% of non-zero responses, 2 = the next 30% of non-zero responses, 3 = the next 20% of non-zero responses, and 4 = the final 10% of non-zero responses. For example, Turchik and Garske (2009) coded responses to Item 1 (number of sexual partners) as follows: coded 0 for no partners, 21.3% of the total responses; 1 = 1-2 partners (47.1% of non-zero responses); 2 = 3-4 partners (17.7% of non-zero responses), 3 = 5-9 partners (9.4%), and 4 = 10 or more partners (4.5% of non-zero responses). Coding categories for all items administered in the current study can be found in APPENDIX E.

**Rape Experiences.** Rape in adolescence or adulthood was assessed using items from the Sexual Experience Survey-Revised (SES-R; Koss et al., 2007). The SES-R assesses sexual victimization since the age of 14 by asking a series of behaviorally specific questions (e.g., has someone inserted an object, fingers, or penis into your vagina by use of physical force) about sexual assault experiences. The items assess experiences of unwanted completed sexual acts (oral, vaginal, and/or anal penetration) or attempted unwanted sexual acts (attempted oral, vaginal, and/or anal penetration) obtained by: 1. use of physical force, 2. the threat of physical force, or 3. that occurred when the individual was not able to consent due to incapacitation by substances. Participants who endorsed one or more of these items were coded as victims of sexual assault and included in the analyses.

The SES and SES-R has been used with many populations including college-aged samples, and is the most widely used measure of unwanted sexual experiences due to item concordance with research and legal definitions of sexual assault (Davis et al., 2014; Koss & Gidycz, 1985). The original SES demonstrated acceptable 1-week test-retest reliability ( $r = .73$ ; Koss et al., 1987). Similarly, the SES-R demonstrates acceptable 2-week test-retest reliability, with over 70% of women reporting the same type of experience of sexual assault at both time points (Johnson, Murphy, & Gidycz, 2017). Additionally, the SES demonstrated good internal consistency ( $\alpha = .80$ ) among a sample of African American adolescents (Cecil & Matson, 2006). Supporting the measure's validity, endorsing sexual victimization items on the SES-R are associated with symptoms of depression, anxiety, traumatic abuse symptoms, and sexual problems (Cecil & Matson, 2006; Johnson et al., 2017).

**Assault Characteristics Questionnaire.** To obtain more information about participants' sexual victimization experience (or self-characterized worst experience, if they experienced multiple sexual assaults), participants were asked to complete a short questionnaire which assessed specific assault characteristics (See APPENDIX F). The assault characteristics questionnaire was previously refined by Littleton, Axsom, Radecki, Breitkopf, and Berenson (2006) and was originally developed by Layman, Gidycz, and Lynn (1996). The questionnaire assesses three main characteristics related to sexual assault: types of force used by the assailant, types of resistance used by victim, and victim level of substance related impairment during the assault. To assess the types of force used by the assailant, participants were asked to indicate which tactic(s) the assailant used to obtain sex from a list provided: non-verbal threats or intimidation, verbal threats, moderate physical force (e.g., using body weight, twisting your arm, or holding you down), and severe physical force (e.g., hitting or slapping you, choking or beating

you, or showing/using a weapon). Victim resistance strategies were assessed through a similar list of options, including low assertive resistance (e.g., turning cold, crying), moderate assertive resistance (e.g., saying no, pleading), and strong assertive resistance (e.g., hitting, running away). Victims were also asked to indicate in what ways they were impaired due to substance use during the assault, coded as impaired (e.g., trouble walking, trouble speaking), or incapacitated (e.g., unconscious, asleep). In addition, victims are asked to indicate their relationship to the assailant, how many standard drinks of alcohol they and the assailant consumed prior to the event, whether they disclosed the event to others, and how many times they have experienced unwanted sex with this assailant or others. Finally, participants were asked to label their experience by choosing the appropriate term from a list which included such terms as miscommunication, hookup, bad sex, rape, attempted rape, etc.

The assault characteristics questionnaire has been used in several studies to further assess details surrounding victims' sexual assault experiences (e.g., Littleton, Grills-Taquechel, & Axsom, 2009; Littleton et al., 2009). Prior studies have found that items endorsed on this measure correlate with outcomes in the expected direction. For example, victims who report experiencing more violent assaults (e.g., assailant used moderate or severe physical force, victim used moderate or severe resistance) also endorsed greater PTSD symptoms and greater use of maladaptive coping (Littleton et al., 2009; Littleton, Grills, Layh, & Rudolph, in press).

**Sexual Functioning.** Sexual functioning was assessed using the Female Sexual Functioning Index (FSFI; Rosen et al., 2000). The FSFI is a 19-item questionnaire that assesses sexual functioning within the past 4-weeks in six domains: desire, arousal, lubrication, orgasm, satisfaction, and pain. Participants are asked to evaluate their experience within each domain using relevant 5-point rating scales (e.g., very low or none at all to very high; almost never or

never to almost always or always). The six domains are summed to obtain a full scale score that ranges from 2 to 36 with higher scores indicating greater sexual functioning. Scores below 26.5 are considered clinically significant and suggestive of a sexual dysfunction (Weigel, Meston, & Rosen, 2005). For the purposes of this study, the global satisfaction subscale was removed from the calculation of the total score in an effort to further differentiate the concepts of sexual functioning and sexual satisfaction. This process has been used in prior studies that have also separately assessed sexual satisfaction (e.g., Millhausen, Buchholz, Opperman, & Benson, 2015). Thus, total scores on the modified FSFI used in this study range from 1.2 to 30. The FSFI demonstrates good internal consistency (Cronbach's  $\alpha > .82$ ), and good test-retest reliability across the six domains, with 2-4 week test-retest correlations ranging from .79 to .86. Additionally, the FSFI demonstrates good divergent validity when compared to scores on measures of marital satisfaction (Rosen et al., 2000).

**Sexual Satisfaction.** Sexual satisfaction was assessed using a subscale of the Sexual Satisfaction Scale for Women (SSS-W; Meston & Trapnell, 2005). The SSS-W is a 30-item measure of sexual satisfaction and sexual distress across five domains: contentment, communication compatibility, relational concern, and personal concern. Five items measuring contentment (e.g. I feel content with the way my present sex life is) were used to assess satisfaction related to sexual intimacy and sexual relationships. Correlations between the contentment subscale and other subscales were moderate to high (.52 to .70). The contentment scale also demonstrated good internal consistency ( $r = .83$ ) and 4-5 week test-retest reliability in a combined sample of clinical and non-clinical patients ( $r = .80$ ). Additionally, the contentment subscale had the highest correlation with overall satisfaction score in both clinical and non-clinical samples (Meston & Trapnell, 2005).

**Sexual Motives.** To examine affect regulation sexual motives, the coping subscale of the Sexual Motives Scale was administered (Cooper et al., 1998). The coping subscale consists of five questions which assess the degree to which an individual endorses having sex to cope with negative affect (e.g., to feel better when one is lonely). For each question participants are asked to indicate how often they engaged in sexual activity for the indicated reason within the past six months on a 5-point scale ranging from 1 (*almost never/never*) to 5 (*almost always/always*). The coping subscale has demonstrated good internal consistency among college-aged women ( $\alpha = .85$ ; Cooper et al., 1998; Cooper, Agocha, & Sheldon, 2000).

### **Estimated Sample Size and Power Considerations**

Participants were drawn from a total sample of 895 African American and European American women recruited from ECU over the course of two academic semesters. Participants consisted of women with a history of completed rape or attempted rape who self-identified as African American or European American, as well as reported engaging in sexual activity in the past six months. Of the initial sample, 234 women endorsed a rape or attempted rape history – 209 were European American and 25 were African American women. Only six women reported no sexual activity within the past six months leaving a final sample size of 25 African American victims and 203 European American victims. Based on the obtained sample size of European American and African American victims, power for a two-tailed *t*-test with alpha set at .05 is .65 for a medium-sized effect and .96 for a large-sized effect.

### **Analysis Plan**

Each hypothesis was tested individually and will be discussed in order. The first aim of this thesis was to examine the relationship between sexual risk behavior and sexual health in a sample of women with a sexual assault history. To address hypothesis one and two a series of linear regressions were performed to evaluate the two sexual risk behavior scale scores

(impulsive sexual behaviors and sexual behaviors with uncommitted partners) as predictors of sexual dysfunction (Hypothesis 1) and sexual satisfaction (Hypothesis 2). Due to the strong correlation between the two sexual risk variables ( $r = .67$ ), each predictor variable was entered independently into separate models.

For all analyses examining differences in sexual risk taking and sexual health between European American and African American women (aim two and three), independent samples *t*-tests were conducted to determine if there were statistically significant differences between the two groups. To examine aim four and five, whether race moderates the relationship between sexual risk behavior and sexual dysfunction and/or satisfaction, moderation analyses were conducted using a post-hoc probing procedure recommended by Holmbeck (1997; 2002). The analyses examined whether associations between sexual risk behavior (i.e., impulsive sexual behavior and uncommitted partners) and sexual health (i.e., sexual dysfunction and sexual satisfaction) are moderated by race. First, independent predictors and the interaction were entered into the regression equation. If the interaction term is significant, regression coefficients for each group were calculated to determine the nature of the moderation effect (Holmbeck, 1997; Holmbeck, 2002).

## RESULTS

### Demographics and Sexual Assault Characteristics

All participants were recruited from Psychology courses at ECU and ranged in age from 18 to 28 with a mean age of 18.5 years. The majority of participants identified as European American/White (89%), with a small percentage identifying as African American/Black (11%). Approximately 98% of participants reported being in their first three years of college. Among participants, 93.4% identified as heterosexual or mostly heterosexual, while 5.7% identified as bisexual, and <1% as homosexual. Participant demographics are summarized in Table 1.

Table 1

#### *Participant Demographics*

Demographics	%	<i>n</i>
Race		
European American/White	89.0%	203
African American/Black	11.0%	25
Academic Standing		
Freshman	79.4%	181
Sophomore	14.0%	32
Junior	4.8%	11
Senior	0.9%	2
Graduate student	0.9%	2
Sexual orientation		
Heterosexual/Mostly Heterosexual	93.4%	213
Bisexual	5.7%	13
Homosexual	0.9%	2

Differences in assault characteristics of European American and African American women were examined using chi-square analyses (see Table 2). Overall, European American and African American women reported experiencing similar types of assaults. Most victims (51.8%) reported their assailant used moderate force (e.g., using body weight, holding down), with no significant differences between European American and African American victims. Similarly,

most victims reported using moderately assertive resistance (e.g., saying no) during their assault. Although, both European American and African American women reported they had been drinking prior to their assault (43.0% and 32.0%, respectively), European American women were significantly more likely to report being incapacitated (e.g., unconscious, asleep) from substance use during their assault. Additionally, European American women were more likely to report their assailant was a romantic partner (28.6%), whereas few African American women reported being assaulted by a romantic partner (8.0%). However, this difference was non-significant.

Table 2

*Assault Characteristics of African American and European American Victims*

Characteristic	European American	African American	$\chi^2$	Overall
	% (n)	% (n)		% (n)
Types of force used by perpetrator				
Nonverbal threats/intimidation	25.6 (52)	12.0 (3)	2.25	24.1 (55)
Verbal threats	7.4 (15)	4.0 (1)	0.39	7.0 (16)
Moderately severe force	52.7 (107)	44.0 (11)	0.67	51.8 (118)
Severe force	11.3 (23)	4.0 (1)	1.27	10.5 (24)
Types of resistance used by victim				
Low assertive resistance	40.0 (82)	28.0 (7)	1.44	39.0 (89)
Moderately assertive resistance	55.2 (112)	40.0 (10)	2.06	53.5 (122)
Strongly assertive resistance	32.0 (65)	28.0 (7)	0.17	31.6 (72)
Substance-related impairment				
Impaired	23.6 (48)	28.0 (7)	1.55	39.5 (90)
Incapacitated	23.6 (83)	4.0 (1)	5.09**	21.5 (49)
Relationship with perpetrator				
Romantic relationship	28.6 (58)	8.0 (2)	3.98	26.3 (60)
Binge drinking during the assault				
Victim drinking	43.0 (88)	32.0 (8)	3.98	42.1 (96)
Perpetrator drinking	42.9 (87)	36.0 (9)	0.58	42.2 (96)
Completed rape	72.4 (147)	60.0 (15)	1.67	72.4 (162)
Continued relationship	29.1 (59)	32.0 (8)	0.98	29.4 (67)
Multiple assaults	33.0 (67)	24.0 (6)	0.15	32.0 (73)
Disclosed the assault	53.7 (109)	40.0 (10)	0.45	52.2 (119)

\*\*  $p < .01$ **Descriptives**

All continuous variables, including sexual satisfaction, sexual functioning, both risky sex variables, and affect regulation sexual motives, were examined to assess variable distribution and

issues related to skew and kurtosis (See Table 3). All measures showed acceptable internal consistency ( $\alpha = .75 - .91$ ). For sexual satisfaction, sexual functioning, and affect regulation sexual motives variables, skew and kurtosis were acceptable suggesting no data transformation was needed (See Table 3).

Table 3

*Descriptive Statistics of Continuous Variables*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max	$\alpha$	Skew	Kurtosis
Satisfaction	227	20.22	5.85	6.0	30.0	.83	0.15	-0.89
Functioning	200	22.17	4.31	8.1	29.6	.91	-0.57	0.05
Impulsive Sex	223	5.40	4.19	0.0	20.0	.78	1.06	1.15
Uncommitted Sex	220	6.83	6.65	0.0	32.0	.91	1.11	0.94
Affect Regulation Motive	227	12.41	5.62	6.0	30.0	.89	0.78	-0.14

*Note.* Satisfaction = Sexual Satisfaction Scale (SSS-W); Functioning = Female Sexual Functioning index (FSFI); Impulsive Sex = Impulsive sexual behavior subscale of Sexual Risk Survey (SRS); Uncommitted Sex = sexual behaviors with uncommitted partners subscale of the SRS; Affect Regulation Motive = coping subscale of Sexual Motives Scale.

Correlation analyses were conducted among continuous measures. Among the independent predictors, sexual functioning was moderately positively correlated with sexual satisfaction ( $r = .53$ ). Similarly, among the dependent variables, impulsive sexual risk behavior was strongly positively correlated with sex with uncommitted partners ( $r = .67$ ). Finally, the affect regulation sex motive was weakly to moderately correlated with both impulsive sexual behaviors ( $r = .33$ ) and sex with uncommitted partners ( $r = .20$ ).

Overall, 97.4% of victims reported being sexually active within the last six months compared to 88.5% of the overall sample. In general, participants reported a high level of satisfaction with their sex lives ( $M = 20.22$ ). However, 20% of the participants reported scores below 15, indicating low sexual satisfaction. Additionally, participants reported a moderate level of sexual functioning with approximately 10% of participants endorsing difficulties with sexual functioning (defined as an FSFI score  $< 16$ ). Within both variables scores fell across the range of

expected values. In comparison, participants reported engaging in few risk behaviors, such as leaving a party with someone new or having sex with uncommitted partners (e.g., someone you just met, “fuck buddies”), leading to positively skewed distributions. However, victims within the current sample were more likely to report engaging in risky sexual behavior in the past six months than participants from the larger sample. For example, 67.1% of victims endorsed having sex with someone they just met compared to 22.6% of participants from the larger sample. Similarly, 51.3% of victims endorsed having sex with at least one partner who has many other sexual partners compared to 35.9% of participants in the entire sample. Finally, participants in the current sample infrequently endorsed affect regulation sex motives although a small portion of victims (10%) did endorse having sex to cope with negative affect very often or always.

### **Aim 1: Sexual Risk Behaviors as Predictors of Sexual Health**

The first study aim was to examine whether sexual risk behaviors, specifically impulsive sexual behaviors and sexual behaviors with uncommitted partners predict sexual functioning and sexual satisfaction. Two linear regressions were conducted to determine if impulsive sexual behaviors and sexual behaviors with uncommitted partners each predicted sexual dysfunction. Because both measures of sexual risk behavior were highly correlated ( $r = .67$ ), regressions were run separately. The results of the regression analyses indicated that, as hypothesized, impulsive sexual behaviors predicted sexual functioning in victims of sexual assault. In comparison, sex with uncommitted partners did not predict sexual functioning (See Table 4). Thus, the first hypothesis was only partially supported.

Table 4

*Sexual Risk Behaviors as Predictors of Sexual Functioning in Victims of Sexual Assault*

Source	Model 1			Model 2		
	<i>B</i>	<i>SE(B)</i>	$\beta$	<i>B</i>	<i>SE(B)</i>	$\beta$
Constant	23.37**	.50		22.42**	.46	
Impulsive Sex Behavior	-.22**	.07	-2.16			
Uncommitted Sex				-.03	.05	-.05
<i>R</i> <sup>2</sup>		.05			.00	
<i>F</i>		9.46**			.47	

Note. Model 1 = impulsive sexual behaviors predicting sexual functioning. Model 2 = uncommitted sexual behavior predicting sexual functioning. \*\*  $p < .01$

Next, two linear regressions were conducted to determine if impulsive sexual behavior and sexual behavior with uncommitted partners each predicted sexual satisfaction. The results of the regression analyses indicated that, as hypothesized, greater engagement in impulsive sexual behavior predicted lower sexual satisfaction in victims of sexual assault. Similarly, engaging in more sexual behavior with uncommitted partners also predicted lower sexual satisfaction among victims of sexual assault (See Table 5).

Table 5

*Sexual Risk Behaviors as Predictors of Sexual Satisfaction in Victims of Sexual Assault*

Source	Model 1			Model 2		
	<i>B</i>	<i>SE(B)</i>	$\beta$	<i>B</i>	<i>SE(B)</i>	$\beta$
Constant	22.72**	.61		21.89**	.55	
Impulsive Sex Behavior	-.45**	.09	-.32			
Uncommitted Sex				-.23**	.06	-.27
<i>R</i> <sup>2</sup>		.10			.07	
<i>F</i>		25.42**			15.29**	

Note. Model 1 = impulsive sexual behaviors predicting sexual satisfaction. Model 2 = uncommitted sexual behavior predicting sexual satisfaction. \*\*  $p < .01$

**Aim 2: Racial Differences in Sexual Health**

The second aim of this study was to examine whether differences in sexual health, including sexual functioning, sexual satisfaction, and affect regulation sexual motives, exist

between European American and African American victims of sexual assault. Independent samples *t*-tests were used to compare sexual health and sexual motives between victims. In general, participants reported an average level of sexual functioning and high satisfaction in their sex lives with no significant differences between groups, as summarized in Table 6. An examination of mean scores indicated that European American women reported higher affect regulation sexual motives than African American women, however, this difference was not statistically significant.

Table 6

*Comparison of Sexual Health in European American and African American Victims*

	European American <i>n</i> = 203 <i>M</i> ( <i>SD</i> )	African American <i>n</i> = 25 <i>M</i> ( <i>SD</i> )	<i>t</i> ( <i>df</i> )	<i>p</i>	Cohen's <i>d</i>
Sexual functioning	22.14 (4.37)	22.46 (3.95)	-0.32 (198)	.75	-0.08
Sexual satisfaction	20.11 (5.74)	21.16 (6.74)	0.85 (225)	.40	-0.38
Affect regulation motive	12.62 (5.69)	10.64 (4.72)	1.67 (225)	.10	0.38

\*\* *p* < .01

### **Aim 3: Racial Differences in Sexual Risk Behavior**

Independent samples *t*-tests were also used to determine whether any differences existed between European American and African American victims' sexual risk behavior including engaging in impulsive sexual behavior and having uncommitted partners. Results are summarized in Table 7. Both European American and African American women reported engaging in few impulsive sexual behaviors (e.g., leaving a party with someone new, having an unplanned sexual encounter) with no significant differences between groups. Similarly, both groups reported having relatively few uncommitted sexual partners, with no statistically significant differences between European American and African American participants.

Table 7

*Comparison of Sexual Risk Behaviors in European American and African American Victims*

	European American <i>n</i> = 203 <i>M</i> ( <i>SD</i> )	African American <i>n</i> = 25 <i>M</i> ( <i>SD</i> )	<i>t</i> ( <i>df</i> )	<i>p</i>	Cohen's <i>d</i>
Impulsive Sex	5.40 (4.21)	5.40 (4.10)	0.01 (221)	1.00	0.00
Uncommitted Sex	6.68 (6.67)	7.69 (6.59)	0.90 (218)	0.37	-0.15

*Note.* Impulsive sex = impulsive sexual behavior subscale of Sexual Risk Survey (SRS). Uncommitted sex = sexual risk behavior with uncommitted partners subscale of the SRS.

**Aim 4 & 5: Race as a Moderator of the Relationship between Sexual Risk Behaviors, Sexual Functioning and Sexual Satisfaction.**

Moderation analyses were conducted to determine if race moderated the relationship between sexual risk behaviors and sexual functioning or the relationship between sexual risk behaviors and sexual satisfaction. To examine these aims, four separate moderation analyses were conducted. Results of the moderation analyses indicated that race did not moderate the relationship between impulsive sexual behavior and sexual functioning or the relationship between sexual behavior with uncommitted partners and sexual functioning, respectively. Similarly, race did not moderate the relationship between impulsive sexual behavior and sexual satisfaction or the relationship between sexual behavior with uncommitted partners and sexual satisfaction, respectively. Results are presented in Table 8, 9, 10, and 11.

Table 8

*Race as a Moderator of the Relationship between Impulsive Sexual Behaviors and Sexual Functioning*

Source	<i>B</i>	<i>SE(B)</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	23.46	.53		47.01	.001
Race	-.31	.98	.02	.32	.752
Impulsive Sex Behaviors	-.24	.08	-.24	-3.24	.001
Race x Impulsive Sex Behavior	.24	.24	.08	1.02	.309
<i>R</i> <sup>2</sup>	.05				
<i>F</i>	3.54				.016

Table 9

*Race as a Moderator of the Relationship between Sex with Uncommitted Partners and Sexual Functioning*

Source	<i>B</i>	<i>SE(B)</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	22.42	.48		49.55	.001
Race	.27	1.04	.02	.26	.794
Uncommitted Sex	-.04	.05	-.06	-.78	.438
Race x Uncommitted Sex	.05	.16	.03	.34	.738
<i>R</i> <sup>2</sup>	-.01				
<i>F</i>	.30				.872

Table 10

*Race as a Moderator of the Relationship between Impulsive Sexual Behaviors and Sexual Satisfaction*

Source	<i>B</i>	<i>SE(B)</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	22.66	.65		34.99	.001
Race	.99	1.19	.05	.83	.407
Impulsive Sex Behaviors	-.46	.10	-.33	-4.86	.001
Race x Impulsive Sex Behavior	.09	.29	.02	.31	.755
<i>R</i> <sup>2</sup>	.11				
<i>F</i>	8.69				.001

Table 11

*Race as a Moderator of the Relationship between Sex with Uncommitted Partners and Sexual Satisfaction*

Source	<i>B</i>	<i>SE(B)</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	21.89	.58		37.79	.001
Race	1.06	1.23	.06	.87	.388
Impulsive Sex Behaviors	-.25	.06	-.28	-4.02	.001
Race x Impulsive Sex Behavior	.16	.19	.06	.84	.403
<i>R</i> <sup>2</sup>	.05				
<i>F</i>	3.54				.016

## **DISCUSSION**

### **Sexual Health and Risk Behaviors in Victims**

The purpose of this thesis was to examine the impact of sexual assault on college women's sexual functioning, sexual satisfaction, and engagement in sexual risk behaviors. Prior research has consistently found college women are at increased risk for experiencing a sexual assault, with as many as 20 to 25% of college women reporting an experience of sexual victimization (Banyard et al., 2005; Fisher et al., 2000; Kilpatrick et al., 2009; Krebs et al., 2009). Like prior studies, participants for this study were predominantly European American college women in their freshman year of college. Within this sample, 25.5% of participants reported experiencing a sexual assault, defined as an attempted or completed rape experience since the age of 14. Rates of sexual victimization varied slightly between European American and African American college women, with 27.5% of European American participants and 18.7% of African American women endorsing a victimization history. These findings are consistent with prior literature (Basile et al., 2007; Kalof, 2000), although may reflect slightly elevated rates due to the inclusion of attempted assaults in addition to completed rape experiences. It should also be noted that these rates reflect assaults that occurred since the age of 14 and likely include instances of sexual assault that occurred prior to college.

Prior research suggests that sexual victimization is associated with negative mental health and behavioral outcomes. For example, several studies found that victims are more likely to report depressive and post-traumatic stress symptoms (Gidycz et al., 2008; Resick, 1993; Zinzow et al., 2010). Similarly, other research has found that victims are more likely to engage in problematic substance use (e.g., binge drinking), engage in greater risk behavior (e.g., tobacco use, drunk driving), and report academic difficulties (Brenner et al., 1999; Gidycz et al., 2008;

Mengo & Black, 2015). However, existent literature has largely ignored the effects of sexual assault on sexual health, including sexual functioning and sexual satisfaction. A few studies have found that victims report experiencing greater sexual dysfunction post-assault (Garneau-Fournier et al., 2015; Turchik & Hassija, 2014), although rates of dysfunction within these studies have varied from 8 to 60%. Within the current study, approximately 10% of victims endorsed difficulties with sexual functioning suggestive of more severe dysfunction. However, the mean within the overall sample indicated most victims reported few concerns related to their sexual functioning. Similarly, victims generally reported feeling satisfied with their sex lives, although approximately 20% of victims reported low sexual satisfaction. These findings suggest that despite experiencing a sexual assault, many victims report feeling satisfied in their sexual relationships and normative sexual functioning. However, the variability within victim responses suggests that there are some victims who report extreme difficulty with sexual functioning and low satisfaction within their sexual relationships that warrant further examination.

This study also examined engagement in two types of sexual risk behavior – impulsive sexual behaviors (e.g., leaving a party with someone you just met, “hooking up” but not having sex with someone you don’t know well) and sex with uncommitted partners (e.g., sex with someone you are not in a relationship with, sex with someone who has many other sexual partners). Research suggests that victims engage in more sexual risk behaviors than non-victims, including using sex to cope with negative affect (e.g., depression; Littleton et al., 2014; Munroe et al., 2010). Therefore, the current study examined engagement in risk behaviors and endorsement of negative affect regulation sexual motives. In general, victims within this study reported engaging in very few sexual risk behaviors. However, endorsement of sexual risk

behavior was notably higher among victims compared with the larger sample. For example, over 2/3 of victims reported they had sex with someone they just met in the past six months, and just over half reported having a high risk partner (i.e., someone who has had sex with many other people). Additionally, few victims endorsed using sex to cope with negative affect on a frequent basis, although approximately 10% of victims did endorse using sex as a way to cope with negative affect (e.g., depression, loneliness) very often or always.

### **Sexual Risk Behaviors as Predictors of Sexual Health**

The first aim of this thesis was to examine whether engagement in sexual risk behaviors predicted lower satisfaction and greater sexual dysfunction among victims of sexual assault. Results from these analyses indicated that greater engagement in impulsive risk behavior predicted both sexual satisfaction and, to a lesser extent, sexual dysfunction. In comparison, sex with uncommitted partners predicted lower satisfaction but not sexual dysfunction. Interestingly, engagement in both types of risk behaviors appeared to have a greater impact on sexual satisfaction compared to sexual functioning. Although no prior research has examined the link between sexual risk behaviors and sexual health (i.e., sexual functioning and satisfaction), this finding is consistent with research on sexual satisfaction more broadly. Indeed, some research has found that college women report feeling less satisfied and experiencing less pleasure during casual sexual relationships, primarily because female sexual pleasure is not prioritized in these relationships (Armstrong et al., 2012). Casual sexual encounters (e.g., hookups) often revolve around male orgasm whereas female orgasm is not prioritized or even expected (Armstrong et al., 2012; Owen et al., 2010). Therefore, it is likely that victims who engage in these impulsive sexual behaviors are deriving less satisfaction from these types of sexual encounters possibly because the expected focus of the interaction is on male pleasure and male enjoyment.

While these findings may reflect normative casual sexual behavior among college students, it is also possible that victims who engage in these impulsive sexual behaviors are doing so for reasons other than pleasure. Littleton and colleagues (2014) previously found that victims of adolescent/adult sexual assault were more likely to report using sex to reduce negative affect, which in turn predicted engagement in sexual risk behaviors. Although this was not directly examined within the scope of this thesis, negative affect regulation sexual motives were positively correlated with engagement in both impulsive sexual behaviors and sex with uncommitted partners. This suggests that victims may be engaging in risky sexual behaviors, including “hookups,” despite feeling less satisfied by them because they are using these encounters to fulfill other needs. For example, some victims may engage in these risky sexual behaviors because they perceive them as normal or expected among their peers. Other victims may engage in these casual sexual relationships as a mean to pursue a long-term committed relationship with a partner. Still others may engage in these risky sexual behaviors as a way to cope with distress (e.g., reduce negative affect) or to increase self-esteem.

In contrast to the relationship between sexual risk behavior and satisfaction, there did not appear to be strong evidence to support a relationship between engagement in sexual risk behaviors and sexual functioning within the current study. Unlike many prior studies that have examined sexual functioning in adult and community samples of sexual assault survivors, this study focused specifically on the sexual health of college-aged victims. The few studies that have also examined sexual functioning among college women have found mixed results. For example, Kelly and Gidycz (2016) found that adult sexual assault did not directly predict sexual functioning, rather this relationship was mediated by distress. In comparison, Turchik and Hassija (2014) found that having a sexual assault history predicted greater dysfunction,

specifically low sexual desire and difficulty with orgasm, among victims of various forms of sexual victimization (e.g., coercion, rape). However, orgasm difficulties were only significant among rape survivors. This study provides further evidence of the complex impact of sexual victimization on sexual functioning. It is possible that sexual functioning, when measured separately from satisfaction as it was in this study, is less affected in college samples because most victims are young and relatively healthy, and may not experience some of the age-related changes associated with sexual dysfunction. Additionally, this thesis only examined sexual functioning within a sample of victims and did not compare the experiences of victims and non-victims. Therefore, there may be limited differences related to sexual functioning within this sample, reducing the ability to identify predictors of differences in functioning levels.

There are a number of other possible explanations which may account for the lack of a relationship between engagement in sexual risk behaviors and sexual functioning found in this thesis. For example, one possibility is that these risky sexual behaviors are largely fueled by drinking. Alcohol is commonly used as a social lubricant and is related to increased engagement in sexual risk behaviors (Brown & Venable, 2007; Cooper, 2002; LaBrie et al., 2014). Indeed, research suggests that “hookups” are more likely to occur in the context of drinking, particularly binge drinking, such as at parties or bars (Fielder & Carey, 2010; LaBrie et al., 2014; Paul et al., 2000). Conceivably, binge drinking may reduce the psychological and physiological distress associated with sexual dysfunction allowing victims to engage in these casual sexual encounters without experiencing distress related to their sexual functioning. Additionally, it is also possible that victims in this study may have limited past sexual experiences which may alter perceptions of current sexual functioning. Indeed, victims may be unable to compare current experiences of dysfunction from a prior functioning level if they lack prior sexual experience.

## **Differences in Sexual Assault Experiences by Race**

Existent literature has largely focused on the sexual assault experiences of European American women and have ignored those of minority women despite evidence suggesting minority women face unique challenges and stressors related to their assaults. Thus, the second aim of this thesis was to examine whether differences in victimization, sexual health, and engagement in sexual risk behaviors exist between European American and African American victims. Several studies have found differences in the assault experiences of European American and African American victims. For example, multiple studies have found that African American women are more likely to report their assailant used physical force during their assault (Bryant-Davis et al., 2009; Kilpatrick et al., 2007) whereas European American women are more likely to report being intoxicated or incapacitated (e.g., blacked out) during their assault (Kilpatrick et al., 200; Littleton & Ullman, 2013). Within the current sample, European American and African American victims reported remarkably similar assault experiences. For example, the use of moderately severe force (e.g., using body weight to hold down) was the most common type of force endorsed by both European American and African American victims. Similarly, both European American and African American victims most frequently endorsed using moderately assertive resistant strategies (e.g., saying “no”) during their assault. Interestingly, there was no significant difference in reports of drinking or impairment due to drinking between European American and African American victims. However, European American victims were significantly more likely to report being incapacitated by alcohol compared to African American victims. It is possible that this difference may reflect differences in binge drinking behavior between the two groups. Indeed, other studies have found that European American college women report greater engagement in binge drinking than African American and Latina women

(Clements, 1999; Littleton et al., 2013; O’Hare, 1999) which is more likely to result in incapacitation as compared to more moderate drinking.

There are a number of possible reasons why the results of this thesis do not support prior research suggesting differences in assault experiences between European American and African American victims. First, this study included only those participants who identified their race as exclusively African American/Black and excluded multi-racial participants. As a result, this study may have excluded multi-racial participants who strongly identify with African American/Black culture reducing the overall sample size of African American women. Second, due to the limited sample size of African American victims, this study lacked sufficient power to effectively examine any differences between the two groups. Additionally, both groups of victims were in their first year of college. As women move through college, it is likely that they begin to develop distinct peer groups with varying behaviors and expectation around alcohol and sex. While this study found initial differences in incapacitation during a sexual assault between European American and African American victims, it is possible that more prominent differences in binge drinking and assault characteristics (e.g., incapacitated assaults) may emerge later in college and were not captured in this study.

### **Racial Differences in Sexual Health and Sexual Risk Behaviors**

Beyond examining broad differences in victimization, this thesis aimed to examine differences in sexual health, sexual risk behavior, and affect regulation sexual motives between European American and African American victims. Within the current study, European American and African American victims reported similar levels of sexual satisfaction and sexual functioning. In fact, mean scores within these domains were almost identical between the two

groups. Additionally, no difference was found in endorsement of affect regulation sexual motives between the two groups.

With regard to differences in sexual risk behaviors between European American and African American sexual assault victims, prior literature in this area is mixed, with some studies suggesting African American women are more likely to engage in risk behavior (e.g., having more partners; Douglas et al., 1997; Espinoza-Hernandez & Lefkowitz, 2009) and others suggesting that European American women engage in riskier sexual behaviors (e.g., sex without condoms, anal sex; Buhi et al., 2010; Davis et al., 2007; Littleton & Dodd, 2016). Within the current study, there were no differences in engagement in impulsive sexual behaviors or sex with uncommitted partners between European American and African American victims. Indeed, both groups reported engaging in relatively few risk behaviors overall. Finally, race was examined as a potential moderator of the relationship between sexual risk behaviors, sexual functioning, and sexual satisfaction. Due to the lack of research in this area these analyses were exploratory. Results from these analyses indicated that there was no effect of race on the relationship between the sexual risk behaviors and either sexual functioning or satisfaction.

Overall, these findings add to the limited literature examining differences in sexual health and sexual risk taking among racial minorities. The similarities in sexual functioning and sexual satisfaction reported by both African American and European American victims may suggest that sexual assault experiences transcend cultural boundaries and affect sexual health similarly across racial and ethnic groups. However, it is also possible that the similarities observed in this study are reflective of the overall demographic similarities between the two groups. Participants in this study were primarily first year college students presumably from the same geographic region with similar religious and cultural influences. These factors may contribute to similar

cultural values and beliefs about sexual practices and sexual experiences, although due to the small sample of African American victims included in this study, this is only speculative. In addition, this thesis only compared the experiences and sexual practices of victims. The similarities in sexual assault experiences reported by participants in this study likely further contribute to overall similarities in sexual health between the two groups. Furthermore, the college environment fosters its own set of normative sexual behaviors among students, including expectations about casual sex and sexual encounters, which may also contribute to the similarities observed between the two groups.

### **Limitations**

There were several limitations to this study which should also be acknowledged. The sample used for this thesis was comprised of college women from one university in the Southeastern U.S. The majority of participants were in their freshman year of college and enrolled in a psychology class. Therefore, the results of this thesis may not be generalizable to other college or community samples. Additionally, the similarities in age, years of education, and geographic location among the sample may have contributed to the lack of differences found between the European American and African American groups. This sample also included women who reported either attempted or complete rape experiences since the age of 14. As a result, many of the reported assaults likely occurred in adolescence or high school and may not reflect assault experiences in college. Similarly, the inclusion of both attempted and completed rape may have affected outcomes. Although distress related to individual rape experiences vary, some research has suggested that women who report completed rape experiences report experiencing the greatest distress (e.g., PTSD, depression), and more negative outcomes (e.g., sexual dysfunction, binge drinking) than victims who report less severe assaults (e.g., attempted

rape, unwanted touching; Garneau-Fournier et al., 2015; Johnson & Johnson, 2013; Littleton et al., 2009; Turchik & Hassija, 2014). It is possible that the inclusion of attempted rape victims within the sample may have influenced the results and weakened any effects of victimization on sexual health. Finally, the sample size was relatively small, particularly when grouped by race. It is possible that differences existed between European American and African American victims, as previous research has alluded to, but were unable to be detected given the lack of power for the analyses conducted.

In addition to limitations related to the sample, this study also used a cross-sectional design rather than a longitudinal design. As such, this thesis only offers a snapshot of sexual functioning and sexual satisfaction experiences among victims who have experienced a sexual assault. Therefore, this study did not capture any nuances in sexual functioning and sexual satisfaction among victims, such as how these variables change over time after an assault. This study also only examined sexual risk behaviors as predictors of sexual health and did not examine other factors that may influence sexual functioning or sexual satisfaction, such as relationship status, time since assault, or severity of the assault.

Finally, this study was also limited by the type of measurement used. For this thesis, only the total score of the Female Sexual Functioning Index (excluding the global satisfaction subscale) was used as a measure of dysfunction. Future research may want to examine how the various subscales within the FSFI relate to sexual victimization and sexual risk behaviors. For example, Turchik & Hassija (2014) found that the desire and orgasm subscales were related to sexual victimization whereas other scales such as lubrication and pain were not. Additionally, a more comprehensive measure of satisfaction and functioning, such as one that included a

qualitative component wherein participants could indicate what factors contribute to their sexual health, may have provided more informative and meaningful results.

### **Future Directions**

This study adds to research on the negative effects of sexual victimization experiences among women and provides avenues for further research exploration. To start, future research should examine other factors that may affect sexual functioning and sexual satisfaction experiences after a sexual assault. For example, future research could examine assault characteristics (e.g., force used by the assailant, relationship to the assailant, or time since the assault) and their effect on sexual functioning and satisfaction. Additionally, future research could examine mediating variables related to the relation between sexual risk behaviors and sexual satisfaction (e.g., psychological distress, affect regulation skills) to further explore how these variables relate to one another. Future research should also examine sexual functioning and satisfaction among survivors through longitudinal research to see how these variables change over time. Research with community samples have found stronger relationships between sexual assault and sexual functioning, whereas findings among college women have varied. It is possible that age may be a contributing factor to sexual dysfunction, however, this relationship cannot be accurately captured in a cross-sectional study such as this and should be explored using a longitudinal analysis. Additionally, this study provides limited information on factors that contribute to sexual health among victims of sexual assault. Future research should include a qualitative component that can provide victims with an avenue to discuss their individual sexual experiences and how they may have been affected by sexual victimization.

Lastly, this study aimed to examine differences in sexual victimization experiences between European American and African American but was limited by a small sample size.

Future research should continue to explore the sexual experiences of racial and ethnic minority women, including sexual victimization experiences and sexual health outcomes, through studies aimed specifically at recruiting minority samples. For example, future studies may want to recruit from historically Black colleges or universities (HBCUs), recruit from predominantly Black sororities, or discuss recruitment strategies with community leaders who may provide insight into best strategies. Additionally, future studies may want to include women from various cultural backgrounds, and from various locations (e.g., urban vs. rural environments, college vs. young professionals). Doing so may provide greater clarity about the unique experiences of women from varying backgrounds and further explore the effects of sexual assault on sexual health among these populations.

### **Implications**

This thesis provides foundational evidence for the inclusion of sexual health as a component of treatment for victims of sexual assault. Despite the inherent sexual nature of rape and other forms of sexual assault, sexual health is largely ignored by mental health providers when treating victims. There is clear evidence that many victims of sexual assault experience disruptions to their sexual functioning and overall feelings of satisfaction with their sexual relationships (Garneau-Fournier et al., 2015; Kelly & Gidycz, 2016; Turchik & Hassija, 2015). Additionally, many victims may face stigma or further feelings of isolation when experiencing disruptions to their functioning, particularly if it affects their ability to form meaningful and intimate sexual relationships with romantic partners. College women may be particularly vulnerable to social ostracization or stigma if they experience disruptions in their sexual functioning. College is typically a time of identity development which often includes exploring one's sexuality within sexual relationships. Therefore, disruptions to sexual functioning and

sexual health broadly may present more problems or create greater psychological distress among college women because there is a higher expectation to engage in these exploratory sexual relationships. Thus, victims of assault, particularly those in college, may benefit from treatment that normalizes these experiences and includes them as a component of the recovery process. This may include providing education on normative changes to sexual functioning and satisfaction after an assault, helping the client discuss these experiences or feelings with their partner, and discussing ways to improve sexual functioning (and by association, satisfaction) with other intimate partners.

In addition to focusing on clinical interventions, this thesis provides support for inclusion of sexual education broadly on college campuses. Current research suggests that victims of sexual assault are at an increased risk for re-victimization while in college (e.g., Littleton et al., 2009) and that engagement in sexual risk behavior is a large contributor to this increased risk (Classen et al., 2005; Combs-Lane & Smith, 2002). Although many colleges provide some education on sex to incoming students, this information primarily focuses on the negative consequences of casual sex, including STIs and unplanned pregnancies (Bay-Cheng, 2003; Daily, 2008). Rather than taking a judgmental or critical stance on these “hookup” behaviors, colleges could focus on educating students on positive consensual sexual experiences that involve the arousal and pleasure of both partners. This type of education could be folded into existing programming on sexual consent that many colleges currently provide for incoming students. Similar programming could also be provided by organizations (e.g., student health, women’s resource center) for free to students and marketed as an optional event where incentives are provided for attendance (e.g., food, course credit). For example, universities like Yale University and the University of Chicago have hosted a program called “Sex Week,” a series of

workshops designed to discuss controversial topics of sexuality from a sex-positive perspective (Sandoval, 2014). These events typically host discussions and forums, such as “Vagina 101” and “Losing Your (Concept of) Virginity,” which are open to all students and highlight different aspects of sexuality and promote open dialogue about sexual intercourse (Sandoval, 2014). This type of programming could benefit all students, and victims in particular, because it teaches women how to discuss their sexual needs with their partner which may allow women to feel more confident in their sexual relationships. As a result, women may feel more empowered to assert themselves sexually in coercive or unwanted sexual situations.

Finally, this thesis adds to the growing research on sexual health in sexual assault survivors. While previous research has examined the effects of victimization on sexual health, this study is one of few to look at factors that contribute to poor sexual health among victims. The findings of this study suggest that engagement in sexual risk behaviors predicts less satisfaction, and to a lesser extent, dysfunction, among victims. However, risk behaviors explain only a portion of the variance in sexual satisfaction and dysfunction. These findings lay the groundwork for future research to examine other factors that contribute to sexual health in victims of sexual assault. This thesis also furthers the discussion on sexual health among young women emphasizing the importance of including sexual functioning and satisfaction in broader cultural discussion on health and well-being.

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## APPENDIX A: IRB APPROVAL



**EAST CAROLINA UNIVERSITY**  
**University & Medical Center Institutional Review Board Office**  
4N-70 Brody Medical Sciences Building· Mail Stop 682  
600 Moye Boulevard · Greenville, NC 27834  
Office **252-744-2914** · Fax **252-744-2284** · [www.ecu.edu/irb](http://www.ecu.edu/irb)

### Notification of Initial Approval: Expedited

From: Social/Behavioral IRB

To: [Heather Littleton](#)

CC:

Date: 9/9/2016

Re: [UMCIRB 16-001459](#)  
Unwanted sex, sexual behaviors and functioning

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 9/9/2016 to 9/8/2017. The research study is eligible for review under expedited category # 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
There are no items to display	
Part_two_email	Additional Items
Protocol_sex_risk_collegewomen	Study Protocol or Grant Application
sex_risk_consent	Consent Forms
Sona_study_info	Additional Items
T1_measures	Surveys and Questionnaires
T2_measures	Surveys and Questionnaires

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

## APPENDIX B: CONSENT DOCUMENT



### **Informed Consent to Participate in Research**

Information to consider before taking part in research that has no more than minimal risk.

Title of Research Study: Unwanted sex, sexual behaviors, adjustment, and sexual functioning

Principal Investigator: Dr. Heather Littleton

Department of Psychology, ECU

Office: Rawl 305B

Phone: (252) 328-6488

Researchers at East Carolina University (ECU) study issues related to society, health problems, environmental problems, behavior problems and the human condition. To do this, we need the help of volunteers who are willing to take part in research.

#### **Why am I being invited to take part in this research?**

The purpose of this research is to examine the relationships among unwanted sexual experiences, sexual functioning, sexual behavior, and adjustment, as well as identify predictors of unwanted sexual experiences among college women. You are being invited to take part in this research because you are a female student who is at least 18 years old and enrolled in Introduction to Psychology. The decision to take part in this research is yours to make. By doing this research, we hope to learn about how unwanted sexual experiences affect women's sexuality as well as identify important predictors of risk for unwanted sexual experiences.

If you volunteer to take part in this research, you will be one of about 1600 people to do so.

#### **Are there reasons I should not take part in this research?**

I understand I should not volunteer for this research if I am under 18 years of age, identify as a male, or if I am not enrolled in an Introduction to Psychology course.

#### **What other choices do I have if I do not take part in this research?**

You can choose to complete other research studies available in the ECU Sona system or choose a non-research option to fulfill your research requirement in Introduction to Psychology.

#### **Where is the research going to take place and how long will it last?**

The research will be conducted online. The total amount of time you will be asked to volunteer for this study is 60 minutes. You may also qualify to complete a second part of this study in two months which will also take 60 minutes.

### **What will I be asked to do?**

You will be asked to complete a number of online questionnaires. These will include questionnaires assessing your current adjustment, including feelings of depression and anxiety. You will also be asked to complete online questionnaires about your recent alcohol use and sexual behaviors and sexual functioning. Finally, you will be asked to answer questions about any unwanted sexual experiences you have had, including answering questions about the details of that experience. If you complete the second part of this study, you will be asked to complete several similar measures about your experiences over the past two months.

### **What might I experience if I take part in the research?**

We don't know of any risks (the chance of harm) associated with this research. Any risks that may occur with this research are no more than what you would experience in everyday life. We don't know if you will benefit from taking part in this study. There may not be any personal benefit to you but the information gained by doing this research may help others in the future.

If you find participating in this research to be personally upsetting, or would like to discuss your personal experience with someone, the following resources are available to you for free or low cost.

*ECU Center for Counseling and Student Development*  
(252) 328-6661  
137 Umstead building  
Office hours 8-5 M-F

All ECU students can be seen for free; call the center to schedule an appointment. The ECU Center for Counseling and Student Development provides services for a variety of mental health and substance use issues.

Emergency walk-ins are seen on first come, first serve basis M-F 10-4.

After regular business hours, you can reach the On-Call Counselor by contacting the ECU Police Department at 328-6150. The on-call counselor is available 365 days/year.

*REAL Crisis Intervention, Inc*  
600 E 11<sup>th</sup> Street

The REAL Crisis center provides several types of services:

A 24-hour free and confidential hotline offering crisis counseling: **252 758 HELP**

A six-week support group for survivors of sexual assault and support services for other mental health problems including depression, suicidality, loneliness, and interpersonal issues.

*Center for Family Violence Prevention*

823 S. Evans Street  
252-758-4400

Office hours: 830-5pm M-F

24-hour emergency line at FVP: **252-752-3811**

The Adult Counseling Program provides free individual and group counseling for victims of abuse.

*ECU PASS Clinic*

311 Rawl building

252-737-4180

Office hours: 10-7pm M-Th; 10-4pm F

The ECU PASS clinic provides counseling for a variety of mental health and substance use issues on a sliding scale fee based on financial need.

*Navigate Counseling Clinic*

4410 Health Sciences Building

252-744-0328

Fourth floor, Allied Health Sciences Building, Brody School of Medicine

The Navigate Counseling Clinic provides substance use services on a sliding scale fee based on financial need.

**Will I be paid for taking part in this research?**

We will not be able to pay you for the time you volunteer while being in this study. You will receive 1.0 hours of research credit for completing the online survey. If you complete part two of this study, you will receive an additional 1.0 hours of research credit for completing that portion of the study.

**Will it cost me to take part in this research?**

It will not cost you any money to be part of the research.

**Who will know that I took part in this research and learn personal information about me?**

ECU and the people and organizations listed below may know that you took part in this research and may see information about you that is normally kept private. With your permission, these people may use your private information to do this research:

- The University & Medical Center Institutional Review Board (UMCIRB) and its staff have responsibility for overseeing your welfare during this research and may need to see research records that identify you.

**How will you keep the information you collect about me secure? How long will you keep it?**

All identifying information collected as part of this study (Sona id, email address) will be removed from the database upon completion of the study. De-identified study information will be kept on a password protected computer and secure server for seven years following completion of the study.

**What if I decide I don't want to continue in this research?**

You can stop at any time after it has already started. There will be no consequences if you stop and you will not be criticized. You will not lose any benefits that you normally receive. You can close the browser at any time. You can choose not to complete any study items.

**Who should I contact if I have questions?**

The people conducting this study will be able to answer any questions concerning this research, now or in the future. You may contact the Principal Investigator at (252) 328-6488 (days, between 9:00 am and 5:00 pm).

If you have questions about your rights as someone taking part in research, you may call the Office of Research Integrity & Compliance (ORIC) at phone number 252-744-2914 (days, 8:00 am-5:00 pm). If you would like to report a complaint or concern about this research study, you may call the Director of the ORIC, at 252-744-

**I have decided I want to take part in this research. What should I do now?**

Please read the following, and if you agree, check the box below:

- I have read all of the above information.
- I have had an opportunity to ask questions about things in this research I did not understand and have received satisfactory answers.
- I know that I can stop taking part in this study at any time.
- By consenting to participate in this study, I am not giving up any of my rights.
- I can print a copy of this consent document, and it is mine to keep.

I consent to participate in this research

## **APPENDIX C: DEBRIEF DOCUMENT**

Thank you for participating in this study. The purpose of this study is to learn more about the frequency and impact of unwanted sexual experiences among college women. The study sought to examine the impact of unwanted sexual experiences on women's overall health, psychological adjustment, and sexual functioning. Additionally, risk factors for having unwanted sexual experiences are being examined as well.

If you experienced emotional upset as a result of participating in this research, or would like to discuss your personal experiences with someone, the following resources are available to you for free or for low cost. You can also contact the Principal Investigator, Dr. Heather Littleton, at (252) 328-6488.

ECU Center for Counseling and Student Development  
(252) 328-6661  
137 Umstead building  
Office hours 8-5 M-F

All ECU students can be seen for free; call the center to schedule an appointment. The ECU Center for Counseling and Student Development provides services for a variety of mental health and substance use issues.

Emergency walk-ins are seen on first come, first serve basis M-F 10-4.

After regular business hours, you can reach the On-Call Counselor by contacting the ECU Police Department at 328-6150. The on-call counselor is available 365 days/year.

REAL Crisis Intervention, Inc  
600 E 11th Street  
The REAL Crisis center provides several types of services:  
A 24-hour free and confidential hotline offering crisis counseling: 252-758-HELP

A six-week support group for survivors of sexual assault and support services for other mental health problems including depression, suicidality, loneliness, and interpersonal issues.

Center for Family Violence Prevention  
823 S. Evans Street  
252-758-4400  
Office hours: 830-5pm M-F  
24-hour emergency line at FVP: 252-752-3811

The Adult Counseling Program provides free individual and group counseling for victims of abuse.

ECU PASS Clinic  
311 Rawl building

252-737-4180

Office hours: 10-7pm M-Th; 10-4pm F

The ECU PASS clinic provides counseling for a variety of mental health and substance use issues on a sliding scale fee based on financial need.

Navigate Counseling Clinic

4410 Health Sciences Building

252-744-0328

Fourth floor, Allied Health Sciences Building, Brody School of Medicine

The Navigate Counseling Clinic provides substance use services on a sliding scale fee based on financial need.

## APPENDIX D: DEMOGRAPHICS

### DEMOGRAPHICS

Now we would like to know a little bit more about you. Please answer these questions to the best of your ability.

1. How old are you? \_\_\_\_ years

2. What is your gender?

Female

Other \_\_\_\_\_

3. Please describe your ethnicity.

Hispanic/Latino/a

Non-Hispanic/Latino/a

4. Tell us what you consider yourself (Mark all that apply).

White (Caucasian/ European or European American)

Asian/Asian American

Native American/ Alaskan Native

Middle Eastern/ North African

Pacific Islander

Black/African American

Multi-ethnic

Caribbean Islander

Other

5. What is your current academic standing?

Freshman

Senior

Other

Sophomore

Masters student

Junior

Doctoral student

6. Please describe your sexual orientation.

Heterosexual/straight

Mostly heterosexual/straight

Bisexual

Mostly homosexual/gay/lesbian

Homosexual/gay/lesbian

Other \_\_\_\_\_

## APPENDIX E: CODING OF SEXUAL RISK SURVEY

**Coding responses were scored using the entirety of the sample ( $n = 1040$ ). Those for the impulsive sexual behaviors and uncommitted sexual partners subscales are presented below.**

1. Engaging in sexual behavior but not sex

$n = 759$

Coded Value	Response range	%	Cumulative %
1	1	55.3	55.3
2	2	19.3	74.6
3	3-4	15.7	90.3
4	5-20	9.7	100.0

2. Leaving a social event

$n = 164$

Coded Value	Response range	%	Cumulative %
1	1	62.2	62.2
2	2	18.3	80.5
3	3-4	12.2	92.7
4	5-12	7.3	100.0

3. “Hooked up” with someone you didn’t know well

$n = 271$

Coded Value	Response range	%	Cumulative %
1	1	50.9	50.9
2	2	26.2	77.1
3	3-5	15.9	93.0
4	6-12	7.0	100.0

4. Number of unexpected and unanticipated sexual experiences

$n = 391$

Coded Value	Response range	%	Cumulative %
1	1	44.8	44.8
2	2	26.3	71.1
3	3-5	19.7	90.8
4	6-50	9.2	100.0

5. Regretted sexual encounters

$n = 327$

Coded Value	Response range	%	Cumulative %
1	1	62.1	62.1
2	2	19.3	81.3
3	3-4	14.7	96.0

4	5-20	4.0	100.0
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6. Number of sexual partners

*n* = 762

Coded Value	Response range	%	Cumulative %
1	1	58.9	58.9
2	2	18.2	77.2
3	3-4	16.2	93.3
4	5-13	6.7	100.0

7. Sex with someone outside of a relationship (i.e. “friend with benefits”)

*n* = 343

Coded Value	Response range	%	Cumulative %
1	1	51.5	51.7
2	2	25.6	77.3
3	3-4	15.1	92.4
4	5-15	7.6	100.0

8. Sex with someone you just met

*n* = 196

Coded Value	Response range	%	Cumulative %
1	1	61.2	61.2
2	2	25.0	86.2
3	3-4	8.7	94.9
4	5-12	5.1	100.0

9. Sex with new partner without discussing sexual history (i.e. STIs)

*n* = 247

Coded Value	Response range	%	Cumulative %
1	1	44.4	44.8
2	2	29.0	73.8
3	3-4	18.1	91.9
4	5-12	8.1	100.0

10. Sex with someone who had many sexual partners

*n* = 317

Coded Value	Response range	%	Cumulative %
1	1	49.2	49.2
2	2-3	31.2	80.4
3	4-8	11.4	91.8
4	8-75	8.2	100.0

11. Sex without protection

*n* = 258

Coded Value	Response range	%	Cumulative %
1	1	54.3	54.3
2	2	22.9	77.1
3	3-4	17.8	95.0
4	5-12	5.0	100.0

12. Sex with someone you didn't trust

*n* = 153

Coded Value	Response range	%	Cumulative %
1	1	67.3	67.3
2	2	18.3	85.6
3	3-5	10.5	96.1
4	6-12	3.9	100.0

13. Sex with partner who is having sex with others

*n* = 168

Coded Value	Response range	%	Cumulative %
1	1	60.7	60.7
2	2	20.8	81.5
3	3-4	11.9	93.5
4	5-15	6.5	100.0

## APPENDIX F: ASSAULT CHARACTERISTICS QUESTIONNAIRE

Please take a few minutes to think about your experience or experiences with unwanted sexual contact that occurred after you turned 14.

First, how many of these experiences have you had since you turned 14? \_\_\_\_\_

If you have had more than one such experience, please complete the following questions regarding what you would consider to be your worst experience with unwanted sex.

How old were you when this experience occurred? \_\_\_\_\_

What was the gender of the other person(s) involved?

- Male
- Female
- Involved both males and females
- Other

What was your relationship with the other person or persons at the time of this experience?

- Stranger
- Just met
- Acquaintance (classmate, member of brother fraternity/sister sorority, friend of a friend)
- Friend
- Dating casually/hook-up partner/friend with benefits
- Steady date
- Romantic partner/boyfriend/girlfriend/spouse
- Relative (cousin, sibling, stepsibling, parent, aunt/uncle, etc.)

What consensual physical activities had you engaged in with this person before this experience?

- None
- Kissing only
- Petting, mutual masturbation, and/or dry humping
- Sexual intercourse, oral sex, and/or anal sex

How much alcohol had you consumed at the time of the experience (1 drink = 1 pint of beer, 1 shot or 1 small mixed drink)? *Please estimate.*

\_\_\_\_\_ drinks

Were you using other drugs at the time of the experience?

- No
- Marijuana
- Other drugs, Please write \_\_\_\_\_

How much alcohol do you think the other person had consumed at the time of the experience (1 drink = 1 pint of beer, 1 shot or 1 small mixed drink)? *Please estimate if you can.*

- drinks
- don't know

What drugs do you think the other person(s) was using at the time of the experience?

- None or don't know
- Marijuana
- Other drugs, Please write \_\_\_\_\_

In what ways were you "out of it" during the experience *as a result of drinking alcohol or using drugs?* (mark all that apply)

- Asleep
- Unconscious (blacked out)
- Had difficulty speaking
- Had difficulty moving limbs (arms, legs)
- Had difficulty walking
- Other, Please write \_\_\_\_\_

What did the other person (s) do during the experience to try to get you to engage in sexual activity with him or her (mark all that apply)?

- Engage in non-verbal threats, intimidation
- Engage in verbal threats to harm you or others
- Use his or her body weight
- Twist your arm or hold you down
- Hit or slap you
- Choke or beat you
- Show or use a weapon
- Other, Please write \_\_\_\_\_

What did you do during the experience to show that you did not want to engage in that sexual activity (mark all that apply)?

- Turned cold
- Tried to reason or plead with the person
- Said "no" or "stop"
- Cried
- Screamed for help
- Ran away
- Physically struggled
- Hit/kicked/punched/scratched/bit the other person
- Other, Please write \_\_\_\_\_

How many people were involved in this experience?

- One
- More than one. Write how many. \_\_\_\_\_

How many times did you have this type of experience with this person or people?  
\_\_\_ times

After this experience, did you continue to have a relationship with the person or people? Yes  
No

Did your experience with unwanted sex result in any of these consequences (mark all that apply)?

- Loss of virginity
- Physical injury
- Pregnancy
- Sexually transmitted infection (STI)

What term do you think best describes your experience?

- Rape
- Attempted rape
- Sexual assault
- Some other type of crime
- Miscommunication
- Bad sex
- Hook-up
- Seduction
- Not sure
- Other, Please write \_\_\_\_\_

Have you told anyone about your experience?

- Yes
- No

How many people have you told? \_\_\_\_\_

What was your relationship with the person or people you told (mark all that apply?)

- Parent or stepparent
- Sibling or stepsibling
- Other relative
- Friend
- Boyfriend/date/partner
- Police
- Doctor/nurse/health care provider
- Therapist/counselor
- Priest/minister/rabbi
- Stranger or someone you just m

