EXAMINING COLLEGE WOMEN'S HOOKUP BEHAVIORS AND CONDOM NEGOTIATION STRATEGIES USED WITH THEIR ONLINE AND OFFLINE PARTNERS

by

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ABSTRACT

Approximately 60-80% of college students report engaging in a hookup at some point during their college career. College students find hookup partners through traditional meeting contexts, but dating apps and social media have become a new resource to identify potential sexual partners. Because males are the ones who physically wear condoms, safer sex efforts may require the female to possess condom negotiation skills to persuade her male partners to use a condom. Previous research has not investigated the use of condom negotiation strategies with partners identified online or offline. The primary purpose of this study was to identify differences between the mode in which college women seek male hookup partners (online, offline, and both online and offline) and the condom negotiation strategies used with these partners. A secondary purpose of the study was to utilize the constructs of the Theory of Planned Behavior (TPB) to predict and identify differences in condom negotiation intention with male hookup partners met online, offline, and both online and offline. The present study utilized a quantitative, cross-sectional design paper and pen survey administered through a convenience sample of 296 undergraduate women enrolled in courses in the College of Human Environmental Sciences at The University of Alabama. Overall, 155 (52.4%) reported engaging in hookups over the previous six months. No significant differences were found between where college women identified their hookup partners and their behavioral intention to negotiate condom use. Nonverbal indirect condom negotiation strategies (F (2, 151, 3.55. $p < 0.05$) were significant among those who found partners offline ($M = 13.38$, $sd = 4.59$, $p = 0.048$). Perceived behavioral

control (p = 0.043) had a significant interaction with behavioral intention when examining the TPB constructs by where college women identified their hookup partners. After adding past condom use with hookup partners to the same model, subjective norms (p = 0.047) was a significant predictor of behavioral intention. Based on the findings of this study, public health educators should continue to explore condom negotiation utilizing the TPB and develop interventions to educate college women how to negotiate condom use with their hookup partners.

DEDICATION

This dissertation is dedicated to Emily K. Garcia (1987-2017), a woman who was unapologetically herself, who never let anything get her down, and was the best friend anyone could ask for.

LIST OF ABBREVIATIONS AND SYMBOLS

UA	University of Alabama
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behavior
RQ	Research question
ANOVA	Analysis of variance
GLM	General linear model
N	Participants in the total sample
n	Participants in a proportion of the total sample
M	Arithmetic mean
sd	Standard deviation
p	P-value: probability associated with the occurrence under the null hypothesis of a value as extreme or more extreme than the observed value
α	Cronbach's index of internal consistency
F	Degrees of freedom
η^2	Partial eta squared
R^2	Coefficient of determination
B	Beta weight: indicator of relationship strength between variables
β	Standardized coefficient
r	Pearson product-moment correlation

%	Percent
<	Less than
>	Greater than
=	Equal to

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CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Despite accounting for 25% of the sexually active population, adolescents and young adults acquire half of all sexually transmitted infections (STIs) annually (Centers for Disease Control and Prevention [CDC], 2017a). STIs can lead to long-term health issues, such as infertility and an increase in an individual's susceptibility to acquiring HIV (CDC, 2017b). Young adults aged 20-24 are at an even greater risk of acquiring an STI due to a combination of behavioral, cultural and biological factors (CDC, 2017a). Additionally, compared to men, women are disproportionately affected as they are more biologically prone to STIs (CDC, 2017b). STI rates have steadily increased over the last several years among young, heterosexual women (CDC, 2014; Higgins, Hoffman, & Dworkin, 2010). An important predictor for the sexual health of women who engage in sexual activity with a man is the relationship status with their male partners (CDC, 2017c). For some women, maintaining the relationship with their partner may take a higher priority than engaging in STI risk reduction behaviors (CDC, 2017c). Despite these statistics, young adults, especially young adult women, continue to engage in risky sexual behaviors putting them at risk for STIs.

College Students Online Hookup Behaviors

College represents a unique time for adolescents and young adults to engage in self-exploration alongside their peers with limited parental supervision. This newfound freedom often

leads to students engaging in romantic relationships and exploring their sexuality (Kenney, Thandani, Ghaidarov, & LaBrie, 2013). One sexual behavior that is seen as a norm on college campuses is engaging in "hookups" which are defined as casual, noncommittal sexual encounters between two individuals, which may or may not include sexual intercourse (Bogle, 2008; Flack et al., 2007) and may occur once or several times with the same partner (Fielder & Carey, 2010a). Unlike traditional dating, hooking up is a form of casual sex that is engaged in without the expectation of a romantic relationship (Lewis, Atkins, Blayney, Dent, & Kaysen, 2013). Hooking up can range from kissing to oral sex to penetrative sexual intercourse (Kenney et al., 2013). According to recent estimates, approximately 60-80% of college students report hooking up (Garcia, Reiber, Massey, & Merriwether, 2012) and between 36-84% of female college students report engaging in a hookup at some point during their college careers (Sienbenbruner, 2015). One of the greatest risks of hooking up reported by both males and females is contracting an STI or unintended pregnancy (Bradshaw, Kahn, & Saville, 2010). Females often report more negative experiences and consequences as a result of hooking up compared with men (Fielder & Carey, 2010b; Kenney et al., 2013).

Sexual partner meeting contexts for college students have traditionally included locations such as dormitories, bars, night clubs, and parties. Additionally, college students can meet partners through mutual friends or family members. However, more recently, global positioning system (GPS) mobile dating applications (apps) and social media have become new resources for college students to "meet" potential partners online. While the worldwide number of users of dating websites (31%) was higher than the number of dating app users (6%) in 2015 (McGrath, 2015), the use of dating apps has steadily increased over the last several years in the United States and tripled among college age adults since 2013 (Smith, 2016). Dating apps have become

increasingly more popular among with 22% of 18 to 24 year olds reporting the use of dating apps in 2015, compared to just 5% in 2013 (Smith, 2016). Tinder is perhaps the most well-known dating app, with 10 million active daily users and 100 million downloads (Smith, 2016). However, there are several other dating apps that can be downloaded and used to identify potential partners.

While the motivations for dating app use vary, one study found that 37.8% of college students reported using dating apps to suggest or initiate sex (Sawyer, Smith, & Benotsch, 2017). Unlike dating apps, which were designed for users to meet potential romantic or sexual partners, social media apps and social networking sites (SNS) like Facebook, Twitter, Instagram, and Snapchat were developed as a social networking tool for users to interact with friends and family members. However, men and women may use social media such as Snapchat in order to send sexual images, gain sexual access, and gain sexual hookups (Moran, Salerno, & Wade, 2018).

Previous research has indicated that those individuals who seek sexual partners through dating apps and websites are engaging in increased levels of risky sexual behavior, such as unprotected sexual activity compared to those individuals who do not meet partners online (Sawyer et al., 2017). Additionally, those who seek sexual partners both offline and online are more likely than those who only seek partners offline to be diagnosed with an STI and have a higher number of vaginal and oral sex partners (Buhi et al., 2013). Previous research has indicated that women who find partners via the internet were more likely than women who met partners offline to self-report a previous diagnosis of an STI (McFarlane et al., 2004) and not use condoms with their online partners (McFarlane et al., 2004; Sawyer et al., 2017; Dir, Cyders, Riley, & Smith, 2015).

Condom Use

Using male condoms is one method to help prevent unwanted pregnancies and the acquisition of STI's. College-educated women generally have more access to health care than non-college educated women, and higher rates of health literacy and self-esteem, factors that may positively influence condom use self-efficacy (Nesoff, Dunkle, & Lang, 2016); however, women are more likely to use female-centric contraception methods, such as birth control pills and intrauterine devices (IUD) than condoms. While female-centric contraception methods can help prevent pregnancy, they do not protect against contracting an STI.

Previous studies have indicated that condom use is affected by relationship context as women with casual partners may be more likely to use condoms compared to women in committed relationships (Nesoff et al., 2016). However, recent studies examining the use of dating apps and college women's condom use have indicated that women using dating apps were more likely to engage in risky sexual behaviors, including not using a condom with casual partners (Sawyer et al., 2017; Dir et al., 2015). Because males are the ones who physically wear condoms during sexual activity, previous studies have indicated that the decision to use a condom is decided predominantly by the male sexual partner (Otto-Salage et al., 2010). If the male partner is reluctant to using a condom, safer sex efforts may require the female to possess condom negotiation skills to persuade her male partners to use a condom during sexual activity (Otto-Salage et al., 2010). Strategies used to negotiate condom use can include verbal direct ("no condom, no sex"), verbal indirect ("we'll need to use large condoms"), non-verbal direct (opening a condom in front of partner), and non-verbal indirect (placing a condom within view of partner) (Lam, Mak, Lindsay, & Russell, 2004, p. 164). As of May 2019, condom negotiation

strategies have been researched; however, studies investigating condom negotiation strategies employed with those who “meet “partner’s online remains unstudied.

Theoretical Framework

Theory is defined as, “a set of interrelated concepts, definitions, and predispositions that present a systematic view of events or situations by specifying relations among variables to explain and predict the events or situations” (Kerlinger & Lee, 2000, p.8). Theory helps explain and predict human behaviors, as well as assists with planning, implementing, and evaluating interventions (Glanz, Rimer, Viswanath, 2008).

The Theory of Planned Behavior (TPB), seen in Figure 1.1., is a health behavior theory developed by Martin Fishbein and Icek Ajzen (1975). The TPB is an extension of the previously conceptualized Theory of Reasoned Action (TRA; Fishein, 1967). Fishbein and Ajzen conceptualized the TRA to help understand the relationship between an individual’s attitudes, intentions, and behaviors (Fishbein, 1967). One aspect that the TRA does not make clear is the volitional control an individual has over the behavioral intentions of the behavior (Ajzen, 1991). The TRA was developed under the assumption that individuals were capable of engaging or performing the behavior if they desired to. However, the TRA did explain behavior for those individuals who had little or no power in performing the behavior (Sharma & Romas, 2012); thus, the construct, perceived behavioral control was added as an extension to the TRA to account for this. This extension led the development of the theory of planned behavior (TPB) (Ajzen, 1991).

The TPB asserts that behavioral intention is the most important determinant of the behavior, which is the individual’s readiness to perform a given behavior (Ajzen, 1991). According to the TPB, behavioral intention is determined by the individual’s attitude and

subjective normative beliefs about the behavior or object. Attitude toward the behavior refers to an individual's beliefs about outcomes of performing the behavior and behavioral belief (Ajzen, 1991). Subjective norm is an individual's estimate of how referent individuals want them to perform and how important these referent individuals' opinions are to the individual (Glanz, Rimer, & Viswanath, 2008).

The construct of perceived behavioral control refers to how much an individual believes they are in command on performing the given behavior (Sharma & Romas, 2012). According to the TPB, the addition of perceived behavioral control combined with behavioral intention, can be used to better predict the engagement in the given behavior (Ajzen, 1991). In addition to the constructs of the TPB, Ajzen (2002) suggests that past behavior should also be considered as a predictor for behavioral intention. Few studies have utilized past condom use to understand the influence on behavioral intention, but results indicate past condom use may be an important variable to consider as past behavior is indicative of future behavior (Ajzen, 2002).

The TPB, which was used to inform the present study, has been used previously to understand sexual behaviors and condom use (Albarracin, Fishbein, Middlestadt, 1998; Heeren et al., 2007; Ansare, 2015) and has been shown to predict condom use, dual contraception use, sexual risk behaviors, and casual sex behaviors among college students (Turchik & Gidycz, 2012). To our knowledge, only one study has applied condom negotiation to the TPB; however, this research is dated and the condom negotiation strategies studied were limited (Carter, McNair, Corbin, & Williams, 1999). Applied to the current study, the TPB will be used to investigate college women's attitudes, subjective norms, perceived behavioral control, and intentions to negotiate condom use with their male hookup partners, as well as the influence of past condom use on behavioral intention.

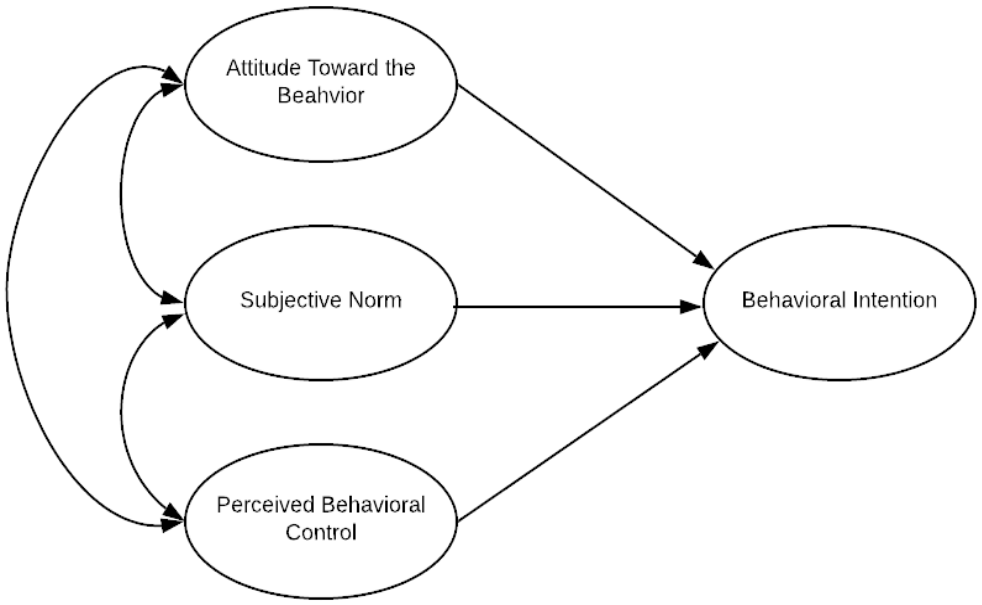

Figure 1.1 Theory of planned behavior-based model for predicting behavioral intention to negotiate condom use with male hookup partners among college women. Adapted from "The theory of planned behavior," by Ajzen, 1991, *Organizational Behavior and Human Decision Processes, 50,* p. 179-211.

Purpose of the Study

Research examining college women's sexual behaviors with their online partners is limited. Additionally, previous research has not investigated condom negotiation strategies or influences employed by college women with their sexual partners met online. The primary purpose of this study was to identify differences between the mode in which college women seek male hookup partners (online, offline, and both online and offline) and the condom negotiation strategies used with these partners. A secondary purpose of the study was to utilize the constructs of the Theory of Planned Behavior (TPB) to predict and identify differences in condom negotiation intention with male hookup partners met online, offline, and both online and offline.

Research Questions

The following research questions were used to guide this study:

1. What is the prevalence of college women who seek male hookup partners online, offline, and both online and offline?
2. Are the scales measuring the constructs of the Theory of Planned Behavior reliable in the context of condom negotiation?
3. Are there differences between college women who seek male hookup partner's online, offline, and both online and offline and their intentions to negotiate condom use?
4. Are there differences between college women who seek male hookup partner's online, offline, and both online and offline and their condom negotiation strategies?
5. Do the constructs of the theory of planned behavior (attitudes, subjective norms, and perceived behavioral control) predict behavioral intention to negotiate condom use for hookups with online, offline, and both online and offline partners?
6. Does past condom use with male hookup partners met online, offline, or both online and offline influence college women's attitudes toward the behavior, subjective norms, and perceived behavioral control to predict future intentions to negotiate condom use?

Significance of the Study

Significant research on hookup behaviors among college women exists; however, as of May 2019 there is no research examining college women's hookup behaviors and condom negotiation strategies with partners met in person (offline) and those met through dating apps, social media, SNS (online). Previous research conducted on dating app use and sexual behaviors has focused mainly on men who have sex with men (MSM); however, studies that examine heterosexuals' use of dating apps is limited. Of these studies, most investigated and reported

primarily on general condom use (i.e. whether a condom was used or not). Furthermore, to date, only one study has been conducted investigating college women's use of dating apps (Dir et al., 2015); however, this study presented no information about the condom negotiation skills employed by the study participants, which is fundamental in reducing STIs and unintended pregnancies. Additionally, previous research examining differences in sexual behaviors between individuals who identified sexual partners online, offline, and both online and offline is outdated as it only investigates the use of online websites to find partners. The present study addresses the hookup behaviors of college women with their online and offline partners, as well as investigating condom negotiation strategies employed during these hookups.

Findings from this study contribute to the literature regarding college women's sexual behaviors, specifically hookup behaviors and condom negotiation strategies. To date, there are no research studies that have investigated condom negotiation strategies for those who engage in hookups, especially those who are using dating apps and social media to identify hookup partners. Findings from this study could assist public health professionals and health educators in the development of programs to educate college students about condom negotiation strategies.

Delimitations

The parameters for this study consisted of students recruited from a single, large university in the southeastern United States, The University of Alabama. The study employed quantitative research methods and analysis to examine the sexual behaviors of college women with their online and offline male hookup partners. Inclusion criteria for this research was limited to include participants who are female, between the ages of 18-24, and enrolled at the university as undergraduate students during the spring semester of 2019.

Limitations

Results from this study musts be considered while remaining cognizant of several important limitations. First, the present study employed convenience sampling techniques. Given that not every member of the population had an equal chance of being selected, the generalizability of the study findings is limited. Questionnaire responses involved self-reporting of information while participants were in close proximity to each other and the principal investigator (PI); thus, the potential for social desirability bias should also be considered a limitation. To reduce the potential for participants to respond in ways that were perceived as socially acceptable, the participants were asked not to write their name or any other identifying information on the questionnaire and to not share their answers. The researcher also assured participants that their responses would be kept anonymous. Another limitation is the cross-sectional design of the present study. Since such a design is limited to the conclusions based on data from a single point in time, it is not possible to infer causation. The study limitations are discussed in more detail in Chapter 5 of this document.

Operational Definitions

The following operationalized definitions of terms used in this study:

Hookup. For the purpose of this study, a *hookup* is a casual, noncommittal sexual encounter between two individuals, which may or may not include sexual intercourse (Bogle, 2008; Flack et al., 2007) and may occur once or several times with the same partner (Fielder & Carey, 2010a).

Offline partners. *Offline partners* are defined as partners met through traditional meeting locations such as dormitories or other residences, bars/nightclubs, parties, class, student clubs/teams, work, churches, common interest groups, public places, or other physical locations

(Kuperburg & Padgett, 2017). Additionally, *offline partners* can include those partners met through social networks like family, friends, community leaders, matchmaking businesses or personal ads, and individuals with shared history (grew up together/hometown) (Kuperburg & Padgett, 2017).

Dating applications (apps). In the present study, *dating apps* are defined as global positioning system (GPS) dating applications (apps) downloaded on an individual's cellphone that use geosocial location to search for romantic and sexual partners. These dating apps include, but are not limited to: Tinder, Bumble, Hinge, The League, Zoosk, Plenty of Fish, Coffee Meets Bagel, OkCupid, Siren, Grouper, Jswipe, Bristlr, and How About We.

Social media or **Social networking sites (SNS).** For the purpose of this study, *social media* is defined as mobile applications (apps) downloaded on an individual's cell phone. These social media apps include, but are not limited to: Facebook, Instagram, Snapchat, and others. These apps include those social networking sites (SNS) which may or may not have mobile applications, such as Facebook and Twitter. SNS can also include platforms like Myspace, blogs, or other similar websites. Both social media and SNS "can be described as profile-based sites that encourage users with similar backgrounds and interests to develop and initiate relationships with one another… to provide an online community that not only promotes the individual, but also emphasizes the individual's relationships within the community" (Howell & Taylor, 2011, para. 3).

Online partners. *Online partners* are defined in the present study as those partners met through dating apps. *Online partners* also include those partners "met" through online dating websites turned mobile dating apps such as EHarmony, Match.com, Christian Mingle, and other similar sites. *Online partners* can also include those individuals "met" through social media or

social networking sites like Instagram, Snapchat, Twitter, or Facebook or special interest websites.

Partner Meeting context. *Partner meeting context* is defined as the contexts in which individuals first meet their hookup partners (Grello et al., 2006). These partner meeting contexts include online and offline venues (See Online partners and offline partners).

Condom. In the present study, *condom* refers to male condoms, worn by the male partner on their penis during sexual intercourse (anal or vaginal) for contraception or to protect against sexually transmitted infections.

Condom negotiation. For the purpose of this study, *condom negotiation* is defined as "the ability to persuade a partner to use a condom" (Noar, Morokoff, & Harlow, 2002) and "describes the process of deciding to use or not use a male condom during sexual intercourse" (Peasant, Parra, & Okwumabua, 2015).

Condom negotiation influences or strategies. *Condom negotiation influences or strategies* can include verbal direct, verbal indirect, nonverbal direct, and nonverbal indirect methods in order to persuade a partner to use a condom during sexual intercourse (Lam et al., 2004).

Past behavior. In the present study, *past behavior* refers to previous condom use reported by the study participants with their male hookup partners.

Sexual intercourse. For the purpose of this study, *sexual intercourse* is defined as an individual engaging in either vaginal intercourse (i.e. a man's penis in a woman's vagina) or anal intercourse (i.e. a man's penis in a woman's anus).

Female-centric contraception. *Female-centric contraception* is defined as contraception that's purpose is to provide protection against pregnancy, but does not provide protection against

STIs or HIV. Examples of female-centric contraception includes but is not limited to, birth control pills, intrauterine devices (IUD) diaphragms, and sterilization (Daniels, Mosher, & Jones, 2013).

College females. *College females* are defined as biologically female, undergraduate students between the ages of 18-24, enrolled at The University of Alabama.

Attitude toward the behavior. This theory of planned behavior (TPB) construct is generally defined as an individual's overall feeling that a behavior is favorable or unfavorable (Ajzen, 1991). For the purpose of this study, *attitude toward the behavior* is operationally defined as an individual's agreement or disagreement that condom use could help protect them against STIs.

Subjective norms. This TPB construct is generally defined as an individual's estimation of how important individuals in their lives would want them to perform (Ajzen, 1991). For the purpose of this study, *subjective norm* is defined as college women's perceptions of how her partner would want her to behave (i.e. the use or non-use of condoms).

Perceived behavioral control. This TPB construct is universally defined as the extent to which an individual believes they are able to perform a certain behavior (Ajzen, 1991). In this study, the *perceived behavioral control* construct is defined as the extent in which college women believe they are in control of negotiating condom use with their male sexual partners.

Behavioral intention. This TPB construct is defined as an individual's readiness to perform a behavior and is the antecedent to behavior (Ajzen, 1991). For the purpose of this study, *behavioral intention* is defined as a college female's intention or readiness to negotiate condom use with her offline and online partners.

Summary

In this chapter, an overview of hookup culture on college campuses, the use of dating apps as a tool to identify potential sexual partners, and condom negotiation strategies was presented. A rationale for studying college women's sexual behaviors and condom negotiation use with their online and offline partners was provided in this chapter, followed by the theoretical framework, the purpose of the study, proposed research questions, significance of the study, delimitations, limitations, and the operational definitions. The literature related to the consequences of engaging in risky sexual behaviors; college hookup culture; the emergence and use of dating apps and social media; the risks and risky behaviors associated with hooking up; condom use among college students; condom negotiation strategies; and theory-based condom negotiation research specific to college students are presented in Chapter 2. The proposed methodology for the study is described in Chapter 3. The study results are presented in Chapter 4, followed by the conclusions drawn from the study and implications to the field of health education in Chapter 5.

CHAPTER 2

LITERATURE REVIEW

Given the information that college students continue to inconsistently use condoms despite knowing the benefits (Fehr, Vidourek, & King, 2014) and the growing use of dating apps to seek sexual partners, there is a need to better understand the condom negotiation skills of those who seek hookup partners online—particularly among young women who are at greater risk of contracting sexually transmitted infections (STIs) (Centers for Disease Control and Prevention [CDC}, 2017b). The primary purpose of this study was to identify differences between the mode in which college women seek male hookup partners (online, offline, and both online and offline) and the condom negotiation strategies used with these partners. A secondary purpose of the study was to utilize the constructs of the Theory of Planned Behavior (TPB) to predict and identify differences in condom negotiation intention with male hookup partners met online, offline, and both online and offline.

In this chapter, the literature related to the consequences of engaging in risky sexual behaviors; college hookup culture; the emergence and use of dating apps and social media; the risks and risky behaviors associated with hooking up; condom use among college students; condom negotiation strategies; and theory-based condom negotiation research specific to college students is presented.

Sexually Transmitted Infection and College Students

STIs are acquired through various sexual activities, such as oral sex, vaginal or anal intercourse. Treating STIs in the United States has an estimated economic impact of approximately $16 billion annually (Owusu-Eduesi et al., 2013). Common STIs include chlamydia, gonorrhea, human papillomavirus (HPV), syphilis, hepatitis B, herpes simplex virus type two, and human immunodeficiency virus (HIV; CDC, 2017a). STIs can affect individuals of all ages, racial and ethnic groups, and genders (CDC, 2017a). However, in the United States, adolescents and young adults are primarily affected. STIs can lead to long-term health issues such as infertility and increase an individual's susceptibility to acquiring HIV (CDC, 2017b). Despite only making up 25% of the sexually active population, individuals between the ages of 15-24 account for half of all new STI cases annually (CDC, 2017a). For young adults aged 20-24, the risk of acquiring an STI is even greater. These individuals are more prone due to a combination of behavioral, cultural, and biological factors that increases their susceptibility (CDC, 2017a). Higher rates of STIs among adolescents and young adults can be attributed to multiple barriers to accessing STI prevention and treatment services including the inability to pay for prevention or treatment; lack of transportation; long patient wait times; conflicts between clinic hours and work or school schedules; embarrassment attached to STI services; and concerns about confidentiality (CDC, 2017a). When examining high STI rates among both male and female adolescents and young adults, women are disproportionately affected (CDC, 2017b).

STI rates have been increasing over the last several years among young, heterosexual women. One in four sexually active females will contract an STI such as chlamydia or human papillomavirus (HPV) (CDC, 2017c). In 2016, women aged 20-24 years had the highest rates of

chlamydia compared to any other age group among both males and females, and the highest rates of gonorrhea and primary and secondary syphilis compared to any other age group among women (CDC, 2017c). Most STIs do not always present symptoms and thus, it is important to get tested and treated. However, when left untreated, chlamydia and gonorrhea can cause pelvic inflammatory disease (PID) which can damage the female reproductive organs and cause infertility (CDC, 2017d). Despite these statistics, young adults, especially young adult women, continue to engage in risky sexual behaviors that put them at risk for STIs. Additionally, women are more likely to rely on female-centric contraception, which does not protect against STIs, regardless if they are married or single (Daniels et al., 2013). Furthermore, women are more biologically vulnerable to STIs than males (CDC, 2017b). Due to these aforementioned factors, STI incidences have been increasing among young, heterosexual women in the United States (CDC, 2017b).

College Hookup Culture

According the US Department of Education (2018), 16.9 million young adults enrolled in postsecondary education in 2017. For these young adults, college represents a time of freedom and self-exploration, which includes engaging in romantic relationships and exploring their sexuality alongside their peers with limited parental supervision (Kenney et al., 2013). For most college students, engaging in “hookups” is seen as a normative behavior (Bogle, 2008; Garcia, Reiber, Massey, & Merriwether, 2012). A hookup is defined as a casual, noncommittal sexual encounter between two individuals, which may or may not include sex (Bogle, 2008; Flack et al., 2007). Unlike traditional dating, a hookup can occur once or several times with the same partner (Fielder & Carey, 2010a) and college students often engage in hookups without the expectation of a romantic relationship (Lewis et al., 2013). In fact, Garcia and Reiber (2008) indicated that

hookups generally adhere to three rules: (1) the individuals engaging in hookups are not in a traditional romantic relationship (i.e. boyfriend/girlfriend), (2) there are no prior discussions of what behaviors will occur during the hookup, and (3) there is no promise that the hookup will lead to any subsequent hookups or a romantic relationship.

Previous research suggests that hooking up has replaced traditional dating on college campuses with more students seeking unattached sexual experiences instead of committed relationships (Bogle, 2008; Bradshaw et al., 2010). Previous studies have estimated that between 60-80% of students engage in a hookup at least once during their first-year in college (Grello, Welsh, & Harper, 2006; Paul & Hayes, 2002), and between 36-84% of female college students have engaged in a hookup at some point during their college career (Siebenbruner, 2015).

Hooking up can include a wide range of sexual behaviors from kissing to touching breasts or genitals to penetrative anal or vaginal intercourse (Fielder & Carey, 2010a; Kenney et al., 2013), to oral sex or mutual masturbation (Garcia & Reiber, 2008), or any combination of these sexual acts. According to a study conducted by Fielder and Carey (2010a), 98 % of hookups involved kissing and many involved touching of the breasts (67%) or genitals (56%). Only 27% of hookups involved oral sex, 27% involved vaginal sex, and zero involved anal sex (Fielder & Carey, 2010a). In a separate study, when asked about their most recent hookup, 46.7% of students reported not having oral or vaginal intercourse, 14.3% reported only having oral sex, 14.9% reported having only vaginal sex, and 24.1% reported engaging in both oral and vaginal sex (Lewis, Granato, Blayney, Lostutter, & Kilmer, 2012). Garcia and Reiber (2008) assessed specific sexual behaviors during hookups and found that 58% engaged in sexual touching above the waist, 53% below the waist, 34% engaged in sexual intercourse, and 71% performed or received oral sex.

College Student Motivations for Hookup Behavior

College students' motivations for engaging in hookups vary. Previous studies have indicated that a vast majority of undergraduate students engage in hookups primarily to receive sexual and physical gratification from their hookup partners (Fielder & Carey, 2010a, 2010b; Garcia & Reiber, 2012; Kenney et al., 2013; Shepherdson, Walsh, Carey, & Carey, 2016). However, compared to offline hookup motivations, motivations for using dating apps and social media apps vary from meeting new people to using the apps to identify and gain access to sexual partners (Cabecinha et al., 2017; Moran et al., 2018 Sawyer et al., 2017)

Hookup motivations and benefits. Previous research has indicated that both males and females engage in hookups for emotional or sexual gratification, peer pressure, and as the result of alcohol or drug intoxication (Garcia & Reiber, 2008). Additionally, one of the most common motives reported for engaging in hookups was sexual desire and a need to feel attractive or desirable (Fielder & Carey, 2010a). Fielder and Carey (2010a) reported additional reasons college students engage in hookups, which include a spontaneous urge, partners attractiveness, partners willingness, and intoxication (Fielder & Carey, 2010a). Furthermore, males and females reported engaging in hookups in the hopes that it will lead to a romantic relationship (Garcia & Reiber, 2008); however, this research is conflicting as Bradshaw and colleagues (2010) found that both males and females report engaging in hookups because there is no expectation for commitment and it is a "no strings attached" sexual experience. The authors also reported that some additional benefits of engaging in hookups was it is fun and exciting, feeling desired, and because hookups are sexually gratifying (Bradshaw and colleagues, 2010).

Although males and females report similar reasons for engaging in hookups, there are some differences in hookup motivations between sexes. While both men and women have

reported engaging in hookups in order to form a romantic relationship with their hookup partners, males most often report engaging in hookups in order to receive physical and emotional satisfaction from their partners and are more likely than women to report being interested in additional hookups (Garcia & Reiber, 2008). Females engage in hookups for a variety of different reasons. Shepherdson et al. (2016) in a study of 262 first-year college women, reported engaging in hookups to feel more sexually desirable, to explore their sexuality and feel sexual pleasure, to increase self-confidence, to experience positive emotions, experience closeness or connectedness, to avoid a relationship, and because their peers are hooking up. Kenney and colleagues (2013) reported that 69.7% of women believe their peers engaged in hookups for sexual gratification or pleasure, for a new sexual experience, to obtain attention from the opposite sex, liking the hookup partner, or wanting to have "fun".

Dating app and social media motivations and benefits. The motivations for using dating apps varies compared with offline hookup motivations. Cabecinha et al. (2017) found that 1 in 6 males and 1 in 10 females in Britain reported using the internet to find sexual partners. A study of 500 heterosexual undergraduate students conducted in the United States by Sawyer and colleagues (2017), identified the primary motivations associated with dating app use among users was to have fun (94%), meet new people (90.5%), and be social or to chat (90%). However, participants also reported using dating apps to flirt (88.1%), feel attractive or sexy (74.1%), find a dating partner (68.7%), and to initiate sex (37.8%) (Sawyer et al., 2017). A similar study of 163 adults aged 18-30, identified three additional motivations for using dating apps: ease of communication, self-worth validation, and the thrill of excitement and trendiness (Sumter, Vandenbosch, & Ligtenberg, 2017). As of May 2019, there is limited research on using social media, such as Instagram, Twitter, or Snapchat to identify potential partners. Moran and

colleagues (2018) reported that some users motivation to utilize Snapchat was to send sexual images, gain sexual access, and use it as a tool to hookup.

Partner Meeting Contexts

College students meet their potential romantic and sexual partners in a variety of different contexts. Previous research has identified college classes, student clubs/teams/organizations, dormitories, work, parties, bar/nightclubs, common interest groups, or other public places as possible meeting locations for college students (Kuperburg & Padgett, 2017). A previous study examining college student's perceptions of hookups reported that 67% of hookups occur at parties, 57% at dormitories or fraternity houses, 10% at bars or nightclubs, 4% in cars, and 35% at any available location (Paul & Hayes, 2002). In addition to traditional locations, spring break and other holidays or vacations have also been reported as a time in which college students engage in hookups (Josiam, Hobson, Dietrich, & Smeaton, 1998). In fact, one study reported approximately 30% of participants had engaged in sexual intercourse with someone they had met during spring break vacation (Sönmez et al., 2006). Such settings, in which alcohol and other drugs are present, may facilitate hookups (Garica et al., 2012). However, there are other contexts in which individuals can meet potential partners, such as through shared history (hometown/grew up together), family, friends, community leaders, matchmaking services, personal ads (Kuperburg & Padgett, 2017), dating websites and more recently through dating apps and social media.

Dating apps serve as a social intermediary, especially for young adults. Social networks which have been previously used to match potential partners such as family, friends, community leaders, as well as matching making businesses, agencies, or columns (Ansari, 2015; Quiroz, 2013; Slater, 2013) have been partially displaced by dating apps. Other traditional partner

meeting locations, such as schools, universities, bars, clubs, and work have also been partially displaced with dating apps by allowing individuals to meet and form relationships with individuals whom they have no previous social ties (Rosenfield & Thomas, 2012). Online venues can provide opportunities for individuals to increase their chances of acquiring a partner (Cabecinha et al., 2017).

Dating Applications and Social Media

The use of dating apps, including versions of pre-existing dating websites, has emerged as a popular resource to meet potential partners. Online dating has grown in popularity with one in ten Americans reporting using one of many online dating platforms to find romantic or sexual partners (Smith, 2016). Online dating has almost tripled since 2015 among 18-24 year olds from 10% to 27% (Smith, 2016). In particular, dating apps have become increasingly more popular with 22% of 18 to 24 year olds reporting the use of dating apps in 2015, compared to just 5% in 2013 (Smith, 2016). Of those who reported using dating apps in 2015, two-thirds reported going on a date with someone they met on a dating app, up from 43% in 2005 (Smith & Anderson, 2016). In a study examining young adults' use of the Tinder dating app, the authors found that 40% of those ages 18 to 26 use Tinder (Shaprio et al., 2017) and 23% used Tinder on a daily basis (Sumter et al., 2017). Previous research has focused on investigating dating app use to identify sexual partners and associated sexual behaviors; however, this research has primarily been limited to men who have sex with men (MSM). One study examining heterosexual's use of dating apps reported that over 25% of individuals reported having sex with someone they had met through a dating app (Sawyer et al., 2017).

Dating apps offer experiences that differ from their web-based counterparts as dating apps are designed to supplant online dating websites by offering users mobility in locating

potential partners. Dating apps use geosocial networking (GSN) in order to allow users to view potential partners within a specified geographic location and age range (Sawyer et al., 2017). Unlike online dating websites, which require users to develop their dating profiles, most dating apps are free to download and require less effort to setup a profile. Mutually interested partners are matched and can chat via the dating app or arrange to meet and engage in a romantic and/or sexual relationship (Shapiro et al., 2017).

Social Media and Social Networking Sites

Unlike dating apps, which are designed for users to meet potential romantic or sexual partners, social networking sites (SNS) and social media apps like Facebook, Twitter, Instagram, and Snapchat were developed as social networking tools to allow users to express themselves and interact with other users (Howell & Taylor, 2011). While there is limited research on the use of social media apps as tools to identify sexual or romantic partners, there is some evidence that suggest social media apps may be used in that manner. One study indicated that more men and women are using Snapchat in order to send sexual images, gain sexual access, and gain sexual hookups (Moran et al., 2018). A study investigating teenagers between 17 and 19 years of age who use the internet to identify sexual partners, reported that 4 out of 5 teens had used a SNS site like Myspace or Facebook to identify sexual partners, along with a number of other websites including Craigslist (Buhi et al., 2013). A recent study investigated the “common connections” feature on Tinder which displays mutual Facebook friends between users and the effect of this feature on the engagement of risky sexual behaviors among users (Green, Turner, & Logan, 2018). The study authors reported that users who used the “common connections” feature to identify a potential date, were less likely to engage in sexual decision-making behavior like discussing HIV or STI testing (Green et al., 2018).

Risks of Engaging in Hookups

While hookups can provide some benefits to those who engage in them, such as increased self-confidence and sexual pleasure (Shepherdson et al., 2016), previous studies have found that hooking up, is associated with a variety of negative consequences such as depression (Owen & Fincham, 2010), regret (Owen et al., 2010; Uecker et al., 2015), embarrassment (Couch & Liamputtong, 2007; Lewis et al., 2012; Napper et al., 2015), concerns of safety (Madden & Lenhart, 2006; Padgett, 2007), and being sexually assaulted or harassed (Buckels, Trapnell, & Paulhus, 2014; DeHue, 2013; Flack et al., 2016; Ford, 2017, Grieve, Marrington, & Jonason, 2017; Paul & Hayes, 2002; Shaw, 2016; Thompson, 2018).

Physical and Emotional Risks

Males and females both experience regret (Owen et al., 2010; Paul & Hayes, 2002; Uecker et al., 2015), embarrassment (Lewis et al., 2012; Napper et al., 2015), and other negative emotions (Kenney, Lac, Hummer, & LaBrie, 2014; Montes et al., 2016) as result of hooking up. However, women report experiencing more feelings of regret and negative reactions following a hookup (Fielder & Carey, 2010b; Kenney et al., 2013; Owen et al., 2010; Paul & Hayes, 2002) than men who report more positive experiences (Garcia & Reiber, 2008).

Offline hookup risks. While males and females agree the greatest risks of hooking up were contracting an STI and pregnancy (Bradshaw et al., 2010), overall women tend to report negative consequences as a result of hooking up than men (Owen & Fincham, 2010). One study examining men and women at Duke University reported that approximately one out of seven students regret most or all of their hookups in the previous semester (Uecker et al., 2015). Fielder and Carey (2010a) found that women who engaged in hookups reported experiencing depressive symptoms compared with women who did not engage in hookups. A separate study conducted

by Owen and Fincham (2010) reported that 48.7% of women reported only negative feelings compared with 26% of men post-hookup. In another study, women respondents indicated that wanting a relationship after a hookup and the partner feeling otherwise, and the risk of becoming emotionally attached were some of the possible negative consequences of hooking up (Bradshaw et al., 2010). Additionally, some individual's report experiencing embarrassment following a hookup encounter. Lewis and colleagues (2012) reported that 27.1% of college students felt embarrassed post-hookup. These findings were supported by a separate study conducted by Napper and colleagues (2015) who reported regret and embarrassment as the most commonly reported consequences of hooking up. In addition to regret and embarrassment, some women may experience other negative emotional consequences for engaging in hookups, such as those associated with sexual double standards, stigma, criticism (Allison & Risman, 2013; Stinson, 2010), and damage to their reputation (Campbell, 2008).

Physical risks, such as sexual assault, are also reported as a consequence of engaging in hookups. One study examining findings from the 2005-2011 Online College Life Survey reported that women were more likely to report being physically forced to engage in intercourse with a partner she did not know very well, especially after the woman had consumed nine or more alcoholic drinks (Ford, 2017). However, even in the absence of alcohol, women engaging in hookups are at risk of experiencing sexual assault. Paul and Hayes (2002) asked college students to describe their best and worst hookup experiences. The authors found that college women were four times more likely than males to report being forced to engage in sexual activity (Paul & Hayes, 2002). A separate study also found that college women reported unwanted anal, oral, and vaginal intercourse during their previous hookup experiences (Flack et al., 2007). A

more recent study found that 78% of respondents had experienced sexual assault within the context of a hookup (Flack et al., 2016).

Online hookup risks. For those individuals who seek partners through online venues, the risk of rejection (Lawson & Leck, 2006) and embarrassment of using online dating to find a partner, especially for those who sought partners on fetish or niche sexual websites was a concern (Couch & Liamputtong, 2007). Additionally, past research has also reported on the concerns online daters have for their safety (Madder & Lenhart, 2006; Padgett, 2007). Some online daters are concerned that the individuals they "meet" online are lying to them (Couch & Liamputtong, 2007, 2008, 2012) or deceiving them in some way (e.g. how they look in real life versus how they look online; Couch & Liamputton, 2012; Toma & Hancock, 2010).

A study investigating perceptions of online dating and associated risks reported that 66% of internet users believed online dating was dangerous (Madden & Lenhart, 2006). For those who actually engaged in online dating, 43% believed it was risky or dangerous (Madden & Lenhart, 2006). In a study of women, 8% reported safety was their primary concern during their most recent date with someone they met online (Padgett, 2007). Other safety concerns have been reported such as receiving hate mail, death or sexually violent threats, and harassment by individuals online (Dehue, 2013). This behavior, known as trolling, occurs when an individual is intentionally offensive or menacing through their online communication (Bishop, 2014). Instagram accounts like *Bye Felipe* and *Tinder Nightmares* feature screenshots of harassment and sexist abuse women have received from men while using dating apps and websites. Two studies analyzing the content of these Instagram accounts and screenshots of conversations with males who are trolling women, have identified a lack of safety as a primary concern for women using dating apps (Shaw, 2016; Thompson, 2018). This lack of safety usually involves threats of

sexual violence (Shaw, 2016), misogyny, and gendered violence (Shaw, 2016; Thompson, 2018). Compared with women, men engage in more trolling behavior online (Buckels et al., 2014). However, a more recent study investigating trolling and associated personality behaviors (e.g. narcissism) were inconsistent with previous study findings (March et al., 2017).

Risk Behaviors of Hooking Up

Previous studies have indicated that those individuals who engage in hookups with online or offline partners report engaging in risky behaviors, such as binge drinking and/or using drugs (Choi et al., 2017; Fielder & Carey, 2010b; Lambert et al., 2003; Paul & Hayes, 2002), having a higher number of sexual partners (Sawyer et al., 2017; Shapiro et al., 2017), and reporting a previous STI diagnosis (Bradshaw et al., 2010; McFarlane et al., 2004).

Impact of Alcohol and Drug Use

Offline alcohol and drug use. The use of alcohol and drugs has been found to facilitate hookups among college students (Lambert et al., 2003; Paul & Hayes, 2002). LaBrie and colleagues (2014) found that when asking males and females about their last hookup experience, 30.7% of females and 27.9% of males reported that they would not have engaged in their last hookup if they had not been drinking alcohol. According to one study of undergraduate students, 64% had consumed at least one alcoholic drink and 7% used marijuana prior to engaging in their most recent hookup (Fielder & Carey, 2010a). In a more recent study, binge drinking was reported by 47% of participants during a hookup experience (Kuperberg & Padgett, 2017). In addition, alcohol and drug use prior to hooking up has also been associated with hookup motives that result in negative emotional consequences (Montes et al., 2016).

Online alcohol and drug use. The association between dating app use and alcohol and recreational drug use has been mostly limited to MSM. In a study examining substance use

among MSM who use dating apps, 91.7% reported alcohol use and 59.7% reported using marijuana before having sex (Landowitz et al., 2013). However, these results may not be applicable to heterosexual dating app users. One study that did examine heterosexuals, investigated differences between bisexual, heterosexual, and homosexual dating app users and the association between alcohol, recreational drug use, and sex surveyed 626 students in Hong Kong. The study authors reported no association between alcohol consumption and sex among those who reported using dating apps (Choi et al., 2017).

Online Versus Offline Partners

Previous studies have indicated that there are some differences in risky sexual behaviors between those individuals who seek sexual partners online compared with those individuals who find sexual partners offline. Individuals who use the internet to seek sexual partners were more likely to report unprotected sex (Choi et al., 2016; Green et al., 2018; Sawyer et al., 2017), have more sexual partners (Brown, Pugsley, Cohen, 2015; Buhi et al., 2013; Dir et al., 2015; Paul, McManus, & Hayes, 2010, England, Shafer, Fogarty, 2007; Sawyer et al., 2017; Shapiro et al., 2017), and fail to discuss sexual histories compared to individuals who met their sexual partner's offline (Brown et al., 2015; Buhi et al., 2013; Couch, Liamputtong, & Pitts, 2012; McFarlane et al., 2000; McFarlane, et al., 2004).

Condom use. Previous studies have indicated that condom use during hookups with offline and online partners varies. Lewis and colleagues (2012) reported that of the students who had engage in oral, vaginal, or anal sex during their most recent hookup (offline), only 46.6% reported using a condom. In regard to dating app use, a recent study of heterosexuals found that those participants who were in casual relationships were more likely to report dating app use and to have engaged in unprotected sex (Sawyer et al., 2017). Additionally, a recent study

investigating college students who met a partner online or in-person (i.e. offline) in the past year, found no difference in the likelihood of condom less sex among those two groups (Green et al., 2018). However, Choi and colleagues (2016) found that among a sample of Chinese college students, the use of dating apps was associated with having a casual partner and not using a condom.

Number of sexual partners. Previous research has indicated a relationship between dating app use and a higher number of lifetime sexual partners and sexual partners in the previous three months (Brown et al., 2015; Dir, et al., 2015; Sawyer et al., 2017; Shapiro et al., 2017). A study comparing young adults with online versus offline partners found that those who had online partners reported having a higher number of vaginal and oral sex partners (Buhi et al., 2013). Additionally, heterosexual men and women who reported meeting sexual partners through the internet were more likely to have multiple sex partners in the previous three months and anonymous sex partners (Brown et al., 2015). In a separate study, reporting five or more sexual partners was associated with being a Tinder dating app user (Shapiro et al., 2017). One of the few studies that was focused on dating app use among college women, found that those who were users of the dating app Tinder, reported significantly higher rates of sexual partners who were one-night stands or casual hookups than non-Tinder users (Dir, et al., 2015). Furthermore, one study found the relationship between dating app use and multiple sex partners was not statistically significant (Sawyer et al., 2017); however, 22.4% of individuals who use dating apps reported having multiple sex partners in the previous three months (Sawyer et al., 2017).

Additionally, previous research has indicated that the number of hookup partners met through traditional meeting contexts varies. Paul and colleagues (2010) reported that the average number of hookup partners for college students throughout their college career was

approximately 11 partners (median =7, range 1-70). However, the authors also indicated the range of hookup partners was 0 to 65 partners per a year (median = 6; Paul et al., 2010). An additional study conducted by England et al. (2007) reported that 40% of the participants in their study had engaged in hookups between 0-3 times, 40% of participants engaged in hookups between 4-9 times, and 20% had engaged in hookups more than 10 times over their college career.

Sexually transmitted infections. Previous research has indicated that the risk of acquiring an STI or reporting a previous diagnosis of STIs for those individuals who engage in hookups is common (Napper et al., 2015). In a study conducted by Napper and colleagues (2015) 25% of participants reported concern over an STI as one negative consequence of hooking up. Conversely, a study conducted by Downing-Matibag and Geisinger (2009) reported that approximately half of the authors study sample of college students were unconcerned about the risks of acquiring an STI from hooking up and most were unaware of the risks of STIs from unprotected oral sex.

Those individuals who use the internet to identify sexual partners, may be at higher risk for STIs (McFarlane et al., 2000). However, one study found that those who sought partners online did not believe there was a greater risk of contracting an STI from someone online than offline (Couch et al., 2012). A previous study conducted by McFarlane and colleagues (2004) found that 43% of the participants reported having met a sexual partner over the internet in chat rooms, bulletin boards, browsing user profiles, or through dating/matchmaking services. Those women who found partners via the internet, were more likely to engage in risky sexual behaviors, such as self-reporting a previous diagnosis of an STI and not using condoms regularly with their internet hookup partners (McFarlane et al., 2004). However, the same study found that

those women who sought sexual partners through the internet, were more likely to engage in higher rates of protective behaviors, such as being tested for both STIs and HIV and receiving education about STI and HIV prevention (McFarlane et al., 2004). A separate study found no associations between seeking sexual partners on the internet and STI history, which may indicate that those who seek partners both online and offline may have similar health outcomes in terms of STIs (Brown et al., 2015). Similarly, a study conducted by Buhi and colleagues (2013) compared those individuals with only offline partners to those with both online and offline partners and found that those with both online and offline partners were more likely to be diagnosed with an STI.

Condom Use

Using barrier methods, such as internal and male condoms during sexual activity can help reduce the risk of STIs and HIV (CDC, 2017d). Male latex condoms are particularly effective as condoms can block the transmission and acquisition of STIs by preventing contact between the wearer's penis and the sexual partner's genitals (CDC, 2017d). Condoms are an inexpensive, readily available, and effective method to reduce one's risk of contracting an STI or HIV (CDC, 2017d); however, despite health education efforts to educate college students about the benefits of condoms, college students continue to fail using condoms consistently and properly during sexual intercourse (Fehr et al., 2014). According to results from the National College Health Assessment (NCHA) conducted by the American College Health Association (2017), only 4.9% of males and females used a condom during oral sex, 47.8% used a condom during vaginal intercourse, and 26.9% used a condom during anal intercourse in the previous 30 days. However, there are various reasons why college students continue not to use condoms. For example, the relationship with the partner (e.g casual or committed) and level of trust can impact the use of

condoms during sexual intercourse (Fazekas, Senn, & Ledgerwood, 2001; Hattori, 2014). Additionally, when condoms are considered to be uncomfortable, awkward, disrupt the mood, or are considered messy, they are less likely to be used (Moor & Rosenthal, 1991).

Partner Relationships, Trust, and Condom Use

An important predictor of a heterosexual woman's sexual health, is the relationship status with her male partner (CDC, 2017c). For some women, if there is a conflict, maintaining the relationship with the partner may take a higher priority than engaging in STI risk reduction behaviors (CDC, 2017c). Research has indicated that the level of trust between two partners can influence the decision to use condoms. Using or not using a condom during sexual intercourse can influence feelings of trust with a partner, just as trust in a partner can influence condom use (Hattori, 2014). Not using a condom is sometimes considered an effective way for an individual to demonstrate or develop trust with their partner (Fazekas et al., 2001). Requesting a partner to use a condom can damage trust by implying that one partner has previously or is currently engaging in risky behaviors (Hattori, 2014) or can be perceived as a confession or accusation of infidelity or promiscuity (Fazakes, 2001). A study of college students found that trust was reported by males and females as an important factor in their decision to engage in sexual activity (Kalish, 2018). However, only males saw trust as relating to a woman's sexual health and whether or not she was "clean" or free of STIs (Kalish, 2018). This perception of a partner being "clean" may be an additional reason why some students do not use condoms with their hookup partners, as well as the context in which individuals meet their sexual partners (i.e. online vs. offline).

Women and Condom Use

There are two primary reasons women may not use condoms with their sexual partners: women are more likely to rely on female-centric contraception methods, such as birth control pills, intrauterine devices (IUD), diaphragms, or sterilization, which do not protect against STIs or HIV (Daniels et al., 2013), and because condom use involves two people making a decision about whether or not a condom will be used during sexual activity. For women, this may require skills to negotiate or persuade male partners to use a condom, as women are not the ones who actually wear the condom (Peters, Jansen, & van Driel, 2010; Noar, Morokoff, & Harlow, 2002). Furthermore, women are socialized to be passive sexually and may be told that condom use is ultimately controlled by the male (East et al., 2007).

Previous research examining women's overall condom use with both hookup partners and partners in a committed relationship, has suggested that women with casual partners may be more likely to use condoms compared to women in committed relationships (Cassell, Mercer, Imrie, Copas, & Johnson, 2006; Kershaw, Ethier, Niccolai, Lewis, & Ickovics, 2003). However, there is some evidence that suggests that women who met hookup partners offline, in public places, were more likely to engage in unprotected sex (Kuperburg & Padgett, 2017). Furthermore, when comparing those women with main sexual partners only, casual partners only, and casual and main sexual partners, those who had both casual and main partners were less likely to use condoms (Nesoff et al., 2016). Previous studies about condom use among women who seek partners online are conflicting. There are some studies which suggest that women may not be using condoms when engaging in sexual intercourse with partners met through online venues (McFarlane et al., 2014; Sawyer et al., 2017). However, there is evidence

that suggests condom use is higher among women who seek partners online (Shapiro et al., 2017).

Condom Use during Hookups

Previous research finding about condom use during hookups vary. Some research suggests that those who find hookup partners offline through traditional meeting contexts may be more likely to use condoms, especially when compared to individuals who have main sexual partners (Cassell, et al., 2006; Kershaw et al., 2003). However, this research is conflicting as some studies suggest that those individuals who engage in hookups are less likely to use condoms (Nesoff et al., 2006). Furthermore, research investigating condom use and seeking sexual partners online has found that those individuals report using condoms less than those who did not meet a partner through an online venue (Choi et al., 2016; McFarlane et al., 2004; Sawyer et al., 2017; Shapiro et al., 2017).

Offline. Women with both casual and main sexual partners were less likely to use condoms compared to women who had casual hookups and more likely than women with main sexual partners (Nesoff et al., 2016). According to Fielder and Carey (2010a), condom use was reported for 69% of vaginal sex hookups, but zero percent was reported for those involving oral sex (Fielder & Carey, 2010a). An additional study also found that 46.6% of students who had engaged in oral, vaginal, or anal sex had used a condom during the most recent hookup (Lewis et al., 2012). A separate study conducted by Paul and colleagues (2010) found that among those individuals who engaged in hookups which included sexual intercourse, condom use was high. However, a study assessing causal sex and condom use among college students reporting condom use in the last 30 days found 21.3% of participants had used a condom most of the time and16.9% reported using condoms rarely or never (Rinaldi-Miles, Quick, & McCloskey, 2017).

Online. Research on condom use among college aged women and their online sexual partners has been limited and mixed. A study conducted by Choi and colleagues (2016) examining college students in Hong Kong, found that the use of dating apps was associated with having a casual sex partner and not using a condom during the last sexual encounter and for other sexual encounters in the previous 12 months. In an earlier study, when asked about behaviors with their internet partners, female participants reported that condoms were used 84% of the time for vaginal sex in the previous 12 months, but only 40% reported using a condom for vaginal sex the last time they had sex with an internet partner (McFarlane et al., 2004). Additionally, only 7.8% of participants reported that condoms were available during their last encounters with an internet partner (McFarlane et al., 2004). More recently, Shapiro and colleagues (2017) found that females had 2.43 times higher odds of reporting using condoms during last sexual intercourse compared to males. A separate study found that participants who reported using dating apps were twice as likely to have unprotected vaginal or anal sex in the past three months than those who did not use dating apps (Sawyer et al., 2017).

Condom Negotiation

Condom use is complex as it is dyadic in nature as it involves two people (Noar et al., 2012). Because males are the ones to wear condoms during sexual activity, previous studies have indicated the decision to use a condom is decided predominantly by the male sexual partner (Peters, Jansen, & van Driel, 2010; Otto-Salage et al., 2010). This may be problematic for women who are at higher risk of contracting STIs (CDC, 2017b; Ostrach & Singer, 2012). If the male partner is reluctant to using a condom, safer sex efforts may require the female to possess condom negotiation skills (Otto-Salage et al., 2010). Condom negotiation refers to an individual's ability to persuade their partner to use a condom during sexual activity (Noar et al.,

2002). According to De Bro et al. (1994), persuading a partner to use a condom involves using a negotiation strategy that will not impede sexual activity and will result in the partner complying. For example, a woman may want her partner to wear a condom, but she may also be worried that insisting on the use of a condom could result in her partner not wanting to engage in sexual intercourse (De Bro et al., 1994).

Condom Negotiation Strategies

De Bro and colleagues (1994) conducted the first extensive study of condom negotiation strategies. Based on previous findings from McCormick (1979) on strategies used to by young adults to influence each other to have sexual intercourse, De Bro et al. (1994) identified six strategies for negotiating condom use. These strategies include reward, emotional coercion, risk information, deception, seduction, and withholding sex (De Bro et al. 1994). Noar et al. (2002) built on these findings and identified additional strategies like relationship conceptualizing, autocracy, and direct request.

In general, condom negotiation strategies can be divided into two categories, verbal and non-verbal strategies which can utilize both direct and indirect methods (French & Holland, 2013; Lam, Mak, Lindsay, & Russell, 2004). Verbal strategies involve direct communication about safer sex practices to an individual's sexual partner (Amaro, 1995). However, non-verbal condom negotiation strategies may also be used to persuade a partner to practice safer sex in a variety of situations, such as in situations when an individual does not initially intend to use a condom, is unable to have a direct conversation with their partner about condom use, or when an individual intends to use condoms without discussing it prior to sexual activity (Coleman & Ingham, 1999).

Verbal strategies can include methods such as verbally threatening to withholding sex (De Bro et al., 1994), asking the partner directly (French & Holland, 2013), dropping hints, using flattery, using emotionally coercive techniques like threats, or deception (Lam et al., 2004), using seduction, expressing concern for a partner or relationship, or using risk information to persuade their partners (French & Holland, 2013). Nonverbal and indirect methods can include pulling out a condom or putting a condom on one's self or partner, buying condoms, and placing condoms within view of one's sexual partner (Lam et al., 2004; French & Holland, 2013).

Research is conflicted about which strategies are more effective. Previous studies focused on HIV prevention through condom negotiation, have only measured direct, verbal communication (Catania, Coates, & Kegeles, 1994; McCormick & Gaeddert, 1989), and focused on individuals directly communicating safer sex practices and condom use with their partners (Amaro, 1995). While direct, verbal communication has been shown to be effective, additional studies have reported the efficacy of non-verbal and indirect condom negotiation strategies (Bird, Harvey, Beckman, & Johnson, 2001; Coleman & Ingham, 1999; Kline, Kline, & Oken, 1992).

Condom Negotiation Research

Condom use and condom negotiation differ in regard to relationship type (i.e. casual versus committed). Individuals who are in committed relationships may have a difficult time negotiating condom use compared with those who are in a casual sexual relationship (Buysse & Ickes, 1999). This may be because those individuals who are in committed relationships may see the act of influencing a partner to use a condom as a sign of mistrust (Hattori et al., 2014; Fazekas et al., 2001; Peasant et al. 2015).

In regard to the college student population, condom negotiation strategies have been found to be strong predictors of condom use (Holland & French, 2011). College-educated

women generally have more access to health care, have increased health literacy, and self-esteem (Nesoff et al., 2016) which may positively influence a woman's ability to negotiate condom use (Trzesniewski & Robbins, 2010; Wolf et al., 2007). Previous health education interventions targeting women have focused on promoting condom use through negotiation skills, persuasion, and increasing their condom use self-efficacy (Crosby et al., 2003).

Previous research has indicated that there may be some differences in which condom negotiation strategies are preferred by males and females. Women may prefer more non-verbal and indirect styles of communication compared with males (Holland & French, 2012; LaFrance & Henley, 1997) and may be more likely to negotiation condom use through a variety of strategies compared with men (Holland & French, 2012). Lam and colleagues (2004) found that women were more likely than men to use nonverbal-indirect strategies such as placing condoms in view of their partner or nonverbal-direct such as opening a condom or putting a condom on their male partner. Holland and French (2012) found that college women use more verbal-direct strategies like withholding sex, using direct request, or using risk information in order to persuade a partner to use condoms. The study authors also reported that men used condoms more than women in general, but using condom negotiation strategies were important in increasing condom use among women (Holland & French, 2012). These differences in condom negotiation and communication styles among males and females may be attributed to power (Lam et al., 2004). Women who have less power or status in their relationships may use non-verbal and indirect strategies to persuade their male sexual partners to use a condom (Howard, Blumstein, & Schwatz, 1986; LaFrance & Henley, 1997).

Theoretical Framework

Theory is integral to the field of health education as theory helps explain and predict human behaviors, as well as assist with planning, implementing, and evaluating interventions (Glanz, Rimer, Viswanath, 2008). Many theories and frameworks have been utilized to examine condom use and condom negotiation strategies including the Information-Motivation-Behavioral (IMB) Skills Model, the Social Cognitive Theory (SCT), the Health Belief Model (HBM), and the Theory of Planned Behavior (TPB). However, the TPB which was used to inform the current study is one that has been used previously to predict condom use behaviors among young Hispanics (Malcolm et al., 2013), college women (Fazekas et al., 2001), and male and female college students (Asare, 2015). When applied to research, the TPB has been shown to predict condom use (Albarracin, Johnson, Fishbein & Muellerleile, 2001; Asare, 2015; Brafford & Beck, 1991; Brown 1984; Campbell, Peplau, & De Bro, 1992; Edward & Barber, 2010; Finklestein & Brannick, 2000; Heeran et al., 2007; Kanu & Kanu, 2000; Muñoz-Silva, Sánchez-García, Nunes, & Martins, 2007; Rinaldi-Miles, Quick, & McCloskey, 2017), dual contraception use, sexual risk behaviors, and casual sex behaviors among college students (Turchik & Gidycz, 2012). While the TPB may provide a framework for understanding how a woman's hookup perceptions may influence her own decisions to hookup (Kenney et al., 2013) or the intention to use condoms (Fazekas et al., 2001), there are no studies to date that have used the TPB as a framework to determine condom use negotiation.

Theory of Planned Behavior

Fishbein and Ajzen conceptualized the theory of reasoned action (TRA) to help understand the relationship between an individual's attitudes, intentions, and behaviors (Fishbein, 1967). The TRA asserts that behavioral intention is the most important determinant of

the behavior, which is the individual's readiness to perform a given behavior (Ajzen, 1991). According to the TRA, behavioral intention is determined by the individual's attitude toward the behavior and subjective norms. Attitudes toward the behavior refers to the individual's beliefs about outcomes of performing the behavior (Glanz, Rimer, Viswanath, 2008). One aspect that the TRA does not make clear is the volitional control an individual has over the behavioral intentions of the behavior (Ajzen, 1991). Thus, the construct perceived behavioral control was added as an extension to the TRA to account for this. This extension led the development of the theory of planned behavior (TPB) (Ajzen, 1991). In the TPB, the attitudes towards the behavior construct consists of two sub-constructs, behavioral beliefs and outcome evaluations. Behavioral beliefs are the beliefs an individual has that performing the behavior will result in specific outcomes (Sharma & Romas, 2012). Outcome evaluations are the value the individual places on the results of performing the behavior (Sharma & Romas, 2012).

Attitudes towards condom use. Previous studies have found an individual's attitudes towards the comfort and convenience of condoms can influence an individual's intention to use condoms during sexual activity (Brown 1984; Campbell, Peplau, & DeBro, 1992). Additionally, having a favorable attitude towards condoms also influences the actual behavior of condom use (Asare, 2015). Asare (2015) utilized the TPB to determine condom use behavior among college students found that 87% of the participants strongly agreed that condom use could help them prevent pregnancy and 76% indicated that condoms are extremely important in protecting themselves against both pregnancy and STIs. Despite high agreement among both males and females, females had more favorable attitudes towards condom use than males and were more likely to believe that condom use can help prevent pregnancy or STIs (Asare, 2015). A separate study that used the TPB as a framework to investigate differences between gender and condom

use intention among a sample of Portuguese and Spanish college students reported that the strong predictor for condom use intention for women was attitude while for men subjective norms was a better predictor (Muñoz-Silva et al., 2007). One study examined how liking (i.e. similarities with partner and attraction), social proof (i.e. what others would do in similar situations), and consistency (i.e. past behavior) on sexual decision making was associated with the constructs of TPB (Rinaldi-Miles et al., 2017). The authors reported that attitudes towards not using a condom were viewed more positively in regard to the consistency and social proof vignettes than the liking vignette (Rinaldi-Miles et al., 2017). Furthermore, in a study investigating condom use and the TPB among South African and American students it was found that attitudes were important to American students in regard to condom use (Heeran et al., 2007).

Subjective norms. The construct of subjective norms is generally defined as an individual's estimate of how referent individuals want them to perform and how important these referent individuals' opinions are to the individual (Glanz, Rimer, Viswanath, 2008). Like attitudes towards the behavior, subjective norms also consist of two sub-constructs, normative beliefs and motivation to comply. Normative beliefs refer to how an individual thinks people who are significant in his or her life would like for them to behave. Motivation to comply is the degree in which the individual wants to act in accordance to those wishes (Sharma & Romas, 2012).

Interpersonal relationships can influence an individual to use or not use a condom. Peers' and friends' opinions can be helpful in influencing condom use behavior. However, when investigating condom use the opinions of friends and how these opinions can influence behavioral intention is conflicting. According to Asare (2015) 51% of participants reported that their friend's approval of their condom use was important to them. While 49% of the respondents

indicated that their friend's approval of their condom use behaviors was not important to them (Asare, 2015).

In addition to asking about peer's or friend's opinions and how important those opinions are to individuals when it comes to engaging in condom use, family approval is often measured. Similar to the approval of their friends, finding of the importance of familial approval can also influence condom use. Asare (2015), found that a majority of the participants (61%), reported that their family's approval of their condom use was important to them.

The endorsement of the individual's sexual partners can also influence condom use. Condom use has been previously linked to the perception of the partner's attitudes towards condoms (Edwards & Barber, 2010). Edwards and Barber (2010) argue that an individual's partner may influence condom use intention more so than any other constructs of the TPB. For example, condom use may be impeded if an individual believes their partner does not want to use a condom, regardless of if they themselves wanted to use one (Edwards & Barber, 2010). However, condom use may be increased among young adults if they believe that their partner is more likely to want to use a condom (Edward & Barber, 2010). Asare (2015) found that approximately 50% of the participants indicated that their sexual partner's approval of condom use was important to them.

In a study examining Australian young adults' and perception of their partner's condom use desires, participants reported wanting to use condoms more often than they thought their partners did (Edward & Barber, 2010). This perception of lower condom use desire among an individual's partner may negatively impact condom use intention. In a separate study, investigating condom use decision making among a sample of college students, half of the participants were instructed to imagine themselves in a casual relationship and half in a serious

relationship (Finklestein & Brannick, 2000). The findings indicate that in both casual and committed relationships, the attitudes of the partner significantly influence the decision to use a condom (Finklestein & Brannick, 2000). A study examining college women's intention to use condoms with new partners found that women feared insisting on the use of condoms as they believed it would lead their partners to believe that they do not trust them (Fazekas et al., 2001).

Perceived behavioral control. According to the TPB, the addition of perceived behavioral control combined with behavioral intention, can be used to better predict the engagement in the given behavior (Ajzen, 1991). Like the constructs of attitude towards the behavior and subjective norms, perceived behavioral control also consists of two sub-constructs, control beliefs and perceived power (Glanz et al., 2008). Control beliefs refer to the individual's beliefs about internal and external factors that may inhibit or prohibit performing the behavior and perceived power is the individual's perception about how easy or how difficult performing the behavior may be (Glanz et al., 2008). The use of TRA is appropriate when the target behavior is under the volitional control of the individual. However, when the behavior is not under the individual's direct control, as is the case with condom use among women, then addressing perceived behavioral control is important in order to understand behavioral intention and the target behavior (condom negotiation and condom use).

Perceived behavioral control has been compared to self-efficacy, which is a construct of the HBM and SCT. Self-efficacy is generally defined as an individual's belief that they can perform a specific behavior (Bandura, 1995). Both perceived behavioral control and self-efficacy capture an individual's perception to perform a health behavior (Bandura, 1977). There have been several studies investigating condom use self-efficacy (CUSE), which has reported that those individuals with high CUSE are more confident in their ability to use a condom and

negotiation condom use (Brafford & Beck, 1991). Fisher and Fisher (1992) suggest in order to successfully negotiate condom use, it is important that an individual believes in their ability to use condoms effectively. A study conducted by French and Holland (2013) found that when a college student has lower CUSE, and does not feel confident that he or she can successfully use or discuss condoms with their partners, they are less likely to insist on the use of a condom. Conversely, the same study also found that college students with greater CUSE were much more likely to report that they would directly request condoms, withhold sex, use protection against STIs or the relationship as a reason, or use non-verbal methods (French & Holland, 2013), even if the partner is reluctant (Holland & French, 2012).

Perceived behavioral control has been used to significantly predict participants behavioral intention and condom use behaviors in a previous study (Asare, 2015). In a study conducted by Asare (2015) 42% of the participants reported that it was very difficult for them to use a condom during sexual activity and 10.7% reported that they were not confident using condoms during sexual intercourse. Conversely, findings from the same study also reported that 25% of the participants indicated that it was not difficult at all for them to use condoms every time they have sex and 58.9% of the participants said they were very confident in using condoms during sexual intercourse (Asare, 2015). Additionally, 81.3% of the participants reported that they had control over their own decision to use condoms (Asare, 2015). A study conducted by Kanu and Kanu (2000) examined the constructs of TPB and African American student's intention to use condoms. The study authors sampled 524 undergraduate students (287 female, 237 male) and found that perceived behavior control was the strongest prediction of behavioral intentions for both males and females.

Behavioral Intention

Previous studies have indicated that the constructs of TPB, attitudes and subjective norms (Sheeran & Taylor, 1999), as well as perceived behavioral control predict condom use intentions (Albarracin et al., 2001). One study sampled 215 males and 181 female multi-partnered heterosexuals to determine behavioral intentions to use condoms during vaginal intercourse with their main sexual partners (von Haetfen & Kenski, 2001). The study authors found no differences between male and female intentions to use condoms with their regular partners (von Haetfen & Kenski, 2001). For women intention to use condoms were influenced by attitudes, subjective norm, partner norms, and perceived behavioral control, but for men only attitudes and partner norms were predictors of intentions to use condoms (von Haetfen & Kenski, 2001). However, with casual partners both males and females reported low condom use (von Haeften & Kenski, 2001). In a study investigating condom use among South African and American students, the study authors reported that self-efficacy (or perceived behavioral control) had significant relation to intention and condom use (Heeran et al.,2007). Additionally, the study authors reported that the constructs of attitude and subjective norms were especially important in predicating behavioral intention and condom use among American students (Heeran et al., 2007). A separate study examining condom use among college students reported that a strong behavioral intention to use condoms is significant predictor of condom use (Asare, 2015).

When investigating behavioral intention to use condoms among college women, Fazekas and colleagues (2001) reported that positive attitudes towards condom use and perceptions of pressure to use condoms were associated with greater intentions to use condoms. Additionally, the degree to which women believe they can or cannot control the use of condoms during sexual intercourse was also found to predict condom use intentions (Fazekas et al., 2001). A separate

study with a sample of Portuguese and Spanish college students, also reported attitude as the greatest predictor of behavioral intention to use condoms for college women (Muñoz-Silva et al., 2007). These findings of favorable attitudes towards condom use among women are a strong predictor of behavioral intention (Asare, 2015).Carter et al. (1999) investigated college men and women's condom negotiation, specifically which sex decides a condom should be used during sexual intercourse and their behavioral intentions to use a condom. According to the study authors, while women were more likely to negotiate condom use, men had greater intentions to use condoms (Carter et al., 1999).

Past Behavior

One aspect that is not clear about the TPB, is the influence of past behavior on behavioral intention. According to Ajzen (2002), past behavior is one of the major predictors in the TRA and TPB and may serve as a source of information for individuals about how to act in future situations. However, Azjen (2002) also suggests that the TPB constructs may not serve as mediators between prior (past behavior) and later behavior (behavioral intention). Conner and Armitage (1998) recommends past behavior as a mediator between perceived behavioral control and behavioral intention (Conner & Armitage, 1998) while other studies suggest that attitudes toward the behavior and subjective norms can be used as mediators to further understand the influence of past behavior on behavioral intention. Few studies have examined past condom use as a predictor and the constructs of TPB as mediators to understand the influence on behavioral intention. Albarracín et al. (2001) reported that the intention to use condoms is more likely for those individuals who have previously used them before. One study which has utilized past behavior to understand the behavioral intention to use condoms examined the availability of birth control pills to predict intentions to use condoms using the TPB constructs as variables (Fazekas

et al., 2001). The authors reported that the availability of birth control negatively effects an individual's behavioral intention to use condoms and leads to more negative attitudes toward condom use (Fazkeas et al., 2001). A separate study investigated whether condom negotiation variables moderated the relationship between past condom use and behavioral intention between college men and women (Carter et al., 1999). The findings from this study indicate that past condom use was a significant predictor of behavioral intentions for women and men (Carter et al., 1999). In the present study, the TPB will be used to understand participant attitudes toward the behavior, subjective norms, perceived behavioral control, and behavioral intention to negotiate condom use with their male hookup partners. Past condom use will be used as a predictor and the constructs of TPB as mediators to understand the influence on the intention to negotiate condom use.

Summary

In this chapter, the literature related to the consequences of engaging in risky sexual behaviors; college hookup culture; the emergence and use of dating apps and social media; the risks and risky behaviors associated with hooking up; condom use among college students; condom negotiation strategies; and theory-based condom negotiation research specific to college students was presented. The methodology for this study is presented in Chapter 3. Results from the analyses follow in Chapter 4, with a discussion of the findings presented in Chapter 5.

CHAPTER 3

METHODS

The primary purpose of this study was to identify differences between the mode in which college women seek male hookup partners (online, offline, and both online and offline) and the condom negotiation strategies used with these partners. A secondary purpose of the study was to utilize the constructs of the Theory of Planned Behavior (TPB) to predict and identify differences in condom negotiation intention with male hookup partners met online, offline, and both online and offline. Chapter 3 describes the study population, instrument development, research methods, and analyses that were used to address the study purposes.

Study Population

This study focused on the hookup behaviors and condom negotiation strategies employed by college women with their online and offline partners. Thus, the inclusion criteria for this study consisted of undergraduate college women between the ages of 18-24 who were enrolled at The University of Alabama during the spring of 2019. The exclusion criteria for this study consisted of college males and individuals under the age of 18 and over the age of 24. Students under the age of 18 were excused because they are not of traditional college age and may lessen the generalizability of the study findings. Students over the age of 24 were excluded from participating in this study because those over the age of 24 are categorized as nontraditional students (National Center for Education Statistics, n.d.) may also lessen the generalizability of

the study findings. However, those who are male and between the ages of 18-24 were eligible for the time-equivalent secondary survey (see Appendix G).

Instrument Development

The survey used in this study was developed and modified from instruments used in studies in the area of condom negotiation strategies (Lam, Mak, Lindsay, & Russell, 2004); attitudes and perceived behavioral control (Kanu & Kanu, 2000); subjective norms (Asare & Sharma, 2010); and behavioral intention (Fishbein & Ajzen, 2010) as seen in Table 3.1. The questionnaire (see Appendix A) consisted of 40-items of a mixture of Likert Type, yes/no, open-ended, and multiple-choice questions. Permission was sought and obtained for all copyrighted scales that were not considered public domain (see Appendix B).

Several versions of the study instrument were reviewed by the co-chairs of the dissertation before a draft was ready for external review. The first review of the questionnaire was an informal review with several (n=13) undergraduate students in person. The purpose of the informal review was to identify any changes necessary to increase the readability and comprehension of the questionnaire. The informal review was conducted by distributing the questionnaire to the students and instructing them to not to answer the questionnaire, but to make notes on the questionnaire about any questions or changes they believed were necessary to the instructions, questions, and responses. Once students had time to review the questionnaire, a discussion was held with the 13 students present addressing any questions and suggestions for changes the group had. After that review, it was determined by the researcher that the following changes would be made to the questionnaire: a definition would be added for sexual intercourse; examples of hookup behaviors would accompany the definition of a hookup; past hookup behaviors would be assessed for the last six months instead of the previous three months; and

two questions were replaced assessing last hookup sexual intercourse and condom use behaviors with two questions that assessed hookups and condom use over the previous six months. Following these changes to the study instrument, approval was sought from The UA Institutional Review Board (IRB) in February 2019 and final IRB approval was granted in April 2019 (see Appendix C).

Questionnaire Format

The questionnaire consisted of 40-items (see Appendix A). The first section of the survey contained inclusion criteria questions, as well as the study purpose, definitions, consent, and directions for completing the survey (see Appendix A). In the consent and directions, participants are informed that by completing the questionnaire the participants are consenting to be a part of the study. The second section of the questionnaire contained questions about previous sexual behavior in the last 12 months (items 1-3) and hookup behaviors in the last 6 months (items 4-9). Sections 4-6 of the questionnaire contained questions assessing the constructs of TPB, attitudes towards condom negotiation, subjective norms, and perceived behavioral control (items 10-27). Section seven assessed the participant's use of various condom negotiation strategies (item 28). Sections eight and nine assessed the participant's intentions to negotiate condom use (items 29-31) and their previous condom negotiation behaviors (items 32-33). Demographic information was assessed in the last section of the questionnaire (items 34-40). All items in the questionnaire are described next. Operational definitions are provided in Chapter 1 under the "Operational Definitions" heading. The full questionnaire can be seen in Appendix A. Permission for use and modifications to existing items can be seen in Appendix B.

Sexual Behaviors (items 1-3)

In order to assess college women's sexual behaviors, the survey included three items assessing the number of sexual partners, number of male sexual partners, and condom use in the last 12 months (see Appendix A). To assess sexual behaviors of college women over the last 12 months, one question (item 1) was obtained with permission (see Appendix B) from the 2015 American College Health Association National College Health Assessment (ACHA-NCHA; ACHA, 2015). This item asked, "Within the last 12 months, with how many partners have you had oral sex, vaginal intercourse, or anal intercourse?" Participants were provided space to write in the number of partners they had sexual intercourse with or enter the number zero if they have not had a sexual partner in the last 12 months. Because the first item can assess both male and female partners the participant has had in the previous 12 months, a second question was added to assess the number of male partners the participant has had in the previous 12 months. The question asks, "Of the partners you have had in the last 12 months, with how many male partners have you had oral sex, vaginal intercourse, or anal intercourse?" Participants were provided a space to write in the number of male partners they have had in the past 12 months or enter the number zero if they have not had any male partners. In order to assess how often the participants used a condom with those male partners within the last 12 months, participants were asked "Within the last 12 months, how often did you use a condom with your male sexual partners?" A 5-point Likert scale was used to obtain responses from participants. The responses on the scale range from always (1) to (5) never.

Hookup Behaviors (items 4-9)

This section includes five items to assess hookup behaviors in the last six months (see Appendix A). A question was developed by the researcher to assess participants' engagement in

hookups. The question asks, “In the past 6 months, have you engaged in a hookup?” Participants can select a binary, yes/no response to this item. The next items (items 5-7) assess where the participants first contacted their hookup partners and how often they seek potential hookup partners through online venues. Participants will be asked, “If you answered yes to question 4, where did you first contact your hookup partner(s)?” Participants will be provided the following response categories, “Online (i.e., dating apps, dating website, social media, etc.)”, “Offline (i.e., bar, dorm, party, student club, etc.)”, and “Both online and offline”. If the participant indicates they have met their partners online or both online and offline, they will be asked “Where did you first interact with your hookup partner(s) found online?” Participants will be presented with four response categories, “Dating app or website (Tinder, Bumble, Hinge, OkCupid, Match.com, etc.)”, “Social media app or social network site (Facebook, Instagram, Snapchat, etc.)”, “Special interest website (Chat room, sex seeking websites, etc.)”, and “Other”. Those participants that indicate they identified their hookup partner through another online source not listed in the responses will be able to provide additional information on where they first made contact with their hookup partner(s). Following this item, participants will be asked “How often did you seek potential hookup partner(s) from online sites/dating apps in the past 6 months”. A 5-point Likert scale ranging from always (1) to (5) never will be presented for participants to respond.

In order to assess past sexual behaviors with hookup partners, two items (items 8 and 9) were developed. Participants will be asked, “Thinking about your hookups over the last 6 months, did you engage in vaginal or anal intercourse?” Participants were presented with a binary, yes/no response for this item. Following this item, participants will be asked about condom use behaviors and will be asked, “If you answered yes to question 8, how often did you use a condom with your hookup partners when engage in vaginal or anal intercourse over the last

6 months?" A 5-point Likert scale will be used to gather responses ranging from always (1) to never (5).

Attitudes Towards Condom Negotiation (items 10-16)

This section includes seven items addressing attitudes towards condom negotiation from the Intent to Condom Use Inventory (Kanu & Kanu, 2000; see Appendix A). The Intent to Condom use Inventory is a 62-item instrument based on constructs from the Theory of Planned Behavior. This instrument was previously used to examine HIV and STD prevention among 524 African-American undergraduate students between the ages of 18-24.

Permission was granted by the study author, Andrew Kanu, to use and modify questions from the survey instrument (see Appendix B). Questions related to the current study were selected and modified from the original instrument which asked about condom use behaviors to assessing condom negotiation attitudes. These questions are measured on a 7-point Likert scale from strongly disagree (1) to strongly agree (7). A Cronbach alpha reliability coefficient was previously established for the instrument at .90 (Kanu & Kanu, 2000).

Subjective Norms (items 17-22)

The survey includes six items addressing subjective norms that are obtained from the Health and Safe Sex Behavior Survey (Asare & Sharma, 2010; see Appendix A). Permission was granted to use and modify questions from the Health and Safe Sex Behavior Survey by the study authors (see Appendix B). These questions address subjective norms about condom use focused on the two sub-constructs of TPB, normative beliefs and motivation to comply. The normative belief subscale questions are measured on a 7-point Likert scale from strongly disagree (1) to strongly agree (7). An example of the normative beliefs questions is, "My partner wants me to use a condom whenever we have sexual intercourse." A 7-point Likert scale was used to measure

the motivation to comply questions and ranges from 1 (not at all important) to 7 (very much important.) An example of the motivation to comply questions is, “It is important that my friends approve of my condom use behavior.” The Cronbach’s alpha for the normative belief’s subscale was 0.83 and the score for the motivation to comply was 0.87 (Asare & Sharma, 2000). A test-retest reliability of 0.97 was also provided for this subscale (Asare & Sharma, 2000).

Perceived Behavioral Control (items 23-27)

The section includes five items addressing perceived behavioral control of condom negotiation from the Intent to Condom Use Inventory (Kanu & Kanu, 2000; see Appendix A). Permission was granted by the study authors to use and modify questions from the survey instrument (Appendix B). These questions were measured on a 7-point Likert scale from strongly disagree (1) to strongly agree (7). A Cronbach alpha reliability coefficient was previously established for the instrument at .90 (Kanu & Kanu, 2000).

Condom Negotiation Strategies (item 28)

One multi-item scale from the Condom Negotiations Scale (CNS; Lam et al., 2004) is also included in the survey to measure condom negotiation strategies (see Appendix A). This scale was chosen as it specifically addressed the condom negotiation strategies of heterosexual, college-age females. Although the CNS consists of 10-items, one scale specifically addressing condom negotiation strategies was most relevant and selected for the current study. Permission was granted to use and modify the item for the current study (Appendix B). The multi-item scale consisted of 19 sub-items, each addressing the four different types of condom negotiation strategies (verbal-direct, verbal-indirect, nonverbal-direct, nonverbal indirect) employed by college-age females. The question for the multi-item scale was modified from asking what condom negotiation strategies the participant had used at the beginning of their relationship with

their current or most recent partner to ask what strategies the participant was most likely to use with their sexual partners or how likely they would use one of the strategies. Each of the 19 statements was measured on a 7-point Likert scale. The original scale measured each item from never used (1) to always used (7). An example of this scale is, “Directly tell partner that you want to use condoms.” This was modified to very likely (1) to very unlikely (7). There were no previously established reliability scores available for this scale.

Condom Negotiation Intentions (items 29-31)

Three items were used to measure the TPB construct of behavioral intention to negotiate condom use in the next 3 months (see Appendix A). In each item, one of the three phrases, “I plan”, “I expect”, and “I intend”, preceded a statement of the behavior of negotiating condom use with the participant’s sexual partner(s) in the next 3 months. These items were developed based off of TPB questionnaire development guidelines by Fishbein and Ajzen (2010). These items are measured on a 7-point Likert scale from 1 (extremely likely) to 7 (extremely unlikely).

Previous Condom Negotiation Behaviors (items 32-33)

This section includes two questions which assess previous condom negotiation behavior (see Appendix A). One question (item 32) asks if participants had engaged in condom negotiation in the last three months. The responses for this question are a binary, yes/no response. The second item (item 33) asks, “If you have met a partner online in the last 3 months, have you negotiated condom use online prior to meeting?” The response categories for this question are also a binary, yes/no response.

Demographic Variables

Commonly measured and relevant demographic variables were also measured for this study, such as classification, race/ethnicity, age, gender at birth, sexual orientation, Greek-

affiliation, and relationship status. These demographic questions and response items (items 34-40) were obtained with permission (see Appendix B) from the 2015 American College Health Association National College Health Assessment survey (ACHA-NCHA, 2015). Although not part of the research questions, demographic variables will be used to identify participants relevant to the study (e.g. college-age females) and will provide a description of the study sample. Each of the demographic variables are categorical in nature. Table 3.1 presents a summary of the final instrument.

Table 3.1

Summary of Survey Instruments

Scale or Item	Items	Source
Sexual Behaviors	1-3	ACHA-NCHA, 2015; Developed by study author
Hookup Behaviors	4-9	Developed by study author
Attitudes About Condom Negotiation	10-16	Intent to Condom Use Inventory (Kanu & Kanu, 2000)
Subjective Norms	17-22	Health and Safer Sex Behavior Survey- Normative Beliefs and Motivation to Comply Subscale (Sharma & Asare, 2000)
Perceived Behavioral Control	23-27	Intent to Condom Use Inventory (Kanu & Kanu, 2000)
Condom Negotiation Strategies	28	Condom Negotiations Scale- Hetero Female Version (Lam et al.,
Intentions About Condom Use	29-31	Developed from guidelines by Fishbein & Ajzen, 2010
Previous Condom Negotiation	32-33	Developed by study author
Demographics	34-40	ACHA-NCHA, 2015

Data Collection

Participant Recruitment

A total of approximately 250 undergraduate women were sought to complete the study. The sample of participants were recruited from undergraduate classes in the College of Human Environmental Sciences (CHES) at UA. Approval to contact course instructors and administer the survey in Issues in Human Environmental Sciences; Personal Health; Community and Public Health; Foundations of Health Education and Promotion; Drug Awareness Education; Health Disparities; Stress Management; Human Development Across the Life Span; Human Sexuality; Understanding Addiction; Introduction to Personal Finance; and Introduction to Human Nutrition during the spring 2019 semester was sought and obtained from the Dean of CHES via a letter of support (see Appendix D). The researcher sent out recruitment emails to course instructors in selected courses in CHES via e-mail and request their permission to conduct the study during one class period time. Instructors were provided with an overview of the study, time requirements, information regarding the secondary survey for students who did not meet the inclusion criteria for the study, and the study alternatives (see Appendix E).

Following permission to enter the classroom, the researcher set up a date with each course instructor via e-mail to attend classes to recruit and administer surveys. To reduce the potential of coercion for those wanting to participate in the study, the researcher asked the instructor to remain outside of the classroom during the study recruitment and administration prior to the researcher entering the classroom.

Prior to administration of the questionnaire, the researcher introduced herself and read a recruitment script, which outlined the study to the students, estimated time to complete the questionnaire, and information about the secondary survey for those who did not meet the

inclusion criteria (see Appendix F). Those students who did not meet the inclusion criteria (i.e. those who were not college women between 18-24 years old) in the course were provided an opportunity to complete a time-equivalent secondary survey. The secondary survey consists of 15-items consisting of multiple choice, Likert scale, and fill-in-the-blank questions about sexual behaviors and condom use resistance tactics (see Appendix G).

After reading the script, the study information sheets for both surveys (see Appendix H and I) were distributed to all students. The study information sheet provided information about the study purpose, benefits and risks of participating, procedures for maintaining confidentiality, participants' rights, and contact information for the UA Student Counseling Center should they need to speak to a professional. Students who did not wish to participate in the study or had previously taken the survey in another class were asked not to take the survey again and/or to remain seated and quiet during the survey.

Survey completion

Participants were reminded that their participation is voluntary, they are free to quit the survey at any point, and may skip any questions they do not feel comfortable answering. Upon completing the survey, students were asked to place their surveys in the envelope located at the front of the classroom. This envelope was sealed following the collection of surveys.

Participant protections

In order to protect participant information, precautions were taken to keep information provided in the survey anonymous. Participants were reminded not to write their names or any other identifying information on the questionnaire. The researcher entered responses to the questionnaire into International Business Machines (IBM®) Statistical Package for Social Sciences (SPSS), Statics version 25.0 in order to conduct various statistical analyses. In order to

protect participant confidentiality, those hard copy questionnaires are stored in a locked file cabinet in the researcher's locked office. All hardcopies of the questionnaire will be destroyed two months after data analysis has been complete. Access to this data is only be granted to the researcher and other key members of the research team. Individual data has not and will not be disclosed; only group data has been reported from the results.

Analysis Overview

Using International Business Machines (IBM®) Statistical Package for Social Sciences (SPSS), Statics version 25.0, various levels of analysis were performed on the completed and cleaned data set. Descriptive statistics were calculated to describe the characteristics of the sample. The present study employed descriptive statistics, linear regressions, analysis of variance (ANOVA), factor analysis, general linear modeling (GLM), and path analysis. An *a priori* significance level of $p < 0.05$ was set for rejecting the null hypotheses. The research questions used to guide this study, hypotheses that relate to each research question, and a description of the statistical analysis used for each are described hereafter.

RQ1: *What is the prevalence of college women who seek male hookup partners online, offline, and both online and offline?*

This research question is focused on determining the proportion of college women who seek partners online, offline, and both online and offline. Descriptive statistics were used to obtain prevalence estimates, as well as confidence intervals for those college women who seek male hookup partners online, offline, and both online and offline.

RQ2: *Are the scales measuring the constructs of the Theory of Planned Behavior reliable in the context of condom negotiation?*

This research question is focused on determining if the questions modified and used to develop scales measuring TPB constructs from previous research investigating condom use are reliable in the context of condom negotiation. A Cronbach's alpha reliability analysis will be conducted on the four subscales of attitudes toward condom negotiation, subjective norms, perceived behavioral control, and behavioral intention. The hypothesis related to RQ2 are as follows:

H_o 2: The scales measuring the constructs of the TPB will not be reliable in the context of condom negotiation.

H_A 2: The scales measuring the constructs of the TPB will be reliable in the context of condom negotiation.

RQ3: *Are there differences between college women who seek male hookup partner's online, offline, and both online and offline and their intentions to negotiate condom use?*

This research question is focused on determining differences between college women who identify male hookup partners online, offline, and both online and offline and their intentions to negotiate condom use in the future. For RQ3, an ANOVA was conducted to determine if the mean intention scores are equal across all three groups (online, offline, and both online and offline partners) or if there are differences between these three groups and their intention to negotiate condom use. The hypothesis for RQ3 are as follows:

H_o 3: There will be no difference between college women who seek male hookup partner's online, offline, and both online and offline and their intentions to negotiate condom use.

H_A 3: There will be a difference between college women who seek male hookup partner's online, offline, and both online and offline and their intentions to negotiate condom use.

RQ4: *Are there differences between college women who seek male hookup partner's online, offline, and both online and offline and their condom negotiation strategies?*

This research question is focused on determining which condom negotiation strategies are employed by college women who seek male hookup partners online, offline, and both online and offline. A Cronbach's alpha was conducted to determine the internal consistency of each the four condom negotiation subscales (verbal direct, verbal indirect, nonverbal direct, and nonverbal indirect). An ANOVA was conducted to compare the four subscales to the three groups (online, offline, and both online and offline partners) to determine if mean condom negotiation strategies differ between the three groups. The hypotheses for RQ4 are as follows:

H_o 4: There will be no difference between college women who seek male hookup partner's online, offline, and both online and offline and their condom negotiation strategies.

H_A 4: There will be a difference between college women who seek male hookup partner's online, offline, and both online and offline and their condom negotiation strategies.

RQ5: *Do the constructs of the Theory of Planned Behavior (attitudes toward the behavior, subjective norms, and perceived behavioral control) predict behavioral intention to negotiate condom use for hookups with online, offline, and both online and offline partners?*

In order to determine if the constructs of TPB (attitude toward the behavior, subjective norms, and perceived behavioral control) have a statistically significant effect on the behavioral

intention of college women to negotiate condom use with the male hookup partners identified online, offline, and both online and offline (Figure 3.1), the analysis of data collected to answer RQ5 employed a general linear model analysis on the combined TPB constructs. The hypotheses related to RQ5 are as follows:

H_o 5: There will be no statistically significant effect between attitude toward the behavior, subjective norms, and perceived behavioral control, and behavioral intention to negotiate condom use with hookup partners met online, offline, and both online and offline.

H_A 5: There will be a statistically significant effect between attitude toward the behavior, subjective norms, and perceived behavioral control, and behavioral intention to negotiate condom use with hookup partners met online, offline, and both online and offline.

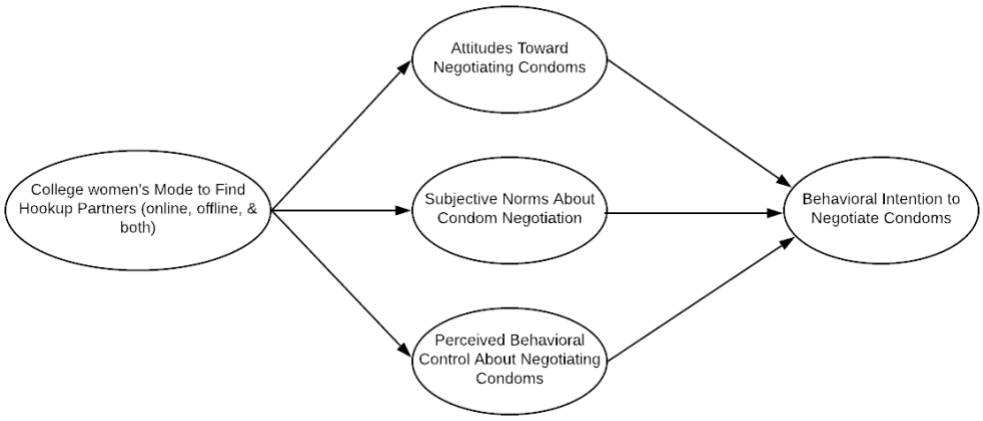

Figure 3.1. Model of how the Theory of Planned Behavior will be used to determine behavioral intention using attitude toward the behavior, subjective norms, and perceived behavioral control for those participants who engage in hookups with a partner found online, offline, or both.

RQ6: *Does past condom use with male hookup partners met online, offline, or both online and offline influence college women's attitudes toward the behavior, subjective norms, and perceived behavioral control to predict future intentions to negotiate condom use?*

In order to determine if the constructs of TPB (attitude toward the behavior, subjective norms, and perceived behavioral control) mediate the relationship between past condom use and behavioral intentions of college women to negotiate condom use with the male hookup partners identified online, offline, and both online and offline (Figure 3.2), the analysis of data collected to answer RQ6 employed a general linear model analysis on the combined TPB constructs.

H_o6: There will be no statistically significant effect between past condom use with male hookup partners and the constructs of the TPB (attitude toward the behavior, subjective norms, perceived behavioral control, and behavioral intention).

H_A6: There will be a statistically significant effect between past condom use with male hookup partners and the constructs of the TPB (attitude toward the behavior, subjective norms, perceived behavioral control, and behavioral intention).

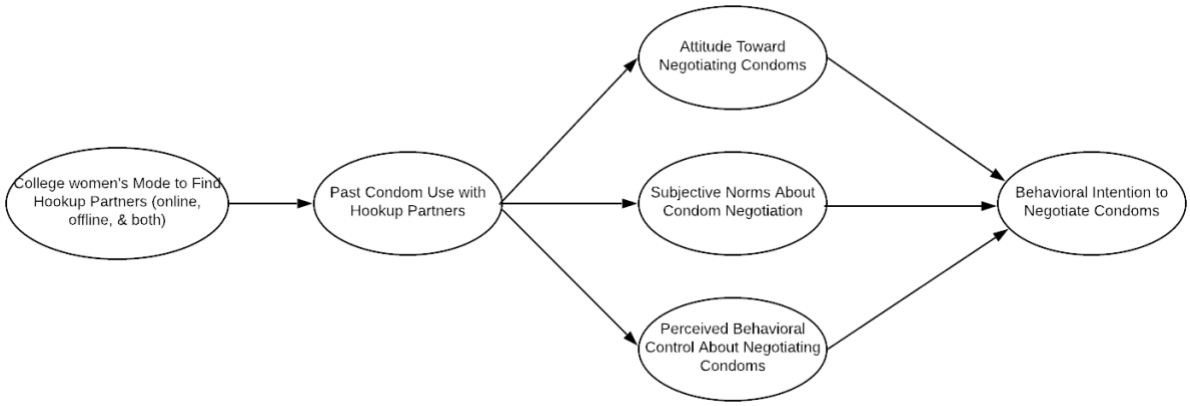

Figure 3.2. Model of how the Theory of Planned Behavior and past condom use will be used to determine behavioral intention using attitude toward the behavior, subjective norms, and perceived behavioral control as mediators.

Data Management

Prior to data entry, each of the collected questionnaires were numbered by the researcher. Each numbered questionnaire coincided with the number entered into SPSS spreadsheet. Each questionnaire was double-checked by the researcher after each entry to ensure participant responses were entered correctly. Through descriptive statistics, it was determined that each scale was missing data. Twenty percent of the total questionnaires collected (n = 72) were missing 100% of the data for the TPB and condom negotiation strategy questions.The researcher ultimately chose not to include these questionnaires in the analysis. It was also determined that four of the questions measuring condom negotiation strategies were missing less than one percent of the data per question. Missing data for any individual item under 10% is acceptable in health research (Dodenn, 2003); therefore, this missing data was not removed from the data set prior to analysis of the study research questions. Prior to analyzing the data, summed scores were created for each of the TPB construct subscales and the condom negotiation strategy subscales (see Appendix J). The analysis of the data is described in Chapter 4.

Summary

The methodology for this study was presented in this chapter. Participants included a convenience sample of female college students enrolled at The University of Alabama. The instrumentation process included obtaining permission and modifying items from existing instruments, developing items to assess past sexual behavior, hookup behavior, and behavioral intention questions, and the proposed analyses was discussed in this chapter. Results from the statistical analyses of the research questions are presented in Chapter 4, with a discussion of the findings following in Chapter 5.

CHAPTER 4

RESULTS

The primary purpose of this study was to identify differences between the mode in which college women seek male hookup partners (online, offline, and both online and offline) and the condom negotiation strategies used with these partners. A secondary purpose of the study was to utilize the constructs of the Theory of Planned Behavior (TPB) to predict and identify differences in condom negotiation intention with male hookup partners met online, offline, and both online and offline. Chapter 4 describes the data screening and respondents, the characteristics of the sample, and the results of the research questions.

Results of the Questionnaire

Data Screening and Respondents

A total of 23 instructors of undergraduate courses in the College of Human Environmental Science (CHES) were contacted for class recruitment and administration during the spring 2019 semester. Of these 23 instructors, 12 granted permission for the researcher to enter the classroom to recruit and administer the questionnaire. It was difficult to determine the sampling frame of all college women in each of the CHES courses the researcher was granted permission to recruit and administer from. Additionally, dual-enrollment across CHES course

was likely; therefore, the sampling frame consisted of 736 college students, including college males.

The number of participants who were successfully recruited and who returned a questionnaire was 370. Of those 370 participants, two did not meet the eligibility criteria because one was under 18 years of age and a second was over 24 years of age (*n*=2, 0.54%). An additional 72 participants were excluded from the analysis because they did not complete all of the instrument items (19.46%). The final sample consisted of 296 undergraduate women. Figure 4.1 provides a summary of the data reduction procedures.

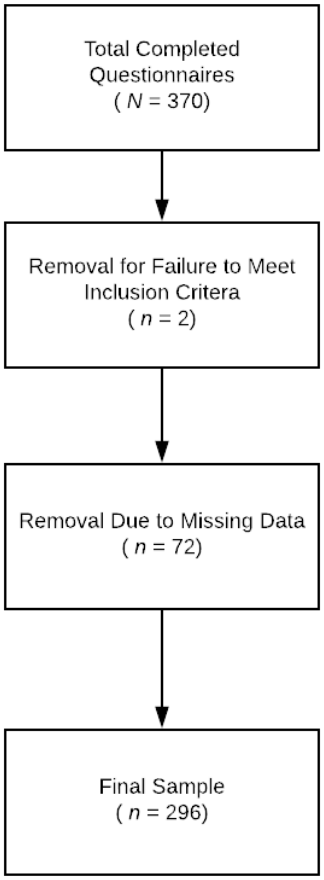

Figure 4.1. Flowchart of data reduction procedures.

Demographic Characteristics of the Sample

Two hundred and ninety-six students (*N* = 296) participated in the survey. Among this sample, the mean age was 20.66 years old (*sd* = 1.37), 32.4% (*n* = 96) were 4th year undergraduates, 68.9% (*n* = 204) were White, 87.8% (*n* = 260) identified as straight or heterosexual, 95.6% (*n* = 283), 50.7% (*n* = 150) indicated that they were not Greek affiliated, 95.6% (*n* = 283) were not married, and 51.7% (*n* = 153) were not in a relationship (Table 4.1).

Table 4.1

Demographics Characteristics of the Study Sample

Characteristic	***n***	**%**
Age (in years)		
18	20	6.8
19	45	15.2
20	58	19.6
21	90	30.4
22	62	20.9
23	17	5.7
24	4	1.4
Classification		
1st Year	46	15.5
2nd Year	49	16.6
3rd Year	82	27.7
4th Year	96	32.4
5th Year	23	7.8
Race/Ethnicity		
White	204	68.9
Black or African American	65	22.0
Hispanic or Latino/a	11	3.7
Asian or Pacific Islander	2	0.7

American Indian, Alaskan Native, or Native Hawaiian	1	0.3
Biracial or Multiracial	13	4.4
Sexual Orientation		
Asexual	19	6.4
Bisexual	9	3.0
Gay	1	0.3
Pansexual	1	0.3
Questioning	3	1.0
Straight/heterosexual	260	87.8
Same Gender Loving	2	0.7
Other	1	0.3
Greek Affiliation		
Yes	146	49.3
No	150	50.7
Marital Status		
Single	283	95.6
Married/partnered	13	4.4
Relationship Status		
Not in a relationship	153	51.7
In a relationship but not living together	115	38.9
In a relationship and living together	28	9.5

Sexual Behaviors of the Sample

In terms of sexual behaviors (Table 4.2), a majority of the sample (93.24%, *n* = 276) indicated that they had engaged in either vaginal or anal intercourse with a partner in the last 12 months. One hundred and seventy-seven (59.8%) reported intercourse with 1 to 2 partners, 24% (*n* = 71) had sex with between 3 and 5 partners, 7.1% (*n* = 21) had intercourse with 6-9 partners, and 2.4% (*n* = 7) had sex with 10 or more partners. When asked how many males they had

intercourse with in the previous 12 months, the majority (59.5%, *n* = 176) indicated that they had intercourse with 1 to 2 men. Participants were also asked how often they had used condoms with the males they had intercourse with. One hundred and sixty-eight (56.8%) participants indicated that they used condoms always/often/sometimes, 108 (36.5%) reported using them rarely/never, and 20 (6.8%) did not answer the question because they had not engaged in intercourse.

Table 4.2

Sexual Behaviors of the Sample

Characteristic	***n***	**%**
Intercourse last 12 months (number of partners)		
0	20	6.8
1-2	177	59.8
3-5	71	24.0
6-9	21	7.1
10+	7	2.4
Intercourse w/ males last 12 months (number of partners)		
0	23	7.8
1-2	176	59.5
3-5	70	23.6
6-9	20	6.8
10+	7	2.4
Condom use with male partners last 12 months		
Always	65	22.0
Often	47	15.9
Sometimes	56	18.9
Rarely	46	15.5
Never	62	20.9

Research Question Results

RQ 1: *What is the prevalence of college women who seek male hookup partners online, offline, and both online and offline?*

Descriptive statistics were used in order to explore participant's hookup behaviors in the previous six months (Table 4.3). One hundred and fifty-five participants (52.4%) reported engaging in a hookup in the previous six months. Of those who indicated they had engaged in a hookup in the last six months, 137 engaged in vaginal or anal intercourse with their hookup partner(s) and of those 137, participants reported using condoms always (29.93%, *n* = 41), often (13.87%, *n* = 19), sometimes (21.90%, *n* = 30), rarely (16.79%, *n* = 23), and never (17.52%, *n* = 24) with their hookup partners.

Table 4.3

Hookup Behaviors and Condom Use with Hookup Partners

Characteristic	*n*	%
Engaged in a Hookup in the Last 6 months		
Yes	155	52.40
No	141	47.60
Engaged in Intercourse*		
Yes	137	46.30
No	18	6.10
Condom Use with Hookup Partner(s)*		
Always	41	29.93
Often	19	13.87
Sometimes	30	21.90
Rarely	23	16.79
Never	24	17.52

Note. The asterisk (*) indicate those proportions of the sample and percentages who indicated that they had engage in a hookup in the previous 6 months (*n* = 155).

When asked where they had first contacted their hookup partners, out of the 155 participants who indicated they had engaged in a hookup, 4.52 % (*n* = 7) found their partner(s) online, 67.74% (*n* = 105) found their partner offline, and 27.74% (*n* = 43) found hookup partners online and offline. Of those participants who indicated they had met their partners online only or both online and offline (*n* = 50), 44% (*n* = 22) reported using a dating app or dating website, 36% (*n* = 18) reported using a social media app or social networking site, and 20% (*n* = 10) utilized both dating apps and social media to contact their hookup partners. When asked how often they sought partners through online venues, a majority of the participants reported they rarely (42%, *n* = 21) used them to identify or seek hookup partners.

Table 4.4

Mode of Contact with Hookup Partners, the Use of Online Venues, and Frequency in which participants identified partners online

Characteristic	*n*	%
Contact Hookup Partner		
Online Only	7	4.52
Offline Only	105	67.74
Both Online and Offline	43	27.74
Contact Online Partner		
Dating app or dating website	22	44.0
Social media app or social networking site	18	36.0
Dating app and social media	10	20.0
How Often Participants Sought Online Partners		
Always	3	6.0
Often	3	6.0
Sometimes	13	26.0
Rarely	21	42.0
Never	10	20.0

Note. The proportion of the sample and percentages presented in this table only include those who indicated that they had engage in a hookup in the previous 6 months (n = 155).

RQ 2: *Are the scales measuring the constructs of the Theory of Planned Behavior reliable in the context of condom negotiation?*

The questionnaire consisted of four subscales measuring the constructs of the Theory of Planned Behavior. Two of the instruments used and modified for this study, the Intent to Condom Use Inventory (Kanu & Kanu, 2000) and the Health and Safer Sex Behavior Survey (Sharma & Asare, 2000), had previously established measures of reliability in college populations (Table 4.5). Items measuring behavioral intention were developed from guidelines

by Fishbein and Ajzen (2010) and did not have previously established measures of reliability. Due to modifications of previously utilized scales and the development of one subscale, reliability was assessed to determine if these scales measuring the constructs of the Theory of Planned behavior were reliable in the context of condom negotiation (Table 4.6). Prior to analysis attitudes toward the behavior (items 10-12, 14), perceived behavioral control (item 26), and behavioral intention (items 29-31) questions that were negatively worded were recoded. Additionally, the items for each of the four subscales were summed to create total scores for each of the TPB constructs (Appendix J).

Table 4.5

Reliability of the Intent to Use Condom Use Inventory and the Health and Safer Sex Behavior Survey

Scale	**Cronbach's Alpha**	**Level of Acceptability**
Intent to Condom Use Inventory		
Attitude Subscale	0.72	Acceptable
Perceived Behavioral Control Subscale	0.70	Acceptable
Health and Safer Sex Behavior Survey		
Normative Belief	0.83	Good
Motivation to Comply	0.87	Good

Cronbach's alpha of reliability is considered to be acceptable at 0.70, good at 0.80 or higher, and excellent at 0.90 or higher (Gliem & Gliem, 2003). However, scores higher than 0.50 are considered to have acceptable reliability (Bowling, 2005; Cronbach, 1951; Helmstadter, 1964). Cronbach's alpha, means, standard deviations, and ranges for each of the TPB subscales are described hereafter.

Attitudes toward condom negotiation. Table 4.6 provides a summary of the mean, standard deviation, possible range, observed range, and reliability statistics for the attitudes toward condom negotiation subscale. Seven items assessed attitudes toward condom negotiation (items 10-16) using a 7-point Likert scale. This subscale had a possible range of 7 to 49 with an observed range of 19 to 49, a mean of 39.13, and a standard deviation of 6.40. Prior to analyzing the reliability of this subscale, several negatively worded items were recoded (items 10, 11, 12, and 14). The Cronbach's alpha for this subscale ($\alpha = 0.64$) was deemed acceptable. Higher scores on this construct of the TPB indicate a favorable attitudes towards negotiating condom use. The attitudes toward condom negotiation data appear to deviate from a normal distribution with a skewness of -0.697 and kurtosis of 0.273. The largest number of participants had a score of 38 (7.3%, $n = 10$), 40 (7.3%, $n = 10$), 43 (12.4%, $n = 17$) and 44 (7.3%, $n = 10$). This means most participants had favorable attitudes toward negotiating condom use with their partners. The distribution of the subscale with a superimposed normal distribution curve can be seen in Figure 4.2.

Subjective norms. Table 4.6 provides a summary of the mean, standard deviation, possible range, observed range, and reliability statistics for the subjective norms subscale. Six items assessing subjective norms (items 17- 22) using a 7-point Likert scale. This subscale had a possible range of 7 to 49 with an observed range of 6 to 42, a mean of 27.32, and a standard deviation of 7.72. The Cronbach's alpha for this subscale was acceptable ($\alpha = .73$). The data for this subscale were normally distributed with a skewness of 0.129 and a kurtosis value of -0.487. The distribution of this subscale with a superimposed normal distribution curve can be seen in Figure 4.2.The largest number of participants earned a possible score between 23 and 30 (44.26%, $n = 131$). This means most participants answered neutrally to questions in this

subscale, indicating that they neither disagreed nor agreed with their family, friends, and partners opinions and approval of their condom use. The distribution of the subscale with a superimposed normal distribution curve can be seen in Figure 4.2.

Perceived behavioral control. Seven items assessing the participants perceived behavioral control in regards to condom negotiation (items 23-27) utilized a 7-point Likert scale. This subscale had a possible range of 7 to 35 with an observed range of 7 to 35, a mean of 28.43, and a standard deviation of 5.30. The Cronbach's alpha for this scale for this subscale was deemed acceptable ($\alpha = 0.67$). A considerable proportion of participants attained the maximum possible score for this subscale (16.90%, $n = 50$). Higher scores on this construct indicated that participants feel comfortable negotiating condom use with their partners or if their partners indicated that they would not be willing to use a condom, participants felt confident in refusing to engage in sexual intercourse. Perceived behavioral control data appear to be negatively skewed with a value of -0.946 and a kurtosis value of 1.14. Table 4.6 provides a summary of the mean, standard deviation, possible range, observed range, and reliability statistics for the perceived behavioral control subscale and the distribution of the subscale with a superimposed normal distribution curve can be seen in Figure 4.2.

Behavioral intention. Participants' behavioral intention was measured with three items (items 29-31) using a 7-point Likert scale. Table 4.6 provides a summary of the mean, standard deviation, possible range, observed range, and reliability statistics for the behavioral intention subscale. This subscale had a possible range of 3 to 21 and an observed range of 3 to 21, a mean of 13.60, and a standard deviation of 6.60. The Cronbach's alpha for this subscale was deemed excellent (0.98) as those Cronbach's values closer to 1.0 are ideal. A majority of the participants achieved the maximum score of 21 (29.4%, $n = 87$) which indicates participants are extremely

likely to negotiate condom use with their partners in the next three months; however, there were also a considerable amount of participants who achieved the minimum score (15.5%, *n* = 46). This indicates that those participants are extremely unlikely to negotiate condom use in the next three months. The behavioral intention data is unevenly distributed with a skewness value of -0.348 and a kurtosis value of -1.28. This is likely due to a large number of participants scoring both the minimum and maximum possible score for this subscale. A visual representation of the data with a superimposed normal distribution curve is provided in Figure 4.2.

Table 4.6

Cronbach's Alpha, Levels of Acceptability, Means, Standard Deviations of the Theory of Planned Behavior Subscales (*n* = 296)

	Descriptive Statistics				**Reliability Statistics**
Subscale	**Possible Range**	**Observed Range**	***M***	***SD***	**Cronbach's α**
Attitudes Toward Behavior	7 to 49	19 to 49	39.13	6.40	0.64
Subjective Norms	7 to 49	6 to 42	27.32	7.72	0.73
Perceived Behavioral Control	7 to 35	7 to 35	28.43	5.30	0.67
Behavioral Intention	3 to 21	3 to 21	13.60	6.60	0.98
Overall Scale	-.-	-.-	-.-	-.-	0.84

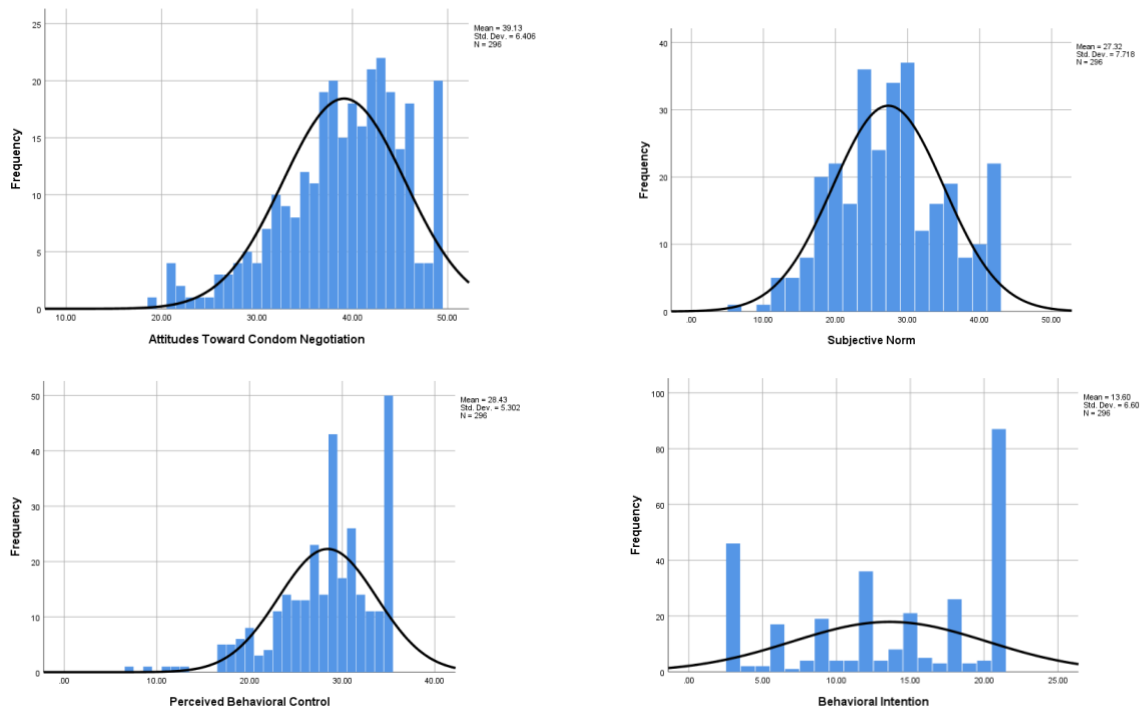

Figure 4.2. Visual Representation of the Distribution of the Theory of Planned Behavior Subscales (n = 296).

RQ 3: *Are there differences between college women who seek male hookup partner's online, offline, and both online and offline and their intentions to negotiate condom use?*

Prior to the analysis, a behavioral intention score was created by summing the items (items 29-31; see Appendix J). The behavioral intention subscale had a possible range of 3 to 21. An one-way analysis of variance (ANOVA) was used to determine significant differences in the mean scores between the mode in which college women identified male hookup partners (online, offline, and both online and offline) and their behavioral intention to negotiate condom use with their partners in the next three months. The analysis revealed there were no significant differences between the mode in which college women identified their hookup partners (online, offline, and both online and offline) and their behavioral intentions (F (2, 152) = 1.77, $p < 0.05$; Table 4.7). However, participants who found partners both online and offline (M = 14.98, sd =

6.89, 95% CI [12.86, 17.10]) had higher levels of intention to negotiate condom use with their partners over the next three months than participants who found partners online (*M* = 10.86, *sd* = 7.56, 95% CI [3.87, 17.85]) and offline (*M* = 13.36, *sd* = 5.91, 95% CI [12.22, 14.51]; Table 4.8).

Table 4.7

One-Way Analysis of Variance of Behavioral Intention by Hookup Partners (Online, Offline, and Both Online and Offline)

Source	***df***	***SS***	***MS***	***F***	***p***
Between groups	2	138.67	69.33	1.76	0.175
Within groups	152	5968.08	39.26	-.-	-.-
Total	154	6106.75	-.-	-.-	-.-

Table 4.8

Proportion of Sample, Means, Standard Deviations, and Confidence Intervals of Behavioral Intention by Hookup Partners (Online, Offline, and Both Online and Offline)

Contact Hookup				**95% Confidence Interval**	
Partner	***n***	***M***	***sd***	**Lower**	**Upper**
Online Only	7	10.86	7.56	3.87	17.85
Offline Only	105	13.36	5.91	12.22	14.51
Online and Offline	43	14.98	6.89	12.86	17.10

RQ 4: *Are there differences between college women who seek male hookup partner's online, offline, and both online and offline and their condom negotiation strategies?* The item assessing condom negotiation strategies was one-multi item scale (item 28) that consisted of 19 sub-items. Based on author recommendations, these multiple items were sorted into four distinct

subscales representing verbal direct, verbal indirect, nonverbal direct, and nonverbal indirect condom negotiation strategies (see Appendix K).

Prior to analysis, the items in each of the four subscales were summed to create a total score for each of the four subscales (see Appendix J). These minimum and maximum scores for each subscale can be seen in Table 4.9. Cronbach's alpha was conducted for each of the four subscales for condom negotiation strategies. Cronbach's alpha, means, standard deviations, and ranges for each of the subscales are described hereafter.

Verbal direct condom negotiation strategies. Six sub-items assessing the participant's likelihood of using verbal direct condom negotiation strategies (item 28; see Appendix K) utilized a 7-point Likert scale. This subscale had a possible range of 6 to 42 with an observed range of 6 to 42, a mean of 20.18, and a standard deviation of 10.29. The Cronbach's alpha for this subscale was considered good ($\alpha = 0.83$). A large number of participants scored on the low end of the range with a total score of 6 ($n = 29$, 9.8%). Lower scores on this subscale indicate the likelihood of using condom negotiation strategies that were verbal and used direct measures to negotiate condom use. The verbal direct subscale was normally distributed with a skewness of 0.485 and a kurtosis of -0.733. Table 4.9 provides a summary of the mean, standard deviation, possible range, and reliability statistics for the subscale. The distribution of the subscale with a superimposed normal distribution curve can be seen in Figure 4.3.

Verbal indirect condom negotiation strategies. Five sub-items assessing the use of verbal indirect strategies to negotiate condom use (item 28; see Appendix K) utilized a 7-point Likert scale. This subscale had a possible range of 5 to 35 with an observed range of 5 to 35, a mean of 23.73, and a standard deviation of 7.95. The Cronbach's alpha reliability was deemed acceptable ($\alpha = 0.75$). A considerable number of participants attained the maximum score ($n =$

41, 13.9%). Higher scores on this subscale indicate that participants were less likely to use verbal indirect strategies to negotiate condom use with their partners. Verbal indirect data appear to be negatively distributed with a skewness of -0.338 and a kurtosis of -0.680. Table 4.9 provides a summary of the mean, standard deviation, possible range, and reliability statistics for the subscale. The distribution of the subscale with a superimposed normal distribution curve can be seen in Figure 4.3.

Nonverbal direct condom negotiation strategies. The nonverbal direct subscale consists of five sub-items (item 28; see Appendix K) measured on a 7-point Likert scale. This subscale had a possible range of 5 to 35 with an observed range of 5 to 35, a mean of 19.79, and a standard deviation of 7.62. Table 4.9 provides a summary of the mean, standard deviation, possible range, and reliability statistics for the subscale. A substantial number of participants scored a 23 (n = 24, 8.1%). This indicates that participants may be more unlikely to not use nonverbal direct tactics. This subscale was normally distributed with a skewness of 0.035 and kurtosis of -0.709. The distribution of the subscale with a superimposed normal distribution curve can be seen in Figure 4.3.

Nonverbal indirect condom negotiation strategies. Three sub-items measuring nonverbal indirect methods of negotiation condom use (item 28; see Appendix K) utilized a 7-point Likert scale. This subscale had a possible range of 3 to 21 with an observed range of 3 to 21, a mean of 14.21, and a standard deviation of 4.77. Table 4.9 provides a summary of the mean, standard deviation, possible range, and reliability statistics for the subscale. A considerable number of participants achieved the maximum score (n = 47, 15.9%) indicating that the participants were unlikely to use nonverbal indirect methods to negotiate condom use with their partners. This subscale was normally distributed with a skewness of -0.233 and kurtosis of -

0.673. Figure 4.3 provides the distribution of the subscale with a superimposed normal distribution curve.

Table 4.9

Cronbach's Alpha, Levels of Acceptability, Means, Standard Deviations, and Possible Range of Scores for Condom Negotiation Strategy Subscales

Subscale	Cronbach's α	Level of Acceptability	*M*	*sd*	Min. Score	Max. Score
Verbal Direct	0.83	Good	20.18	10.29	6	42
Verbal Indirect	0.75	Acceptable	23.73	7.95	5	35
Nonverbal Direct	0.60	Acceptable	19.79	7.62	5	35
Nonverbal Indirect	0.50	Acceptable	14.21	4.77	3	21
Overall Instrument	0.85	Good	77.97	22.54	-.-	-.-

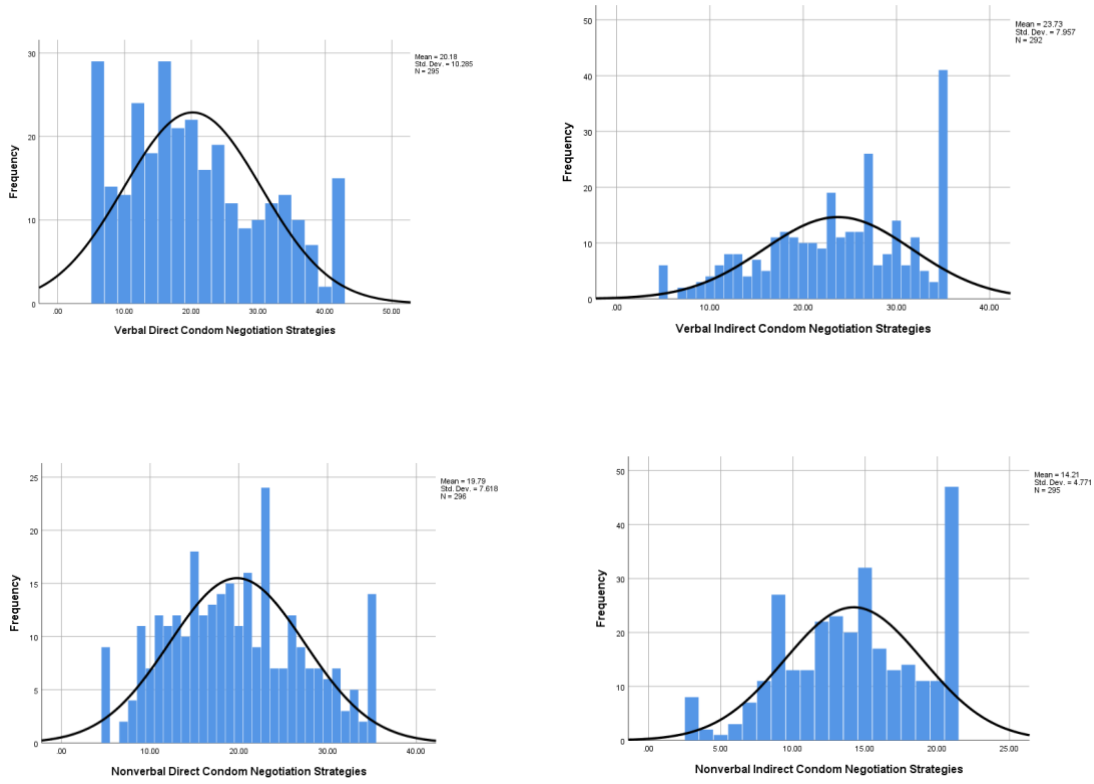

Figure 4.3. Visual Representation of the Condom Negotiation Strategy Subscales

Following tests of reliability, a one-way analysis of variance (ANOVA) was conducted to identify significant differences in the mean scores between the mode in which college women identified male hookup partners (online, offline, and both online and offline) and their condom negotiation strategies. A statistically significant difference was found among the nonverbal indirect condom negotiation strategies (F (2, 151, 3.55. $p < 0.05$). There was no significant differences found with those participants who had identified their partners verbal direct (F (2,152) = 0.038, $p > 0.05$), verbal indirect (F (2,151) = 0.604, $p > 0.05$), and nonverbal direct (F (2, 152) = 0.018, $p > 0.05$) among the participants who found male hookup partners online, offline, or through both venues.

Table 4.10

One-Way Analysis of Variance of Condom Negotiation Strategies by Hookup Partners (Online, Offline, and Both Online and Offline)

Source	***df***	***SS***	***MS***	***F***	***p***
Verbal direct					
Between	2	8.18	4.09	0.038	0.963
Within	152	16429.33	108.09	-.-	-.-
Verbal indirect					
Between	2	70.18	35.09	0.604	0.548
Within	151	8768.73	58.07	-.-	-.-
Nonverbal direct					
Between	2	2.11	1.06	0.018	0.983
Within	152	9104.51	59.90	-.-	-.-
Nonverbal indirect					
Between	2	153.54	76.77	3.550	0.031*
Within	151	3265.81	21.63	-.-	-.-

*Note.** $p < 0.05$

Table 4.11

Proportion of Sample, Means, Standard Deviations, and Confidence Intervals for How Participants Contacted Their Hookup Partners by Condom Negotiation Strategies

					Tukey's HSD Comparisons		
CNS	**CHP**	***n***	***M***	***SD***	**Online**	**Offline**	**Both**
Verbal Direct	Online	7	21.0	14.47	-.-	-.-	-.-
	Offline	105	21.15	9.82	-.-	-.-	-.-
	Both	43	21.65	11.06	-.-	-.-	-.-
Verbal Indirect	Online	7	26.29	6.58	-.-	-.-	-.-
	Offline	104	23.43	7.61	-.-	-.-	-.-
	Both	43	24.35	7.79	-.-	-.-	-.-
Nonverbal Direct	Online	7	19.57	9.31	-.-	-.-	-.-
	Offline	105	19.81	7.34	-.-	-.-	-.-
	Both	43	19.56	8.44	-.-	-.-	-.-
Nonverbal Indirect	Online	7	17.71	4.11	-.-	0.048*	0.242
	Offline	104	13.38	4.59	0.048*	-.-	0.293
	Both	43	14.65	4.86	0.242	0.293	-.-

Note. Lower mean values for condom negotiation strategies indicate increased use of those specific strategies; CNS = condom negotiation strategy; CHP = contact hookup partner; Both = both online and offline partners. * $p < 0.05$

In order to determine which groups (mode of contacting hookup partners) differed in their use of nonverbal indirect condom negotiation strategies, a test of multiple comparisons was conducted. Tukey's HSD revealed significant differences between those individuals who identified partners offline (M = 13.38, sd = 4.59) and those who found partners online (M = 17.71, sd = 4.11), p = 0.048. The results from Tukeys HSD are presented in Table 4.11.

RQ 5: *Do the constructs of the Theory of Planned Behavior (attitudes toward the behavior, subjective norms, and perceived behavioral control) predict behavioral intention to negotiate condom use for hookups with online, offline, and both online and offline partners?*

A general linear model (GLM) analysis was conducted to determine if there was a significant interaction between the constructs of the TPB and behavioral intention for those participants who engage in hookups with partners found online, offline, and both online and offline. The results indicated that the mode in which college women identified their hookup partners and the constructs of the TPB did not have a significant interaction ($p > 0.05$) on behavioral intention to negotiate condom use in the next three months; however, perceived behavioral control did have a significant interaction ($p = 0.043$) with behavioral intention. The entire model explained approximately 16.5% ($R^2 = 0.165$) of the variance in behavioral intention and perceived behavioral control explained 2.8% of the variance in behavioral intention to negotiate condom use in the next three months. These interactions can be seen in Table 4.12 and in Figure 4.4.

Table 4.12

Results of the General Linear Model Analysis for Hookup Partner (Online, Offline, and Both Online and Offline) and the Theory of Planned Behavior

Variable	*SS*	*df*	*MS*	*F*	*p*	Partial Eta Squared (η^2)
Corrected Model	1009.96[a]	11	91.82	2.58	0.005	0.165
Intercept	93.97	1	93.97	2.64	0.107	0.018
CHP	148.47	2	74.23	2.08	0.128	0.028
ATT	73.74	1	73.742	2.07	0.153	0.014
SN	4.80	1	4.804	0.135	0.714	0.001
PBC	147.92	1	147.924	4.150	0.043*	0.028
CHP*ATT	148.49	2	74.245	2.083	0.128	0.028
CHP*SN	99.95	2	49.97	1.40	0.249	0.019
CHP*PBC	146.422	2	73.211	2.054	0.132	0.028

Note. R^2 for the model = 0.165; Adjusted R^2 = .101; CHP = contact hookup partners, ATT = attitudes toward condom negotiation; SN = subjective norms; PBC = perceived behavioral control. *$p < 0.05$

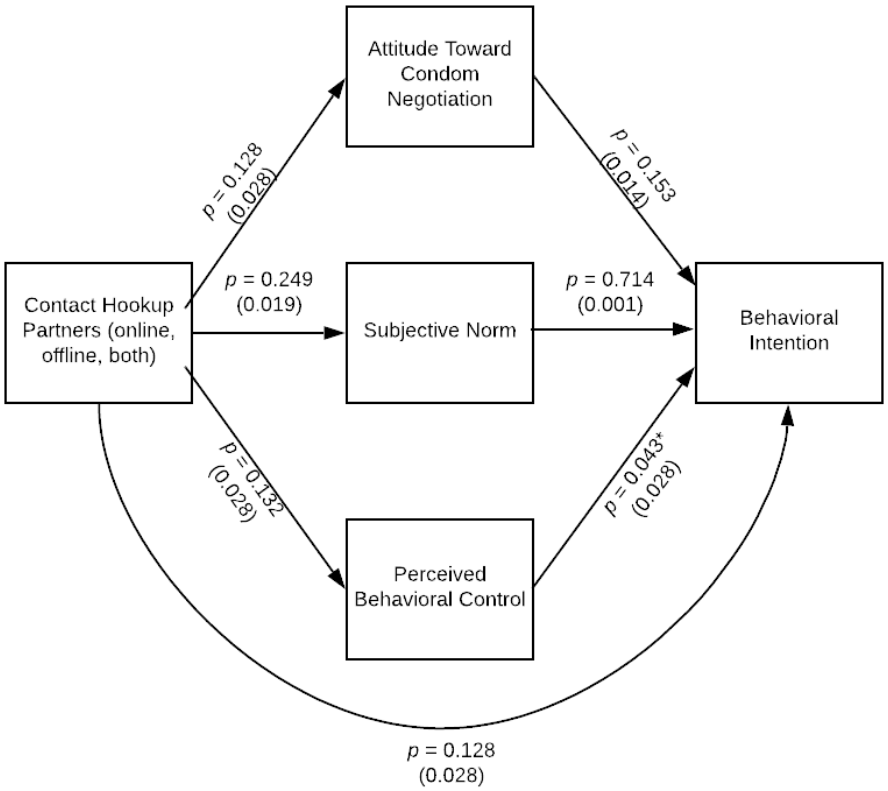

Figure 4.4. Model Depicting Interactions Between the Mode in Which College Women Identified Their Hookup Partners and the Theory of Planned Behavior. *Note.* Partial Eta Squared (η^2) and *p*-values shown in figure. $*p < 0.05$.

RQ 6: *Does past condom use with male hookup partners met online, offline, and both online and offline influence college women's attitudes toward the behavior, subjective norms, and perceived behavioral control to predict future intentions to negotiate condom use?*

Prior to the analysis, the responses to the item (item 9) measuring past condom use with hookup partners in the previous six months were collapsed into always/often and sometimes/rarely/never. A general linear model (GLM) analysis was conducted to determine if there was a predictive relationship between past condom use, the constructs of the TPB, and behavioral intention for those participants who engage in hookups with partners found online,

offline, and both online and offline. The results indicated that there was not a significant interaction between how college women identified partners, past condom use, attitudes toward the behavior, and perceived behavioral control, ($p > 0.05$); however, subjective norms, when placed in this model was a significant predictor ($p = 0.047$) of behavioral intention. Subjective norms explained 3.1% (partial $\eta^2 = 0.031$) of the variance in the model and the entire model explained approximately 13.5% ($R^2 = 0.135$) of the variance in behavioral intention and subjective norms explained 3.1% of the variance in behavioral intention to negotiate condom use in the next three months. These interactions can be seen in Table 4.13 and in Figure 4.5.

Table 4.13

Results of the general linear model analysis for hookup partner (online, offline, and both online and offline), past condom use, and the Theory of Planned Behavior

Variable	*SS*	*df*	*MS*	*F*	*p*	Partial Eta Squared (η^2)
Corrected Model	753.866[a]	11	68.533	1.77	0.065	0.135
Intercept	132.98	1	132.98	3.45	0.066	0.027
CHP	89.24	2	44.62	1.157	0.318	0.018
PCU	75.87	1	75.87	1.97	0.163	0.015
CHP*PCU	122.26	2	61.13	1.59	0.209	0.025
ATT	5.747	1	5.747	0.149	0.700	0.001
SN	155.405	1	155.405	4.038	0.047*	0.031
PBC	2.990	1	2.990	0.077	0.781	0.001
PCU*ATT	69.462	1	69.462	1.801	0.182	0.014
PCU*SN	4.547	1	4.547	0.118	0.732	0.001
PCU*PBC	0.334	1	0.334	0.009	0.926	0.000

Note. R^2 for the model = 0.135; Adjusted R^2 = .059; CHP = contact hookup partner; PCU = past condom use; ATT = attitudes toward the behavior; SN = subjective norms; PBC = perceived behavioral control.
*$p < 0.05$

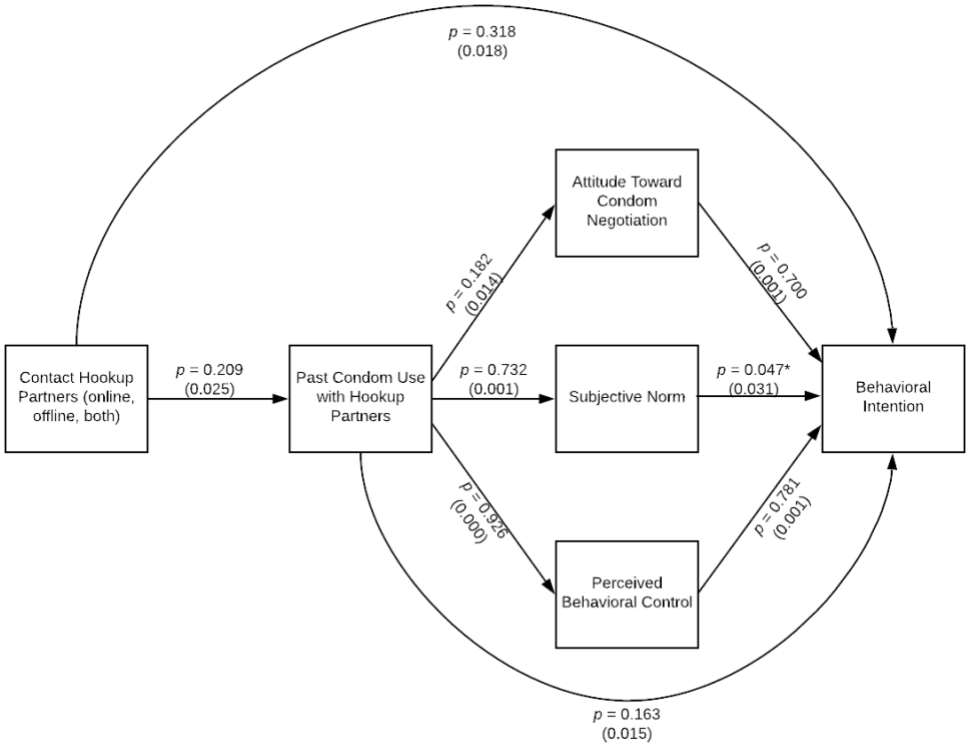

Figure 4.5. Model Depicting Interactions Between the Mode in Which College Women Identified Their Hookup Partners, Past Condom Use, and the Theory of Planned Behavior. *Note.* Partial Eta Squared (η^2) and *p*-values shown in figure. *$p < 0.05$.

Summary

The results of this investigation were discussed in Chapter 4. Descriptive statistics were used to describe the characteristics of the sample, their sexual behaviors, and hookup behaviors. Various analysis were conducted, which included Cronbach's alpha, ANOVA, and GLM in order to answer the study research questions. Chapter 5 will discuss the conclusions, implications for health education, future research, and the limitations of the current study.

CHAPTER 5

DISCUSSION

Engaging in hookups are seen as a normative behavior on college campuses across the United States (US; Bogle, 2008; Flack et al., 2007). College students can meet potential partners through traditional meeting contexts, such as bars, dormitories, or even through social networks like friends and family members (Kuperburg & Padgett, 2017). However, in recent years the number of young adults using global positioning system (GPS) mobile dating applications (apps) and other social networking sites (SNS; e.g. Snapchat, Facebook, and Instagram) to identify both romantic and sexual partners have continued to grow with 22% of 18 to 24 year olds reporting using dating apps in 2015 (Smith, 2016).

Research has indicated that those individuals that engage in hookups and who identify sexual partners online (i.e. dating apps and SNS) engage in risky sexual behaviors like not using condoms which can increase an individual's risk of acquiring a sexually transmitted infection (STI) (Couch, Liamputtong, & Pitts, 2012; McFarlane et al, 2004). However, condom use is dyadic in nature and requires both individuals to agree to use a condom during sexual activity (Noar et al., 2012). Because men are the ones who physically wear condoms, women may need to possess condom negotiation skills in order to persuade their male's partners to use a condom during sexual activity (Peters, Jansen, & van Driel, 2010; Otto-Salage et al., 2010). Although condom negotiation has been studied among college students (French & Holland, 2013; Holland

& French, 2011; Lam et al., 2004; Nesoff et al., 2016), there is limited information about condom negotiation strategies employed during hookups, especially with partners "met" online.

The primary purpose of this study was to identify differences between the mode in which college women seek male hookup partners (online, offline, and both online and offline) and the condom negotiation strategies used with these partners. A secondary purpose of the study was to utilize the constructs of the Theory of Planned Behavior (TPB) to predict and identify differences in condom negotiation intention with male hookup partners met online, offline, and both online and offline. This study represented the first attempt to examine condom negotiation among college women who engage in hookups with partners found through both offline and online venues using the TPB. This chapter presents an evaluation of the study's research questions, implications of the study's findings to the field of public health education, recommendations for future research, and limitations of the study.

Theoretical Framework

The Theory of Planned behavior has been used previously to investigate condom use among college students (Asare, 2015) and college women (Fazekas et al., 2001) and has been shown to predict condom use (Albarracin, Johnson, Fishbein & Muellerleile, 2001; Asare, 2015; Brafford & Beck, 1991; Brown 1984; Campbell, Peplau, & De Bro, 1992; Edward & Barber, 2010; Finklestein & Brannick, 2000; Heeran et al., 2007; Kanu & Kanu, 2000; Muñoz-Silva, Sánchez-García, Nunes, & Martins, 2007; Rinaldi-Miles, Quick, & McCloskey, 2017). The selection of the Theory of Planned Behavior as a framework for this study was appropriate as previous research has shown the TPB may be used to understand how a woman's hookup perceptions may influence her own decisions to hookup (Kenney et al., 2013), or her intentions

to use condoms (Fazekas et al., 2001), and which condom negotiation strategies are likely to be employed (Carter et al., 1999).

Significance of the Study

There has been a great deal of research on hookup behaviors among college women exists; however, as of May 2019 there is no research found in the literature examining college women's hookup behaviors and condom negotiation strategies with partners met in person (offline) and those met through dating apps, social media, SNS (online). Previous research conducted on dating app use and sexual behaviors has focused mainly on men who have sex with men (MSM); however, studies that examine heterosexuals' use of dating apps is limited. Of these studies, most investigated and reported primarily on general condom use (i.e. whether a condom was used or not). Furthermore, to date, only one study has been conducted investigating college women's use of dating apps (Dir et al., 2015); however, this study presented no information about the condom negotiation skills employed by the study participants, which is fundamental in reducing STIs and unintended pregnancies. Additionally, previous research examining differences in sexual behaviors between individuals who identified sexual partners online, offline, and both online and offline only investigates the use of online websites to find partners. The present study assessed the hookup behaviors of college women with their online and offline partners, as well as investigated condom negotiation strategies employed during these hookups.

The findings from this study contribute to the literature regarding college women's sexual behaviors, specifically hookup behaviors and condom negotiation strategies by providing information regarding the prevalence of hookup behaviors among college women, their condom negotiation strategies, and the influence of the Theory of Planned Behavior on their intentions to negotiate condom use.

Research Questions

RQ 1: *What is the prevalence of college women who seek hookup partners online, offline, and both online and offline?*

This research question examined the prevalence of hookups with online, offline, and both online and offline male partners. Among participants in the sample, approximately half (n =155, 52.4%) reported engaging in a hookup in the previous six months. This finding is consistent with previous literature which estimates that between 36-84% of college women have engaged in a hookup at some point during their college career (Siebenbruner, 2015). Of those women who reported engaging in hookups, the majority identified their partners offline (n = 105) compared with those participants who found partners online (n = 7) or both online and offline (n = 43). The proportion of participants in each category (online, offline, and both) is consistent with previous research which investigated assessed where participants had met their sexual partners in 2012 (Buhi et al., 2012). However, Buhi and colleagues (2012) reported that those participants who found partners online, identified them through dating or sex-seeking websites and social networking sites (Buhi et al., 2012). The present study expands these findings by assessing the use of dating apps and social media apps to identify partners online.

It is likely that individuals use online venues to identify partners, but do not rely solely on online venues to identify partners as the proportion of those who identified partners online only is small. These findings indicate that while dating apps have become a popular resource for young adults to identify romantic and sexual partners, there may not be as many college students, specifically college women, using dating apps or other online venues to find potential partners. In spite of this, the majority of participants who identified their partners either online only or both online and offline (n = 22) reported finding their hookup partners through dating apps and

websites, through social media apps or social networking sites (*n* = 18), or through both dating apps and social media (*n* = 10). As of May 2019, there has only been one study investigating the use of a social media app to gain access to potential sexual partners (Moran et al., 2018). Further research is needed to assess if social media apps are indeed a potential tool to identify sexual partners and which specific dating apps are used to seek potential sexual partners.

Furthermore, it is possible that participants met their hookup partners through traditional meeting contexts. Kuperburg and Padgett (2017) have identified these traditional meeting contexts as classes, organizations, common interest groups, through family members or friends, bars/clubs, parties. Furthermore, it is possible that participants met their hookup partners through Greek life at The University of Alabama. Thirty-four percent of undergraduate students are Greek affiliated at The University of Alabama (Division of Student Life, n.d.). In the present study, approximately half (49.3%) of the participants reported being a member of a sorority on campus; thus, it is possible that these individuals are provided with more opportunities through their Greek affiliation to meet partners offline. In addition, approximately 59.4% of the participants were over the age of 21. It is likely that these participants may have also met their hookup partner's offline through traditional meeting contexts like bars or clubs. Further investigation is needed to determine where these individuals are identifying partners offline and if these findings are consistent with previous literature.

Approximately 46% (*n* = 137) of participants reported having either vaginal or anal intercourse with their hookup partners in the previous six months. Participants reported using condoms always (29.3%, *n* = 41), 13.87% (*n* = 19) often, 21.9% (*n* = 30) sometimes, 16.79% (*n* = 23) rarely, and 17.52% (*n* = 24) never used condoms with their hookup partners. The findings from this study are parallel to similar results reported by Rinadli-Miles and colleagues (2017)

who reported that 21.3% of participants had used condoms most of the time and 16.9% used condoms rarely or never over the last 30 days. Yet, past research is conflicting about the use of condoms for women who engage in hookups with online (Choi et al., 2016; McFarlane et al., 2014; Sawyer et al., 2017; Shapiro et al., 2017) and offline (Paul et al., 2010; Nesoff et al., 2016)

Researchers may want to further explore condom use among those who engage in hookups with online and offline, and consider investigating condom use with those individuals who indicate they identify partners through both online and offline venues to determine what differences, if any, are present among these groups.

RQ 2**:** *Are the scales measuring the constructs of the Theory of Planned Behavior reliable in the context of condom negotiation?*

This research question examined the reliability of the Theory of Planned Behavior scales utilized in this study to measure participant attitudes toward the behavior, subjective norms, perceived behavioral control, and behavioral intention of condom negotiation. Cronbach's Alpha of Reliability is considered to be acceptable at 0.70, good at 0.80 or higher, and excellent at 0.90 of higher (Gliem & Gliem, 2003); however, scores higher than 0.50 are considered to have acceptable reliability (Bowling, 2005; Cronbach, 1951; Helmstadter, 1964). The attitudes toward the behavior ($\alpha = 0.64$), subjective norms ($\alpha = 0.73$), perceived behavioral control ($\alpha = 0.67$), behavioral intention ($\alpha = 0.98$), and the overall scale ($\alpha = 0.84$) were deemed acceptable to measure the TPB constructs in the context of women's condom negotiation. Therefore, the TPB scales utilized in this study are acceptable measures to assess condom negotiation among college women.

RQ 3**:** *Are there differences between college women who seek hookup partner's online, offline, and both online and offline and their intentions to negotiate condom use?*

There were no significant differences between where college women identified their male hookup partners and their mean behavioral intention scores to negotiate condom use in the next three months. Despite the lack of significance, the analysis did reveal that those participants who found their partners both online and offline had a higher mean behavioral intention score compared with those who found their partners online and offline only. Future research is needed to further explore behavioral intention to negotiate condom use among different populations or using different approaches to assess if these differences remain.

RQ 4**:** *Are there differences between college women who seek hookup partner's online, offline, and both online and offline and their condom negotiation strategies?*

A significant difference was found between nonverbal indirect condom negotiation strategies and the remaining three types of strategies (verbal direct, verbal indirect, and nonverbal direct). These findings are consistent with previous research that reported women were likely to use nonverbal indirect methods to negotiate condom use (Holland & French, 2012; Howard et al., 1986; LaFrance and Henley, 1997; Lam et al. 2004). In addition to this finding, there was a significant difference between the mean scores for those individuals who found partners online and offline in regards to nonverbal indirect condom negotiation strategies. It is possible that the participants in this study may choose to use nonverbal indirect methods to negotiate condom use because they feel they have little power in the relationship to discuss the use of condoms (Howard et al., 1986; LaFrance & Henley, 1997; Lam et al., 2004), they might not be able to have a direct conversation with their partner about condom use, or the participant may intend to use condoms without discussing it with their partners prior to sexual intercourse (Coleman & Ingham, 1999).Future research should further explore these significant differences

between how women found their partners and which condom negotiation strategies they choose to employ.

Previous research on condom negotiation strategies has not investigated the use of condom negotiation strategies among those individuals who engaged in hookups. However, past research has indicated that college women use verbal direct strategies like using direct request (Holland & French, 2012) or nonverbal direct strategies like opening a condom or putting a condom on their male partner (Lam et al., 2004). The findings in this study are consistent with previous research, indicating that while participants were more likely to use nonverbal indirect methods to negotiate condom use, there were no significant differences between those participants who identified partners online, offline, or both and their use of verbal direct, verbal indirect, and nonverbal direct condom negotiation strategies.

RQ 5**:** *Do the constructs of the Theory of Planned Behavior (attitudes toward the behavior, subjective norms, and perceived behavioral control) predict behavioral intention to negotiate condom use for hookups with online, offline, and both online and offline partners?*

The purpose of this research question was to determine if the constructs of the Theory of Planned Behavior (attitudes toward the behavior, subjective norms, and perceived behavioral control) mediate the relationship between how participants found their partners (online, offline, and both online and offline) and behavioral intention to negotiate condom use in the next three months. The analysis yielded a significant interaction between perceived behavioral control and behavioral intention ($p = 0.043$). These findings suggest that engaging in hookups with partners met online, offline, and both online and offline do not influence an individual's cognitions (attitudes toward the behavior and subjective norms) and their future intentions to negotiate

condom use, but perceived behavioral control has a direct influence on future intentions to negotiate condoms.

Perceived behavioral control has been used previously to significantly predict participants behavioral intention and condom use behaviors (Asare, 2015; Kanu & Kanu, 2000). Perceved behavioral control has been compared to the construct of self-efficacy from the Health Belief Model and the Social Cognitive Theory. Both perceived behavioral control and self-efficacy capture an individual's perception to engage in a health behavior (Bandura, 1977). Research has found that those individuals with high condom use self-efficacy are more likely to directly require condoms, withhold sex, or use nonverbal methods to negotiate condom use (French & Holland, 2013). The findings in the present study support the relationship between perceived behavioral control and behavioral intention to negotiate condom use.

RQ 6**:** *Does past condom use with male hookup partners met online, offline, or both online and offline influence college women's attitudes toward the behavior, subjective norms, and perceived behavioral control to predict future intentions to negotiate condom use?*

The purpose of this research question was to determine if how participants met their hookup partners (online, offline, and both online and offline) and their past condom use with those hookup partners predict behavioral intention to negotiate condom use in the next three months using the constructs of the Theory of Planned Behavior (attitudes toward the behavior, subjective norms, and perceived behavioral control) as mediators. The results of the analysis indicate that the model was not significant and that those participants who identified partners online, offline, and both online and offline and their past condom use with these partners, had no influence on their cognitions about condom negotiation (attitudes toward the behavior, subjective norms, or perceived behavioral control) and their intentions to negotiate condom use in the next

three months. However, when looking at results of this model, a significant interaction was present between subjective norms and behavioral intention ($p = 0.047$). These findings indicate that how the participant identified their partner and their past condom use with those partners did not have an influence on their subjective norms; however, the behavioral beliefs and the participants motivation to comply with those beliefs (subjective norms) does influence the participants intentions to negotiate condom use in the next three months.

There was a significant relationship between subjective norms and behavioral intention. Past research has reported comparable results indicating that in addition to attitudes, subjective norms, and partner norms (i.e. sexual partners opinions) were predictors of behavioral intentions for women to use condoms (von Haeften &Kenski, 2001). It is possible that partner norms are an important predictor of behavioral intention to negotiation condom use. Past research has indicated that the attitudes of an individual's partner can influence the decision to use a condom or not (Edward & Barber, 2010; Fazekas et al., 2001; Finklestein & Brannick, 2000).

According to Ajzen (2002), past behavior should be considered as one of the major predictors in the TRA and TPB. Past behavior may serve as a source of information for individuals about how to act in future situations (behavioral intention or engaging in a behavior). However, Azjen (2002) also suggests that the constructs of the TPB may not serve as reliable mediators between the past behavior and behavioral intention. In spite of this, Conner and Armitage (1998) suggests past behavior as a mediator between the constructs of perceived behavioral control and behavioral intention (Conner & Armitage, 1998) while other studies suggest that attitudes toward the behavior and subjective norms can be used as mediators to further understand the influence of past behavior on behavioral intention. In the present study, the constructs of the TPB did not mediate the relationship between past behavior (past condom

use with a hookup partner) and behavioral intention to negotiate condom use in the next three months. Nonetheless, the relationship between subjective norms and behavioral intention was found to be significant.

Limitations

There are several limitations that are important to consider when interpreting the results of the present study. Data related to the TPB and condom negotiation were collected in the context of a very specific population (i.e. college females between 18 and 24 years of age). It is possible that the responses to the TPB constructs would be different with participants who are males or of a different age group. This delimitation of surveying college females between 18 and 24 years of age, limits the generalizability of this study to other populations. Another limitation of the generalizability is the use of convenience sampling techniques employed in the present study. Given that not every member of the population had an equal chance of being selected, findings cannot be generalized beyond the participants sampled at The University of Alabama.

Courses outside of the Department of Health Science were included in recruitment; however, an overwhelming majority (80%) of those instructors who allowed the researcher to recruit and administer the questionnaire, were Health Science instructors; thus, the majority of participants were recruited from courses in the Department of Health Science at The University of Alabama. While courses like Personal Health are requirements of several majors outside of the Department of Health Science, many courses from which participants were recruited were majority Public Health majors at varying stages of their degree program and the questionnaire was administered toward the end of the semester. Therefore, it is possible that the results of the present study were influenced by participants who were more cognizant of the risk associated with various behaviors assessed in the present study due to their academic coursework.

Questionnaire responses involved self-reporting of information while participants were near each other and the researcher. It is possible that some participants felt inclined to respond in a way that was perceived to be socially acceptable instead of providing authentic information. In order to reduce the potential for social desirability bias, participants were asked to not write their name on the questionnaire or any identifying information and to not share their answers. In addition, the questionnaire did ask participants to recall their past sexual behaviors and it is possible that participants may have reported some inaccuracies in their past sexual behavior (Asare, 2015). It is also possible that the participants misinterpreted the wording of some of the instructions, questions, or responses in the survey. An informal assessment was conducted prior to administering the questionnaire, with a small number of undergraduate students (n = 13) who volunteered to review the questionnaire for instructions, questions, and responses that could be misinterpreted during the questionnaire administration.

The questionnaire used in the present study was not pilot tested with a segment of the priority population; however, the questionnaire scales were assessed for reliability. Additionally, the questionnaire did intend to measure the constructs of the Theory of Planned Behavior; however, the scales measuring attitudes towards condom negotiation and perceived behavioral control did not measure the full TPB construct. The attitudes toward condom negotiation questions only measured behavioral beliefs and did not measure the participants' motivation to comply. Likewise, the perceived behavioral control items measured the individual's control in regards to negotiating condom use, but did not measure perceived power. The researcher selected questions from previously developed instruments measuring condom use that pertained to condom negotiation and required minimal modifications to the existing questions related to the TPB constructs for the present study. Despite not measuring the full constructs of attitude toward

the behavior and subjective norms, the subscales were assessed by obtaining a Cronbach's alpha reliability score and deemed acceptable.

Lastly, there are inherent limitations with the TPB. The TPB is an interpersonal level theory and even though it does acknowledge normative influences, it does not consider interpersonal, economic, environmental, or political factors that may influence an individual's intentions to engage in a behavior (Ajzen, 2001; Boston University School of Public Health, 2018). Further, the TPB assumes that an individual has received necessary resources and opportunities to successfully engage in a behavior, regardless of their behavioral intention (Ajzen, 2011; Boston University School of Public Health, 2018).

Implications for Health Education

The findings from this study, while consistent with previous research regarding hookups among college women, presents information about where college women are identifying hookup partners, their condom use with those partners, and behavioral intentions to negotiate condom use in the future. The findings from this study indicate that approximately half of the participants engaged in hookups. Public health educators should consider developing targeted messaging encouraging those who engage in hookups to use condoms, especially encouraging women to take control of their sexual health by negotiating condom use. One of the more popular dating apps, Tinder, provides information on their website about the importance of using condoms with partners met through the dating app and Hero Condoms previously marketed their condoms in Australia on Tinder. Using dating apps as a platform to encourage users to use condoms with their partners could increase condom use among dating app users. Furthermore, public health educators should use targeted messaging about the use of condoms on college campuses where hooking up is seen as a normative behavior.

Health educators and practitioners should focus on equipping women with the skills to exert control of the use of condoms in sexual situations. This should be done by teaching women how to deal with resistance, pressure, and how to effectively negotiate using verbal and nonverbal methods. The findings of this study indicate that college women are more likely to use nonverbal indirect methods to negotiate condom use with their hookup partners. Previous research has suggested that nonverbal and indirect methods of condom negotiation have not typically been taught in condom negotiation education (Lam et al. 2004). Interventions are needed that teach both verbal and nonverbal condom negotiation strategies using direct and indirect methods as some women may feel more comfortable negotiating using different methods. In addition, interventions should incorporate information about condom use resistance tactics, which use similar methods to persuade partners to not use a condom during sexual intercourse. Role playing and practicing different condom negotiation strategies and responses to condom use resistance tactics may strengthen college students' ability to negotiate condom use with their future partners.

Lastly, the questionnaire used in the current study can be used to help develop interventions in order to address the attitudes toward condom negotiation, subjective norms, and perceived behavioral control in order to increase condom negotiation. Perceived behavioral control and subjective norm were found to significantly influence behavioral intention to negotiate condom use in the next three months. Therefore, future interventions designed to increase college women's behavioral intentions to negotiate condom use in the next three months, should consider targeting these two constructs of the TPB.

Future Research

Future condom negotiation research should develop instrumentation based on the constructs of the Theory of Planned Behavior, specifically scales assessing attitudes towards condom negotiation and perceived behavioral control. While the questions used and modified in the current study are from research examining college student condom use, and the Cronbach's alpha reliability score for each of those particular scales indicated they were acceptable to measure attitudes toward condom negotiation and perceived behavioral control, the entirety of these two constructs was not measured in the present study. Only the behavior beliefs of the attitudes toward the behavior construct and control believes of the perceived behavioral control construct were measured for this study. Future studies should include questions assessing participants evaluations of behavioral outcomes and perceived power for those constructs. It is possible that there are other aspects of those TPB constructs related to condom negotiation that were not measured in the present study. Future studies should develop questions and scales to assess these constructs using guidelines from Ajzen and Fishbein (2010) to further explore the relationship between the TPB constructs and behavioral intention. Furthermore, future studies should explore the correlation between the constructs of the TPB and behavioral intention, especially the influence of perceived behavioral control and subjective norms.

The present study focused on women as they are not the ones who wear condoms during sexual intercourse and often need to employ condom negotiation skills in order to persuade their partners (Peters et al., 2010; Otto-Salage et al., 2010). Future studies should consider expanding the current study to explore if there are differences between sexes and condom negotiation strategies within the context of hookups. This information could be useful in developing education for women about which strategies men are more likely to use and respond to. Previous

research has suggested that women who have less power or status in their relationships may use nonverbal and indirect strategies to negotiate condom use (Howard et al., 1986; LaFrance & Henley, 1997; Lam et al. 2004). Further research is needed to understand if this is a reason why women who engage in hookups in the currently study was more likely to use nonverbal and indirect strategies to negotiate condom use.

Approximately half (52.4%, *n* = 155) of the participants who returned a survey for this study indicated they had engaged in hookups in the last six months and reported how often they had used condoms with these partners. While not explored in the present study, future research should investigate the role of trust and the use of female-centric contraception. Research has indicated that trust can influence an individual's decision to use or not use a condom with their partners (Fazekas et al., 2001; Hattori, 2014); however, the findings have been limited to those individuals in romantic relationships. Future research should investigate what motivates individuals to use or not condoms with their hookup partners and if trust influences an individual's decision about which condom negotiation strategies to use. Additionally, while a considerable proportion of participants indicated they had used condoms with their hookup partners, 34.31% (*n* = 47) participants also reported using condoms rarely or never. It is possible that these individuals rely on female-centric contraception and do not use condoms as their main form of contraception; thus, these individuals may have responded that they were very unlikely to use condom negotiation strategies. Future research should explore the use of female-centric contraception and its impact on condom use and condom negotiation.

Previous research has identified primary motivations for dating app use among users like having fun, meeting new people, to flirt, to feel sexually attractive or sexy, to find a dating partner, or to initiate sex (Sawyer et al., 2017). The current study did not explore the motivations

of college women's use of online venues like dating and social media apps. Future research should assess the motivations of college women who use dating apps, as well as social media apps to identify potential partners.

Conclusions

The present study contributed to the literature by providing information regarding college women's attitudes, subjective norms, perceived behavioral control, and behavioral intentions to negotiate condom use with their male hookup partners. The findings from this research support the use of the theory of planned behavior to assess condom negotiation.

Perceived behavioral control and subjective norms were significant predictors of behavioral intention to negotiate condom use in the next three months, whereas attitude toward behavior was not. These constructs should be incorporated as targets in the development of sexuality education addressing condom negotiation strategies. Nonverbal indirect condom negotiation strategies were identified as significant among college women with their male partners met online, offline, and both online and offline. Public health researchers should consider emphasizing these strategies when educating college women about how to persuade their partners to use condoms during hookups, as well as further investigate why these strategies are significant among college women who engage in hookups. Overall, the findings from this study suggest that public health educators should continue to explore condom negotiation strategies utilizing the Theory of Planned Behavior and develop interventions to educate college women how to negotiate condom use with their hookup partners

REFERENCES

Ajzen, I. (1991). Theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 197-211.

Ajzen, I. (2002). Residual effects of past on later behavior: Habituation and reasoned action perspectives. Personality and Social Psychology Review, 6(2), 107-122.

Ajzen, I. (2011). The theory of planned behavior: Reactions and reflections. Psychology & Health, 26(9), 1113-1127.

Albarracin, D., Johnson, B.T., Fishbein, M., & Muellerleile, P.A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. Psychological Bulletin, 127(1), 142-161.

Allison, R., & Risman, B.J. (2013). A double standard for "hooking up": How far have we come toward gender equality? *Social Science Research, 42*(5), 1191-1206.

Amaro, H. (1995). Love, sex, and power: Considering women's realities in HIV prevention. *American Psychologist, 50*, 437-447.

American College Health Association. (2015). American college health association-national college health assessment II paper survey. Retrieved from https://www.acha.org/documents/ncha/ACHA-NCHA_IIc_Paper_Survey.pdf

American College Health Association. (2017). Spring 2017 reference group executive summary. Retrieved from http://www.acha-ncha.org/docs/NCHA-II_SPRING_2017_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf

Anderson, J. (2003). Condom use and HIV risk among US adults. *American Journal of Public Health, 93*, 912-914.

Ansare, M. (2015). Using the theory of planned behavior to determine the condom use behavior among college students. *American Journal of Health Studies, 30*(1), 43-50.

Ansare, M., & Sharma, M. (2010). Using the theory of planned behavior to predict of safer sexual behavior among Ghanaian immigrant in Mid-western city. *International Quarterly of Community Health Education, 30*(4), 321-325.

Ansari, A. (2015). *Modern romance*. London: Allen lane.

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, N.J.: Prentice Hall.

Bishop, J. (2014). Representations of 'trolls' in mass media communication: A review of media-texts and moral panics relation to 'internet trolling'. *International Journal of Web Based Communities, 10,* 7-24.

Bird, S.T., Harvey, S.M., Beckman, L.J., & Johnson, C.H. (2001). Getting your partner to use condoms: Interviews with men and women at risk of HIV/STDs. *Journal of Sex Research, 38,* 233-240.

Bogle, K. (2008). *Hooking up: Sex, dating, and relationships on campus*. New York: New York University Press.

Bowling, A. (2005). Techniques of questionnaire design. In A. Bowling & S. Ebrahim (Eds.), *Handbook of health research methods: Investigation, measurement, and analysis*. New York, NY: Open University Press.

Brafford, L.J., & Beck, K.H. (1991). Development and validation of a condom self-efficacy scale for college students. *Journal of American College Health,* 39, 219-225.

Bradshaw, C., Kahn, A.S., & Saville, B.K. (2010). To hookup or date: Which gender benefits? *Sex Roles, 62,* 661-669.

Brown, I.S. (1984). Development of a scale to measure attitude toward the condom as a method of birth control. *The Journal of Sex Research, 20,* 255-263.

Brown, M.J., Pugsley, R., & Cohen, S.A. (2015). Meeting sex partners through the internet, risky sexual behavior, and HIV testing among sexually transmitted infections clinic patients. *Arch Sex Behav, 44,* 509-519.

Buckels, E.E., Trapnell, P.D., & Paulhus, D. L. (2014). Trolls just want to have fun. *Personality and Individual Differences, 52,* 482-486.

Buhi, E.R., Cook, R.L., Marhefka, S.L., Blunt, H.D., Wheldon, C., Oberne, A.B., Mullins, J.C., & Dagne, G.A. (2012). Does the internet represent a sexual health risk environment for young people? *Sexually Transmitted Diseases, 39*(1), 55-58.

Buhi, E.R., Klinkenberger, N., McFarlane, M., Kachur, R., Daley, E.M., Baldwin, J.,…Reitmeijer, C. (2013). Evaluating the internet as a sexually transmitted disease risk environment for teens: Findings from the communication, health, and teens study. *Sexually Transmitted Diseases, 40*(7), 528-533.

Cabecinha, M., Mercer, C.H., Gravningen, K., Aicken, C., Jones, K.G., Tanton, C.,…Field, N. (2017). Finding sexual partners online: Prevalence and associations with sexual

behaviour, STI diagnoses, and other sexual health outcomes in the British population. *Sex Transm Ifect, 93*, 572-582.

Campbell, A. (2008). The morning after the night before: Affective reactions to one-night stands among mated and unmated women and men. *Human Nature, 19*(20), 157-173.

Campbell, S.M., Peplau, L.A., & DeBro, S.C. (1992). Women, men, and condoms: Attitudes and experiences of heterosexual college students. *Psychology of Women Quarterly, 16*, 273-288.

Carter, J.A., McNair, L.D., Corbin, W. R., & Williams, M. (1999). Gender differences related to heterosexual condom use: The influence of negotiation styles. *Journal of Sex & Marital Therapy, 25*, 217-225.

Cassell, J. A., Mercer, C.H., Imrie, J., Copas, A.J., & Johnson, A.M. (2006). Who uses condoms with whom? Evidence from national probability sample surveys. *Sexually Transmitted Infections, 82*, 467-473.

Catania, J.A., Coates, T.J., & Kegels, S.M. (1994). A test of the AIDS risk reduction model: Psychological correlates of condom use in the AMEN cohort survey. *Health Psychology, 33*, 548-555.

Centers for Disease Control and Prevention [CDC]. (2017a). 2016 sexually transmitted diseases surveillance: Adolescents and young adults. Retrieved from https://www.cdc.gov/std/stats16/adolescents.htm.

CDC. (2017b). *Sexually Transmitted Disease Surveillance 2016.* Atlanta: U.S. Department of Health and Human Services.

CDC. (2017c). 2016 sexually transmitted diseases surveillance: Women and infants. Retrieved from https://www.cdc.gov/std/stats16/womenandinf.htm.

CDC. (2017d). Sexually transmitted diseases (STDS): STDs & fertility. Retrieved from https://www.cdc.gov/std/infertility/default.htm.

Choi, E.P.H., Wong, J.Y.H., Lo, H.H.M, Wong, W., Chio, J.H.M., & Fong, D.Y.T. (2016). The association between smartphone dating applications and college students' casual sex encounters and condom use. *Sexual & Reproductive Healthcare, 9*, 38-41.

Choi, E.P.H., Wong, J.Y.H., Lo, H.H.M, Wong, W., Chio, J.H.M., & Fong, D.Y.T. (2017). Association between using smartphone dating applications and alcohol and recreational drug use in conjunction with sexual activities in college students. *Substance Use & Misuse, 52*(4), 442-428.

Coleman, L., & Ingham, R. (1999). Contrasting strategies used by young people to ensure condom use: Some findings from a qualitative research project. *AIDS Care, 11*, 473-479.

Conner, M., & Armitage, C.J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology, 28*(15), 1429-1464.

Couch, D., & Liamputton, P. (2007). Online dating and mating: perceptions of risk and health among online users. *Health, Risck & Society, 9*(3), 275-294.

Couch, D. & Liamputton, P. (2008). Online dating and mating: The use of the internet to meet sexual partners. *Qualitative Health Research, 18*(2), 238-279.

Couch, D., Liamputton, P., & Pitts, M. (2012). What are the real and perceived risks and dangers of online dating? Perspectives from online daters. *Health, Risk & Society, 14*(7-8), 697-714.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika, 16*(3), 297-334.

Crosby, R.A., DiClemente, R.J. Wingood, G.M., Salazar, L.F., Harrington, K. Davies, S.L., & Oh, M.K. (2003). Identification of strategies for promoting condom use: A prospective analysis of high-risk African American female teens. *Prevention Science, 4*, 263-270.

Daniels, K., Mosher, W.D., & Jones, J. (2013). Contraceptive methods women have ever used: United States, 1982-2010. (National Health Statistics Reports, Vol. 62). Hyattsville, MD: National Center for Health Statistics.

De Bro, S.C., Campbell, S.M., & Peplau, L.A. (1994). Influencing a partner to use a condom. *Psychology of Women Quarterly, 18*, 165-182.

Dehue, F. (2013). Cyberbullying research: New perspectives and alternative methodologies. *Journal of Community and Applied Social Psychology, 58*, 95-102.

Division of Student Life. (n.d.).Fraternity and sorority life. Retrieved from https://ofsl.sa.ua.edu/

Dir, A.L., Cyders, M.A., Riley, E.N., & Smith, G.T. (2015). Tinder use and association with problematic alcohol use and sexual hookups among college females [Abstract]. *Alcoholism: Clinical and Experimental Research, 39*(6).

Downing-Matibag, T.M., & Geisinger, B (2009). Hooking up and sexual risk taking among college students: A health belief model perspective. *Qualitative Health Research, 19*(9), 1196-1209.

East, L., Jackson, D., O'Brien, L., & Peters, K. (2007). Use of the male condom by heterosexual adolescents and young people: Literature review. *Journal of Advanced Nursing, 59*, 103-110.

Edwards, G.L., & Barber, B.L. (2010). Women may underestimate their partners' desires to use condoms: Possible implications for beahviour. *Journal of Sex Research, 47*(1), 59-65.

England, P. Shafer, E.F., & Fogarty, A.C.K. (2007). Hooking up and forming romantic relationships on today's college campuses. *The Gendered Society Reader*, 559-572. New York: Oxford University Press.

Fazekas, Senn, C.Y., & Ledgerwood, D.M. (2001). Predictors of intention to use condoms among university women: An application and extension of the theory of planned behavior. *Canadian Journal of Behavioural Science, 33*(2), 103-117.

Fehr, S.K., Vidourek, R.A., & King, K.A. (2015). Intra- and inter-personal barriers to condom use among college students: A review of the literature. *Sexuality & Culture, 19*, 103-121.

Fielder, R.L., & Carey, M.P. (2010a). Prevalence and characteristics of sexual hookups among first-semester female college students. *Journal of Sex and Marital Therapy, 36*(4), 346-359.

Fielder, R.L., & Carey, M.P. (2010b). Predictors and consequences of sexual "hook ups" among college students: A short-term prospective study. *Archives of Sexual Behavior, 36*, 346-359.

Fielder, R.L., Carey, K.B., & Carey, M.P. (2013). Are hookups replacing romantic relationships? A longitudinal study of first-year female college students. *J Adolesc Health, 52*(5), 657-659.

Finkelstein, M.A., & Brannick, M.T. (2000). Making decisions about condoms: Whose attitude is it anyway? *Social Behavior and Personality, 28*(6), 539-554.

Fishbein, M. (1967). *Readings in attitude theory and measurement*. New York: Wiley.

Fischbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addision-Wesley.

Fishbein, M. & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach.* New York: Psychology Press (Taylor & Francis).

Fisher, J.D., & Fisher, W.A. (1992). Changing AIDS-risk behavior. *Psychological Bulletin, 111*, 455-474.

Flack, W. F, Daubman, K.A., Caron, M.L., Asadorian, J. A., D'Aureli, N.R., Gigliotti, S.N.,… Stine, E.R. (2007). Risk factors and consequences of unwanted sex among university students. *Journal of Interpersonal Violence, 22*(2), 139-157.

Flack, W.F., Hansen, B.E., Hopper, A.B., Bryant, L.A., Lang, K.W., Massa, A.A., & Whalen,

J.E. (2016). Some types of hookups may be riskier than others for campus sexual assault. *Psychol Trama, 8*(4), 413-420.

Ford, J.V. (2017). Sexual assault on college hookups: The role of alcohol and acquaintances. *Sociological Forum, 32*(2), 381- 405.

French, S. E., & Holland, K.J. (2013). Condom negotiation strategies as a mediator of the relationship between self-efficacy and condom use. *Journal of Sex Research, 50*(1), 48-59.

Garcia, J.R., & Reiber, C. (2008). Hook-up behavior: A biopsychosocial perspective. *Journal of Social, Evolutionary, and Cultural Psychology, 2*(4), 192-208.

Garcia, J.R., Reiber, C., Massey, S.G., & Merriwether, A.M. (2012). Sexual hookup culture: A review. *Review of General Psychology, 16*(2), 161-176.

Glanz, K., Rimer, B.K., & Viswanath, K. (2008). *Health behavior and health education: Theory, research, and practice* (4th ed.). San Francisco, CA: Jossey-Bass.

Gliem,J.A., & Gliem, R.R.(2003).Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *2003 Midwest research to practice conference in adult, continuing, and community education*, 82-88.

Green, S.M., Turner, D., & Logan, R.G. (2018). Exploring the effect of sharing common facebook friends on the sexual risk behaviors of Tinder Users. *Behavior and Social Networking, 21*(7), 457-462.

Grello, C.M., Welsh, D.P., & Harper, M.S. (2006). No strings attached: The nature of casual sex in college students. *The Journal of Sex Research, 43*, 255-267.

Helmstadter, G. C. (1964). *Principles of psychological measurement*. New York: Appleton-Century-Crofts.

Holland, K.J., & French, S. E. (2012). Condom negotiation strategy use and effectiveness among college students. *Journal of Sex Research, 49*(5), 443-453.

Hattori, M.K. (2014). Trust and condom use among young adults in relationships in Dar Es Salaam, Tanzania. *J Biosoc Sci, 46*, 651-668.

Heeran, G. A., Jemmott, J.B., Mandeya, A., Tyler, J.C. (2007). Theory-based predictors of condom use among university students in the United States and South African. *AIDS Education and Prevention, 19*(1), 1-12.

Higgins, J.A., Hoffman, S., & Dworkin, S.L. (2010). Rethinking gender, heterosexual men, and women's vulnerability to HIV/AIDS. *Am J Public Health, 100*(3), 435-445. doi:10.2105/AJPH.2009.159732.

Howard, J.A., Blumstein, P., & Schwartz, P. (1986). Sex, power, and influence tactics in intimate relationships. *Journal of Personality and Social Psychology, 51*, 102-109.

Howell, G.V.J., & Taylor, M. (2011). When crisis happens, who turns to Facebook and why? *Asia Pac Pub Relat J, 12*, 1-8.

Josiam, B.M., Hobson, J.S.P., Dietrich, U.C., & Smeaton, G. (1998). An analysis of the sexual, alcohol and drug related behavioural patterns of students on spring break. *Tourism Management, 19*, 501-513.

Kalish, R. (2018). The gendered meaning of trust and its role in sexual decision-making within American collegiate hookup culture. *College Student Journal, 52*(3), 410-421.

Kanu, A.J., & Kanu, C.G. (2000). Perceived behavioral control for HIV/STD prevention among African-American undergraduate students. *The Health Education Monograph Series, 18*, 27-38.

Kenney, S.R., Thadani, V., Ghaidarov, T, & LaBrie, J.W. (2013). First-year college women's motivations for hooking up: A mixed-methods examination of normative peer perceptions and personal hookup participation. *Int J Sex Health, 25*(3), 212-224. doi:10.1080/19317611.2013.786010.

Kenney, S.R., Lac, A., Hummer, J.F., & LaBrie, J.W. (2014). Development and validation of the Hookup Motives Questionnaire (HMQ). *Psychol Assess, 26*, 1127-1137.

Kerlinger F.N., & Lee, H.B. (2000). *Foundations of behavioral research* (4th ed.) Fort Worth, TX: Harcourt College.

Kershaw, T.S., Ethier, K.A., Niccolai, L.M., Lewis, J.B., & Ickovics, J.R. (2003). Misperceived risk among female adolescents: Social and psychological factors associated with sexual risk accuracy. *Health Psychology, 22*, 523-532.

Kline, A., Kline, F., & Oken, E. (1992). Minority women and sexual choice in the age of AIDS. *Social Science & Medicine, 34*, 447-457.

Kuniavsky, M., Goodman, E., & Moed, A. (2012). *Observing the user experience: A practitioner's guide to user research* (2nd ed.) Boston, MA: Morgan Kaufman.

Kuperburg, A., & Padgett, J.E. (2017). Partner meeting contexts and risky behavior in college students' other-sex and same-sex hookups. *Journal of Sex Research, 54*(1), 55-72.

LaBrie, J.W., Hummer, J.F., Ghaidarov, T.M., Lac, A., & Kenney, S. (2014). Hooking up in the college context: The event-level effects of alcohol and partner familiarity on hookup behaviors and contentment. *Journal of Sex Research, 51*(1), 62-73.

LaFrance, M., & Henley, N.M. (1997). On oppressing hypotheses: Or differences in nonverbal sensitivity revisited. M.R Walsh (Ed.), *Women, men, and gender: Ongoing debates* (p. 104-119). New Haven, CT: Yale University Press.

Lam, A.G., Mak, A. Lindsay, P.D., & Russell, S.T. (2004). What really works? An exploratory study of condom negotiation strategies. *AIDS Education and Prevention, 16*(2), 160-171.

Lambert, T.A., Kahn, A.S., & Apple, K.J. (2003). Pluralistic ignorance and hooking up. *The Journal of Sex Research, 40*, 129-133.

Landowitz, R.J., Tseng, C.H., Weissman, M., Haymer, M., Mendenhall, B., Rogers, K.,…Shoptaw, S. (2013). Epidemiology, sexual risk behavior, and HIV prevention practices of men who have sex with men using GRINDR in Los Angeles, California. *Journal of Urban Health, 90*(4), 729-739.

Lawson, H., & Leck, K. (2006). Dynamics of internet dating. *Social Science Computer Review, 24*(2), 189-208.

Lewis, M.A., Granato, H., Blayney, J.A., Lostutter, T.W., & Kilmer, J.R. (2012). Predictors of hooking up sexual behaviors and emotional reactions among U.S. college students. *Arch Sex Behav, 41*(5), 1219-1229. doi: 10.1007/s10508-011-9817-2.

Lewis, M.A., Atkins, D.C., Blayney, J.A., Dent, D.V., & Kaysen, D.L. (2013). What is hooking up? Examining definitions of hooking up in relation to behavior and normative perceptions. *J Sex res, 50*(8), 757-766. doi: 1080/00224499.2012.706333.

Madden, M., & Lenhart, A. (2006). *Online dating.* Washington, DC: Pew Internet.

March, E., Grieve, R., Marrington, J., & Jonason, P.K. (2017). Trolling on tinder (and other dating apps): Examining the role of the dark tetrad and impulsivity. *Personality and Individual Differences, 110,* 139- 143.

McCormick, N.B. (1979). Come-ons and put-offs: Unmarried students' strategies for having and avoiding sexual intercourse. *Psychology of Women Quarterly, 4*, 192-211.

McCormick, N.B., & Gaeddert, W. (1989). Power in college students' contraceptive decisions. *Archives of Sexual Behavior, 18*, 35-48.

McFarlane, M., Bull, S.S., & Rietmeijer, C.A. (2000). The internet as a newly emerging risk environment for sexually transmitted diseases. *J AMA, 284*(4), 443-446.

McFarlane, M., Kachur, R., Bull, S., & Rietmeijer, C. (2004). Women, the internet, and sexually transmitted infections. *Journal of Women's Health, 13*(6), 689-694.

McGrath, F. (2015). What to know about Tinder in 5 charts. Retrieved from https://blog.globalwebindex.com/trends/what-to-know-about-tinder/.

McKenna K.Y.A., Green, A.S., & Gleason, M.E.J. (2002). Relationship formation on the internet: What's the big attraction? *Journal of Social Issues, 58*(1), 9-31.

Montes, K.S., Napper, L.E., Froidevaux, N.M., Kenney, S., & LaBrie, J.W. (2016). Negative affect as a moderator of the relationship between hookup motives and hookup consequences. *Journal of American College Health, 64*(8), 668-672.

Moore, S.M., & Rosenthal, D.A. (1991). Condoms and coitus: Adolescents' attitudes to AIDS and safer sex. *Journal of Adolescence, 14*, 211-227.

Moran, J.B., Salerno, K.J., & Wade, T.J. (2018). Snapchat as a new tool for sexual access: Are there sex differences? *Personality and Individual Differences, 129*, 12-16.

Muñoz-Silva, A., Sánchez-García, M., Nunes, C., & Martins, A. (2007). Gender differences in condom use prediction with theory of reasoned action and planned behaviour: The role of self-efficacy and contol. *AIDS Care, 19*(9), 1177-1181.

Napper, L.E., Montes, K.S., Kenney, S.R., & LaBrie, J.W. (2015).Assessing the personal negative impacts of hooking up experienced by college students: Gender differences and mental health. *J Sex Res, 53*(7), 766-775.

National Center for Education Statistics. (n.d.). Nontraditional undergraduates. Retrieved from https://nces.ed.gov/pubs/web/97578e.asp.

Nesoff, E.D., Dunkle, K., & Lang, D. (2016). The impact of condom use negotiation self-efficacy on partnership patters on consistent condom use among college-education women. *Health Education & Behavior, 43*(1), 61-67.

Noar, S.M., Morokoff, P.J., & Harlow, L.L. (2002). Condom negotiation in heterosexually active men and women: Development and validation of a condom influence strategy questionnaire. *Psychology and Health, 17*(6), 711-735.

Ostrach, B., & Singer, M. (2012). At special risk: Biopolitical vulnerability and HIV/STI syndemics among women. *Health Sociology Review, 21*, 258-271.

Otto-Salaj, L.L., Traxel, N., Brondion, M.J., Reed, B., Gore-Felton, C., Kelly, J.A., & Stevenson, L.Y. (2010). Reactions of heterosexual African American men to women's condom negotiation strategies. *Journal of Sex Research, 47*(6), 539-551.

Owen, J., & Fincham, F.D. (2010). Effects of gender and psychosocial factors on "friends with benefits" relationships among young adults. *Archives of Sexual Behavior, 40*, 311-320.

Owen, J.J., Rhoades, G.K., Stanley, S.M., & Fincham, F.D. (2010). "Hooking up' among college students: Demographic and psychosocial correlates. *Archives of Sexual Behavior, 39*(3), 653-663.

Owusu-Eduesi, K., Chesson, H.W., Tao, G., Ocfemia, M.C., & Kent, C.K. (2013). The estimated direct medical cost of selected sexually transmitted infections in the United States, 2008. *Sex Transm Dis, 40*(3), 197-201.

Padgett, P. (2007). Personal safety and sexual safety for women using online personal ads. *Sexuality Research and Social Policy, 4*(2), 27-37.

Paul, E.L., & Hayes, K.A. (2002). The casualties of "casual" sex: A qualitative exploration of the phenomenology of college students' hookups. *Journal of Social and Personal Relationships, 19,* 639-661.

Paul, E.L., McManus, B., & Hayes, A. (2010). 'Hookups': Characteristics and correlates of college students' spontaneous and anonymous sexual experiences. *Journal of Sex Research, 37,* 76-88.

Peasant, C., Parra, G., & Okwumabua, T.M. (2015). Condom negotiation: Findings and future directions. *Journal of Sex Research, 52*(4), 470-483.

Quiroz, P.A. (2013). From finding the perfect love online to satellite dating and loving-the-one-you're near: a look at Grindr, Skout, Plenty of Fish, Meet Moi, Zoosk and Assisted Serendipity. *Humanity & Society, 37*(2), 181-185.

Rinaldi-Miles, A., Quick, B.L., & McCloskey, L. (2017). Risk assessment heuristics: Cues and intention to use a condom in casual sex. *Health Education Journal, 76*(3), 313-325.

Rosenfield, M.J., & Thomas, R. J. (2012). Searching for a mate: The rise of the internet as a social intermediary. *American Sociological Review, 77*(4), 523-547.

Sawyer, A.N., Smith, E.R., & Benotsch, E.G. (2017). Dating application use and sexual risk behavior among young adults. *Sex Res Policy, 15*(20), 183-191.

Shapiro, G.K., Tatar, O., Sutton, A., Fisher, W., Naz, A., Perez, S., & Rsoberger, Z. (2017). Correlates of Tinder use and risky sexual behaviors in young adults. *Cysberpsychology, Behavior, and Social Networking, 20*(12), 727-734.

Sharma, M., & Romas. J. (2012). *Theoretical foundations of health education and health promotion*. Sudburry, MA: Jones & Bartlett Learning.

Shaw, F. (2016). "Bitch I said hi": The *Bye Felipe* campaign and discursive activism in mobile dating apps. *Social Media + Society,* 1-10.

Sheeran, P., & Taylor, S. (1999). Predicting intentions to use condoms: A meta-analysis and comparison of theories of reasoned action and planned behavior. *Journal of Applied Social Psychology, 29,* 1624-1675.

Shepherdson, R.L., Walsh, J.L., Carey, K.B., & Carey, M.P. (2016). Benefits of Hooking up: Self-reports from first-year college women. *Int J Sex Health, 28*(3), 216-220.

Siebenbruner, J. (2015). Dating to hooking up: The emotional and behavioral health of college woman. *College Student Affairs Journal, 33*(1), 27-46.

Slater, D. (2013). Love in the time of algorithms: What technology does to meeting and mating. New York, NY: Penguin Group.

Smith, A. (2016). 15% of American adults have used online dating sites or mobile dating apps. Retrieved from http://www.pewinternet.org/2016/02/11/15-percent-of-american-adults-have-used-online-dating-sites-or-mobile-dating-apps/.

Smith, A., & Anderson, M. (2016). 5 facts about online dating. Retrieved from http://www.pewresearch.org/fact-tank/2016/02/29/5-facts-about-online-dating/.

Sönmez, S., Apostolopoulos, Y., Yu, C.H., Yang, S., Mattila, A.S, & Yu, L.C. (2006). Binge drinking and casual sex on spring-break. *Annals of Tourism Research, 33,* 895-917.

Stinson, R.D. (2010). Hooking up in young adulthood: A review of factors influencing the sexual behaviors of college students. *Journal of College Student Psychotherapy, 24*(2), 98-115.

Sumter, S.R., Vendenbosh, L., & Lightenber, L. (2017). Love me Tinder: Untangling emerging adults' motivations for using the dating application Tinder. *Telemataics and Informatics, 34*(1), 67-78.

Thompson, L. (2018). "I can be your Tinder nightmare": Harassment and misogyny in the online sexual marketplace. *Feminism & Psychology, 28*(1), 69-89.

Toma, C., & Hancock, J. (2010). Looks and lies: The role of physical attractiveness in online dating self-presentation and deception. *Communication Research, 37*(3), 335-351.

Turchik, J.A., & Gidycz, C.A. (2012). Prediction of sexual risk behaviors in college students using the theory of planned behavior: A prospective analysis. *Journal of Social and Clinical Psychology, 31*(1), 1-27.

Uecker, J.E., Pearce, L.D., & Andercheck, B. (2015). The four u's latent classes of hookup motivations among college students. *Social Currents, 2*(20), 163-181.

United States Department of Education. (2018). Undergraduate enrollment statistics. Retrieved from https://nces.ed.gov/programs/coe/indicator_cha.asp.

von Haeften, I., & Kenski, K.M. (2001). Multi-partnered heterosexuals' condom use for vaginal sex with their main partner as a function of attitude, subjective norm, partner norm, perceived behavioural control and weighted control beliefs. *Psychology, Health and Medicine, 6*(2), 165-177.

APPENDICES

APPENDIX A

Questionnaire

COLLEGE WOMEN'S SEXUAL BEHAVIORS SURVEY

For the following questions, please circle or use an "x" for the response that describes you.

Are you between the ages of 18 and 24 years old?

☐ Yes ☐ No

Was your sex assigned as female at birth, such as on an original birth certificate?

☐ Yes ☐ No

If you answered "Yes" to ALL of the questions above, please take the rest of this survey.

If you answered "No" to ANY of the questions above OR <u>you have taken this survey in another class</u>, please STOP and DO NOT take this survey. Thank you for your time!

Purpose of Study: The purpose of this study is to investigate hookup behaviors, online dating, and the condom negotiation strategies of college women at The University of Alabama.

For this survey, the following definitions will be used:

A. *Hookups* are defined as casual, non-committal sexual encounter between two individuals, which may or may not include sex and can range from kissing to sexual intercourse.
B. *Sexual intercourse* is vaginal (a man's penis inside a woman's vagina) or anal intercourse (a man's penis in woman's anus)
C. *Condom negotiation* is the ability to persuade a partner to use a condom.
D. *Condom negotiation strategy* or strategies are methods used to persuade a partner to use a condom.
E. *Condom*(s) refers to a male condom

Consent and directions: This is an anonymous survey. Please do not write your name on this survey. Your participation is voluntary. You may choose not to participate or to quit the study at any time. You may skip any questions you do not feel comfortable answering. Your participation in this survey implies your consent. If you have any questions, please let the researcher know.

SEXUAL BEHAVIORS—Questions 1-3 ask about your sexual behaviors in the past 12 months. Please write in your response to question #1 and #3, and circle or place an "x" in the box to indicate your response for question #2.

1. Within the last 12 months, with how many partners have you had oral sex, vaginal intercourse, or anal intercourse? (if you did not have a sex partner within the last 12 months, please enter 0 and **move on to question 4**)

_____ Number of partners

2. Of the partners you have had in the last 12 months, with how many **male** partners have you had oral sex, vaginal intercourse, or anal intercourse? (if you did not have sex with a **male** partner within the last 12 months, please enter 0 and **move on to question 4**)

_____ Number of **male** partner

3. Within the last 12 months, how often did you use a condom with your **male** sexual partners?

☐ Always

☐ Often

☐ Sometimes

☐ Rarely

☐ Never

HOOKUP BEHAVIORS- Questions 4-9 ask questions about your previous or current sexual behaviors. Please circle or place an "x" in the box to indicate your response.

4. In the past 6 months, have you engaged in a hookup?

☐ Yes ☐ No (if **NO**, **you can skip to question 10)**

5. If you answered yes to question 4, where did you first contact your hookup partner(s)?

☐ Online only (i.e., dating apps, dating website, social media, etc.)

☐ Offline only (i.e., bar, dorm, party, student club, etc.) (**if OFFLINE ONLY, you can skip to question 8)**

☐ Both online and offline

6. Where did you first make contact with your hookup partner(s) found online?

☐ Dating app or website (Tinder, Bumble, Hinge, OkCupid, Match.com, etc.)

☐ Social media app or social network site (Facebook, Instagram, Snapchat, etc.)

☐ Special interest website (Chat room, sex seeking websites, etc.)

☐ Other (please specify):_____

7. How often did you seek potential hookup partner(s) from online sites/dating apps in the past 6 months?

☐ Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never

8. Thinking about your hookups over the last 6 months, did you engage in vaginal or anal intercourse? ☐ Yes ☐ No (if **NO**, **you can skip to question 10)**
9. If you answered yes to question 8, how often did you use a condom with your hookup partners when engaging in vaginal or anal intercourse over the last 6 months? ☐ Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never

ATTITUDES ABOUT CONDOM NEGOTIATION- Questions 10-16 are about your attitudes and beliefs about negotiating condom use. Please circle or place an "x" in the box to indicate your response for **each** statement.

If you have not engage in sexual activity with a male in the last 6 months, please skip to question 34.

Statement:		**Strongly disagree**						**Strongly agree**
10.	I believe it would be embarrassing to discuss using a condom with my partner.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
11.	I believe that putting on a condom interrupts the smooth flow of sex.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12.	I believe that it would be difficult to negotiate a condom every time one has sex.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13.	I believe that it would be easy to talk to a partner about using a condom.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
14.	It is the responsibility of the man to get a condom and use it when we have sex.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
15.	I believe I am equally responsible as my partner is for getting and using a condom when we have sex.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
16.	I believe I could persuade a partner that condoms should be used when we have sex.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Please continue to next page ➔

SUBJECTIVE NORMS—Questions 17-22 measures the opinions of others about your condom use and how important their opinion is to you. Please circle or place an "x" in the box to indicate your response for **each** statement.

Statement:		**Strongly disagree**						**Strongly agree**
17.	My friends want me to use condoms whenever I have sexual intercourse.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
18.	My family wants me to use condoms whenever I have sexual intercourse.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
19.	My partner wants me to use a condom whenever we have sexual intercourse.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Statement:		**Not at all important**						**Very Much important**
20.	It is important that my friends approve of my condom use behaviors.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
21.	It is important that my family approve of my condom use behaviors.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
22.	It is important that my sexual partner(s) approve of my condom use behaviors.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Please continue to next page ➔

PERCEIVED BEHAVIORAL CONTROL—Questions 23-27 measure how confident or comfortable you feel about negotiating condom use. Please circle or place an "x" in the box to indicate your response for **each** statement.

Statement:		**Strongly disagree**						**Strongly agree**
23	I would feel comfortable negotiating condom use.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
24.	I would not have sex if my partner refused to use a condom.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
25.	I am comfortable discussing the importance of using condoms with my partner.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
26.	If I were to have sex and my partner refused to use a condom, I feel like I could not do anything about it.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
27.	I feel confident I could persuade my partner to use a condom during sex if I wanted to.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

CONDOM NEGOTIATION STRATEGIES—Question 28 consists of multiple questions asking about your condom negotiation strategies. Please circle or place an "x" in the box to indicate your response for **each** statement.

28. Thinking about your most recent sexual partner, what strategies were you most likely to use with them? If you have not had a sexual partner in the past 3 months, what strategies *would* you be likely to use?	**Very likely**						**Very unlikely**
Drop hints (e.g., "So-and-So just got pregnant").	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Place condoms on the pillow or somewhere in view.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Verbally threaten (e.g., "no condoms-no sex").	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Put condom on partner.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Statements continued from previous page:	**Very likely**						**Very unlikely**
Flatter (e.g., "We will need to use extra-large condoms").	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Leave safer sex article or pamphlet in view.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Verbally express negative feelings (e.g., object or complain).	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Physically withdraw (move away) from partner if he doesn't want to use condoms.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Discussion (e.g., you and partner openly discuss condom use together).	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Seduction (e.g., increase partner's sexual arousal so that he forgets that you're using a condom).	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Give STI reason to use condoms.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Display negative emotions (e.g., crying, looking angry, looking dissatisfied).	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Give a relationship reason (e.g., it will enhance our relationship).	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Look through purse or nightstand to show desire to use condom.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Give pregnancy reason to use condoms.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Hand condom to partner.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Directly tell partner that you want to use condoms.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Offer trade off (e.g., "do this for me, I'll do something for you").	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Mislead partner (e.g., tell partner you want to use condoms because you don't want to get pregnancy, when you really are afraid of getting STIs)	**1**	**2**	**3**	**4**	**5**	**6**	**7**

INTENTIONS ABOUT CONDOM USE- Questions 29-31 measure your intention to negotiate condom use with your sexual partner(s) in the next 3 months. Please circle or place an "x" in the box to indicate your response for **each** statement.

Statement:		**Extremely likely**						**Extremely unlikely**
29.	I plan to negotiate condom use with my partner(s) in the next 3 months.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
30.	I expect to negotiate condom use with my partner(s) in the next 3 months.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
31.	I intend to negotiate condom use with my partner(s) in the next 3 months.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

CONDOM NEGOTIATION—Questions 32-33 are asking about your previous condom negotiation behaviors in the last 6 months. Please circle or place an "x" in the box to indicate your response.

32. In the past 6 months, have you engaged in condom negotiation with your partner(s)?

☐ Yes ☐ No (if **NO, you can skip to question 34)**

33. If you have met a partner online in the last 6 months, have you negotiated condom use online prior to meeting?

☐ Yes ☐ No ☐ No, I have not met a partner online in the last 6 months

Please continue to next page ➔

DEMOGRAPHIC QUESTIONS—Questions 34-40 ask questions about your background. Please circle or place an "x" in the box to indicate your response.

34. What is your year in school?

☐ 1st year undergraduate

☐ 2nd year undergraduate

☐ 3rd year undergraduate

☐ 4th year undergraduate

☐ 5th year undergraduate

☐ Graduate or professional

☐ Not seeking a degree

☐ Other_____

35. How do you usually describe yourself? (*Mark all that apply)*

☐ White

☐ Black or African American

☐ Hispanic or Latino/a

☐ Asian or Pacific Islander

☐ American Indian, Alaskan Native, or Native Hawaiian

☐ Biracial or Multiracial

☐ Other:_____

36. How old are you?

☐ 18

☐ 19

☐ 20

☐ 21

☐ 22

☐ 23

☐ 24

37. Which term best describes your sexual orientation?

☐ Asexual

☐ Bisexual

☐ Gay

☐ Lesbian

☐ Pansexual

☐ Questioning

☐ Queer

☐ Straight/heterosexual

☐ Same Gender Loving

☐ Another identity (please specify:_____)

38. Are you a member of a sorority?

☐ Yes ☐ No

39. What is your marital status?

☐ Single

☐ Married/Partnered

☐ Separated

☐ Divorced

☐ Other:_____

40. What is your current relationship status?

☐ Not in a relationship

☐ In a relationship but not living together

☐ In a relationship and living together

Please turn in your survey to the envelope at the front of the classroom.

Thank you for your time!

APPENDIX B

Instrument Author Permission Emails

Condom Negotiation Strategies

Inbox ×

Jennifer Evans <jevans9@crimson.ua.edu> Fri, Oct 26, 2018, 11:40 AM
to amygracelam

Good Morning Dr. Lam,

My name is Jennifer Evans and I am currently a doctoral student at The University of Alabama working on my dissertation examining college women's condom negotiation strategies. I came across an article you and your colleagues published, What Really Works? An Exploratory Study of Condom Negotiation Strategies, and I was wondering if you would be willing to share the questionnaire used in the study and provide me permission to modify and use it. Thank you in advance for your consideration.

Best,

Jennifer Evans

Jennifer Evans, MEd, CHES
Sent from my iPhone

Amy Lam <amygracelam@gmail.com> Sat, Oct 27, 2018, 11:07 PM
to me

Hi Jennifer,
Thanks for reaching out.
Here is the female hetero version of the Condom Negotiations Strategies Scale and the questions that go into each type (Verbal-Direct; Verbal-Indirect; Nonverbal-Direct; Nonverbal-Indirect).
I'm excited to hear more about your dissertation and what you're looking at.

If you choose to modify it, please first show me first how you plan to modify it so I can see if it is the CNS Scale with modifications or a completely different scale.

Thanks,

Mary Hoban Mon, Jan 28, 5:22 PM
to me

Sure, Jennifer, you can use #19 in your dissertation.
Thanks,
Mary Hoban

From: Jennifer Evans <jevans9@crimson.ua.edu>
Sent: Monday, January 28, 2019 4:44 PM
To: Mary Hoban <MHoban@acha.org>
Subject: Re: Request for Permission to Use NCHA II Survey Questions

Hi Mary,

Thank you for letting me know. May I have permission to use question 19 for my dissertation? I will be using the question as it is written in the 2015 ACHA NCHA survey.

Thank you,

Jennifer

Andrew J Kanu <AKanu@vsu.edu> Fri, Oct 5, 2018, 11:04 AM
to me

Good morning Ms. Evans,
You can use the inventory I used to investigate intent to use condom, or modify it to address your your research interest.
Please let me know if I can be of any help along the way. Congratulations and good luck.

Dr. Andrew J. Kanu
Dean, Professor
College of Humanities and Social Sciences
202 Harris Hall
(804) 524-5930
Fax. (804) 524-5406
Virginia State University
VA, 23806

Asare, Matt <Matt_Asare@baylor.edu> Tue, Oct 30, 2018, 6:50 PM
to me, manoj.sharma@jsums.edu

Hi Jennifer,

You can use the attached instrument in its entirety or tailor it to meet your dissertation needs. However, make sure to acknowledge the authors (i.e. me and Dr. Sharma) in your dissertation. This permission is limited to your dissertation only. Any future use of the instrument for other purposes should be approved by the authors.

Please let me know if you have any questions.
Thanks,
Matt

Matt Asare, PhD., MPH., MBA., CHES.

APPENDIX C

Institutional Review Board Approval Letter

THE UNIVERSITY OF ALABAMA | Office of the Vice President for Research & Economic Development
Office for Research Compliance

April 19, 2019

Jennifer Evans, MEd, MCHES
Health Science
Box 870311

Re: IRB # 19-OR-109: "Examining the Hookup Behaviors and Condom Negotiation Strategies of College Women with Online and Offline Partners"

Dear Ms. Evans:

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of consent. Approval has been given under expedited review category 7 as outlined below:

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

The approval for your application will lapse on April 18, 2020. If your research will continue beyond this date, please submit the annual report to the IRB as required by University policy before the lapse. Please note, any modifications made in research design, methodology, or procedures must be submitted to and approved by the IRB before implementation. Please submit a final report form when the study is complete.

Please use reproductions of the IRB-approved consent forms to obtain consent from your participants.

Good luck with your research.

Sincerely,

[redacted]

Director & Research Compliance Officer

cc: Dr. David A. Birch

APPENDIX D

Dean of the College of Human Environmental Sciences Approval Letter

THE UNIVERSITY OF ALABAMA | College of Human Environmental Sciences
Office of the Dean

January 28, 2019

UA Office of Research Compliance
Box 870127
358 Rose Administration Building
Tuscaloosa, AL 35487-0127

To whom it may concern,

Please accept this letter as my support for Jennifer Evans, a doctoral student in the Health Education and Health Promotion doctoral program at UA, to recruit students by contacting CHES professors to seek permission to use some of their class time. I have reviewed her dissertation study, *Examining the Hookup Behaviors and Condom Negotiation Strategies of College Women with Online and Offline Partners,* and understand that her need to recruit students within CHES is solely for research purposes and I support her efforts.

Sincerely,

[redacted]

Stuart L. Usdan, Ph.D.
Dean
College of Human Environmental Sciences
University of Alabama

APPENDIX E

E-mail to Instructors to Recruit and Administer Questionnaire

Dissertation Research Invitation E-mail to Instructors

Email Subject: Dissertation Research Invitation

Hello (insert instructor's name),

My name is Jennifer Evans and I am a doctoral candidate of Health Education and Promotion in the Department of Health Science working with Drs. David A. Birch and Stuart Usdan. As part of my dissertation, I am examining college women's hookup behaviors and condom negotiation strategies using the theory of planned behavior as a framework for an original research project (IRB # 19-01-1889).

I am seeking students to complete a 40-item questionnaire, estimated to take about 20 minutes to complete. I am kindly requesting permission to recruit students from your (insert class name) and administer the questionnaire during one class period during the spring 2019 semester. If this is possible, I will explain the study to students willing to participate and provide pen and paper surveys for the students to complete, as well as a study information sheet. I am offering a time-equivalent secondary survey for those who do not meet the inclusion criteria. The secondary survey entails answering a 15-item, paper and pencil questionnaire consisting of multiple choice and fill-in-the blank questions about sexual behaviors and condom use resistance tactics.

If you are willing, please let me know via e-mail. My e-mail address is jevans9@crimson.ua.edu. If you have any questions, I can also be reached at [redacted]

Thank you in advance for your willingness to support my research efforts.

Best,

Jennifer L. Evans, MEd, MCHES

APPENDIX F

Recruitment Script for Participants

Student Recruitment Script

Good morning/afternoon
My name is Jennifer Evans and I am a doctoral student of Health Education and Promotion in the Department of Health Science here at the University of Alabama.

I am conducting a study on college women's hookup behaviors and condom negotiation strategies. If you are interested in participating, you will be asked questions about your past hookup behaviors, your beliefs and attitudes about negotiating condom use, and questions about condom negotiation strategies.

This study will involve taking a survey via paper and pen. You must be enrolled in this class and between 18 and 24 years to participate. The study should take approximately 15 minutes to complete.

If you do not meet the inclusion criteria for the questionnaire (i.e. if you are a male), I will provide a copy of a paper and pen secondary survey. If you are interested in participating, you will be asked questions about your sexual behaviors and condom use resistance tactics. The only alternative is to not participate in either the college women's study or the male study.

There are minimal risks to participating in this study. Should you feel any discomfort, the number to The University of Alabama Counseling Center is provided in the study information sheet attached to the survey. The benefits of participating in this study, is the possibility of you increasing your awareness of and knowledge about hookup behaviors and condom negotiation strategies.

Please know that your participation is completely confidential, anonymous, and voluntary. You may choose not to participate. If you do participate, you may choose to not answer some questions or quit the study at any time.

If you have questions, concerns, or complaints about the study right now, please ask them. If you have questions, concerns, or complaints about the study later on, you can find information about who to contact on the form with information about the study.

Once you are finished with the survey, please come place them in the envelope at the front of the classroom. Please be sure not to put an identifying information on the survey like your name or campus wide identification number.

Thank you for your time.

APPENDIX G

Secondary Survey for Male Participants

COLLEGE MEN'S SEXUAL BEHAVIORS SURVEY

For the following questions, please circle or use an "x" for the response that describes you.

Are you between the ages of 18 and 24 years old?

☐ Yes ☐ No

Was your sex assigned as male at birth, such as on an original birth certificate?

☐ Yes ☐ No

Have you ever engaged in sexual intercourse (vaginal or anal)?

☐ Yes ☐ No

If you answered "Yes" to ALL of the questions above, please take the rest of this survey.

If you answered "No" to ANY of the questions above OR you have taken this survey in another class, please STOP and DO NOT take this survey. Thank you for your time!

COLLEGE MEN'S SEXUAL BEHAVIORS SURVEY

Purpose of the Study: The purpose of this study is to investigate condom use resistance tactics used by college men on their partners and to identify what condom use resistance tactics are used on college men by their partners.

For this survey, the following definitions will be used:

A. *Condom use resistance is* avoidance or resistance towards using condoms by one or both of the sexual partners.
B. *Condom use resistance tactics* verbal or non-verbal ways sexual partners prevent or persuade their partners from using condoms
C. *Sexual intercourse* is vaginal (a man's penis inside a woman's vagina) or anal intercourse (a man's penis inside a woman or man's anus)
D. *Condom(s)* refer to male condoms

Consent and directions: This is an anonymous survey. Please do not write your name on this survey. Your participation is voluntary. You may choose not to participate or to quit the study at any time. You may skip any questions you do not feel comfortable answering. Your participation in this survey

SEXUAL BEHAVIORS—Questions 1- 4 ask about your past sexual behaviors. Please write in your circle or place an "x" in the box to indicate your response.

1. How many sexual partners have you had in your lifetime?

_____Number of partners

2. What percentage of sexual intercourse over your lifetime have you used a condom for?

_____Percent (%)

3. Have you ever used a 'line' (a statement) to keep a potential sex partner from using condoms?

☐ Yes ☐ No

4. Has anyone ever used a 'line' (statement) to keep you from using condoms during sexual activity?

☐ Yes ☐ No

CONDOM USE RESISTANCE —Question 5 consists of multiple questions asking about what you have done with a current or previous sexual partner to persuade them to not use a condom. Some questions may not apply to you and your current or previous sexual behavior. If a statement **does not** apply to you, please answer "0 times".

5. Since the age of 14, how many times have YOU successfully avoided using a condom with a partner who wanted to use one by:	Please circle or place an "x" in the box to indicate your response for **each** statement.					
Getting your partner so sexually excited that they agreed to have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Getting your partner really aroused and then starting to have sex without a condom (i.e. "slipping it in" without a condom on.)	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Seducing your partner until they were willing to have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner how happy you would be if you had sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner how upset you would be if you did not have sex because you did not have a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner how angry you would be if they insisted on using a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Promising to have a relationship with them so they would have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling them that they were special so they would have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**

Telling them that you trusted each other so they would have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Reassuring them that you were "clean" (i.e., did not have any STIs) so that they would have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Promising to pull out before you ejaculated.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling them that you didn't need to use a condom this time since you didn't use one with them last time.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your *female* partner that she could just use Plan B ("morning after pill").	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner, you didn't want to use a condom because they are uncomfortable.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner, you didn't want to use a condom because sex doesn't feel as good with one on.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner that you can't feel anything when you wear a condom so you don't want to use one.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner that you could lose your erection while putting the condom on.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner that you could lose your erection during sex if you had to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner that you would have difficulty staying physically aroused if you had to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**

Making it clear that you would not have sex if you had to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Making a direct request to not use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Pretending that you have a latex allergy and cannot use condoms.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Pretending you had a vasectomy so that you *female* partner would agree not to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Agreeing to use a condom, but intentionally breaking the condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Preventing them from getting a condom by staying on top of your partner.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Threatening to hurt them if they would not have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Using physical force to get them to have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**

OPEN-ENDED—Question 6 asks you to provide examples of other condom use resistance tactics that may not have been included in the statements above.

6. Are there any other examples you have used that are not listed above? If so, please provide examples:

Please continue to next page ➔

PARTNER CONDOM RESISTANCE—Question 7 asks about what current or previous *your partner(s)* have done to persuade *you* to not use a condom. Some questions may not apply to you and your current or previous sexual behavior. If a statement **does not** apply to you, please answer "0 times".

7. Since the age of 14, how many times has your PARTNER successfully avoided using a condom with YOU by:	Please circle or place an "x" in the box to indicate your response for **each** statement.					
Getting you so sexually excited that you agreed to have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Getting you really aroused and then starting to have sex without a condom (i.e. "slipping it in" without a condom on.)	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Seducing you until you were willing to have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you how happy they would be if you had sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you how upset they would be if you did not have sex because you both did not have a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you how angry you would be if they insisted on using a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Promising to have a relationship with you so you would have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that you were special so you would have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that you trusted each other so you would have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Reassuring you that they were "clean" (i.e., did not have any STIs)	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**

so that you would have sex without a condom.						
Telling you that you could just pull out before you ejaculated.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that you didn't need to use a condom this time since you didn't use one with them last time.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that she could just use Plan B ("morning after pill").	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that they didn't want to use a condom because they are uncomfortable.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that they didn't want to use a condom because sex doesn't feel as good with one on.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that they can't feel anything when you wear a condom so they don't want to use one.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling your partner that you could lose your erection while putting the condom on.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that they won't be able to stay lubricated ("wet") if you had to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that you could lose your erection *OR* that your partner could lose their erection while putting on the condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Telling you that you could lose your erection *OR* that your partner could lose their erection during sex if you had to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**

Telling you that you would have difficulty staying physically aroused if you had to use a condom *OR* that your partner would have difficulty staying physically aroused.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Making it clear that they would not have sex if you had to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Refusing to have sex with you if you had to use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Making a direct request to not use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Pretending to have a latex allergy so you cannot use condoms.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Pretending they were on birth control so that you would agree to not use a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Agreeing to use a condom, but intentionally breaking the condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Agreeing to use a condom, but removing it before or during sex without telling you.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Preventing you from getting a condom by staying on top of you.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Threatening to hurt you if you would not have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**
Using physical force to get you to have sex without a condom.	**0 times**	**1-5 times**	**6-10 times**	**11-15 times**	**16-20 times**	**21 or more times**

OPEN-ENDED-- Question 8 asks you to provide examples of other condom use resistance tactics that may not have been included in the statements above.

8. Are there any other examples you have used that are not listed above? If so, please provide examples:

DEMOGRAPHIC QUESTIONS—Questions 9-15 ask questions about your background. Please circle or place an "x" in the box to indicate your response.

9. What is your year in school?

☐ 1st year undergraduate

☐ 2nd year undergraduate

☐ 3rd year undergraduate

☐ 4th year undergraduate

☐ 5th year undergraduate

☐ Graduate or professional

☐ Not seeking a degree

☐ Other_____

10. How do you usually describe yourself? (*Mark all that apply)*

☐ White

☐ Black or African American

☐ Hispanic or Latino/a

☐ Asian or Pacific Islander

☐ American Indian, Alaskan Native, or Native Hawaiian

☐ Biracial or Multiracial

☐ Other:_____

11. How old are you?

☐ 18

☐ 19

☐ 20

☐ 21

☐ 22

☐ 23

☐ 24

12. Which term best describes your sexual orientation?

☐ Asexual

☐ Bisexual

☐ Gay

☐ Pansexual

☐ Queer

☐ Questioning

☐ Same Gender Loving

☐ Straight/heterosexual

☐ Another identity (please specify:_____)

13. Are you a member of a fraternity?

☐ Yes ☐ No

14. What is your marital status?

☐ Single

☐ Married/Partnered

☐ Separated

☐ Divorced

☐ Other:_____

15. What is your current relationship status?

☐ Not in a relationship

☐ In a relationship but not living together

☐ In a relationship and living together

Please turn in your survey to the envelope at the front of the classroom.

Thank you for your time!

APPENDIX H

Information Sheet- College Women's Questionnaire

Information Sheet for Research
Principal Investigator: Jennifer L. Evans, M.Ed., MCHES (Doctoral Candidate)
Faculty Advisors: David A. Birch, Ph.D., MCHES and Stuart Usdan, Ph.D.
Department of Health Science
The University of Alabama

Introduction: You are being asked to take part in a research study. Please read this sheet carefully and ask questions about anything you do not understand. You are being asked to take part in a survey which asks about college males' condom use resistance tactics. Jennifer Evans, a graduate student at The University of Alabama, is conducting the study.

Is the researcher being paid for this study?
No, the researcher is receiving no funding for this study.

Is this research developing a product that will be sold, and if so, will the investigator profit from it?
No, this researcher is not developing a product that will be sold.

Does the investigator have any conflict of interest in this study?
The researcher has no conflict of interest to disclose.

What is this study about? What is the investigator trying to learn?
The purpose of this research is to identify commonly used condom use resistance tactics used by males on their partners, as well as tactics that have been used on males to prevent them from using a condom.

Why is this study important or useful?
This knowledge is important because condom use for women who have sex with men, primarily relies on persuading their partners to use condoms. The results from this study may help health educators to improve education for college students on sexuality and may provide insight on which condom use resistance tactics are commonly used on and among college males.

Why have I been asked to be in this study?
You have been asked to be in this study because you are a student at The University of Alabama between the ages of 18 and 24 years old and you identify as a male.

How many people will be in this study?
About 300 other people will be in this study.

What will I be asked to do in this study?
If you meet the criteria and agree to be in this study, you will be asked to do these things:

For this study you will be asked to complete a 15-item questionnaire regarding your sexual behaviors, and condom use resistance tactics, once during a regularly scheduled class time.

How much time will I spend being this study?
You will be asked to complete a 15-item questionnaire that will take approximately 20 minutes to complete. The entire study will take approximately 25 minutes of your time.

Will being in this study cost me anything?
The only cost to you from this study is your time.

Will I be compensated for being in this study?
You will not be compensated for participating in this study.

Can the investigator take me out of this study?
The investigators may take you out of the study if they feel that the study is upsetting you, something happens that means you no longer meet the study requirements, etc.

What are the risks (dangers or harms) to me if I am in this study?
There are no physical risks or discomforts in this study. The psychological risks or discomforts due to participating in this study are minimal. This survey will explore aspects of sexuality that some may find uncomfortable. Should you experience discomfort, we will inform you about counseling services offered by the University of Alabama Counseling Center (205-348-3863).

What are the benefits (good things) that may happen if I am in this study?
Participation in this study may increase your awareness of and knowledge about hookup behaviors and condom use resistance tactics.

What are the benefits to science or society?
Findings from this study may be used to help design health education and promotion programs to decrease condom use resistance tactics and may help improve current or future education to educate students on how to negotiate condom use. As a result, society could benefit from a lower prevalence of sexually transmitted infections and unintended pregnancies.

How will my privacy be protected?
You do not have to answer any question that you do not want to. If you feel uncomfortable completing the survey during class time, you can take it in the private office of Ms. Evans. Please alert the researcher if you would like this option. All information collected is anonymous and confidential. I am not collecting any identifying information for you and I will be the only person to view these surveys.
How will my confidentiality be protected?
The number of people who can access data will be restricted, and the paper and pen surveys will be destroyed two months after data analysis.

What are the alternatives to being in this study? Do I have other choices?
The alternative is to not participate.

What are my rights as a participant in this study?
Taking part in this study is voluntary. It is your free choice. You can refuse to be in it at all. You may start and then change your mind and stop at any time. There will be no effect on your relations with the University of Alabama.

The University of Alabama Institutional Review Board ("the IRB") is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems?
If you have questions, concerns, or complaints about the study right now, please ask them. If you have questions, concerns, or complaints about the study later on, please email the investigator (Jennifer Evans) at jevans9@crimson.ua.edu or her faculty supervisor, Dr. David A. Birch at 205-348-4751.

If you have questions about your rights as a person in a research study, call Ms. Tanta Myles, the Research Compliance Officer of the University, at 205-348-8461 or toll-free at 1-877-820-3066.

You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach website at http://ovpred.ua.edu/research-compliance/prco/. You may e-mail the Research Compliance office at rscompliance@research.ua.edu

After you participate, you are encouraged to complete the survey for research participants that is online at the outreach website or you may ask the investigator for a copy of it and mail it to the University Office for Research Compliance, Box 870127, 358 Rose Administration Building, Tuscaloosa, AL 35487-0127.

**** BY COMPLETEING THE SURVEY, YOU INDICATE CONSENT FOR YOUR ANSWERS TO BE USED IN THIS RESEARCH STUDY.****

PLEASE KEEP THIS INFORMATION SHEET FOR YOUR RECORDS

APPENDIX I

Information Sheet- Secondary Survey for College Males

Information Sheet for Research
Principal Investigator: Jennifer L. Evans, M.Ed., MCHES (Doctoral Candidate)
Faculty Advisors: David A. Birch, Ph.D., MCHES and Stuart Usdan, Ph.D.
Department of Health Science
The University of Alabama

Introduction: You are being asked to take part in a research study. Please read this sheet carefully and ask questions about anything you do not understand. You are being asked to take part in a survey which asks about college males' condom use resistance tactics. Jennifer Evans, a graduate student at The University of Alabama, is conducting the study.

Is the researcher being paid for this study?
No, the researcher is receiving no funding for this study.

Is this research developing a product that will be sold, and if so, will the investigator profit from it?
No, this researcher is not developing a product that will be sold.

Does the investigator have any conflict of interest in this study?
The researcher has no conflict of interest to disclose.
What is this study about? What is the investigator trying to learn?
The purpose of this research is to identify commonly used condom use resistance tactics used by males on their partners, as well as tactics that have been used on males to prevent them from using a condom.

Why is this study important or useful?
This knowledge is important because condom use for women who have sex with men, primarily relies on persuading their partners to use condoms. The results from this study may help health educators to improve education for college students on sexuality and may provide insight on which condom use resistance tactics are commonly used on and among college males.

Why have I been asked to be in this study?
You have been asked to be in this study because you are a student at The University of Alabama between the ages of 18 and 24 years old and you identify as a male.

How many people will be in this study?
About 300 other people will be in this study.

What will I be asked to do in this study?
If you meet the criteria and agree to be in this study, you will be asked to do these things:

For this study you will be asked to complete a 15-item questionnaire regarding your sexual behaviors, and condom use resistance tactics, once during a regularly scheduled class time.

How much time will I spend being this study?
You will be asked to complete a 15-item questionnaire will take approximately 20 minutes to complete. The entire study will take approximately 25 minutes of your time.

Will being in this study cost me anything?
The only cost to you from this study is your time.

Will I be compensated for being in this study?
You will not be compensated for participating in this study.

Can the investigator take me out of this study?
The investigators may take you out of the study if they feel that the study is upsetting you, something happens that means you no longer meet the study requirements, etc.

What are the risks (dangers or harms) to me if I am in this study?
There are no physical risks or discomforts in this study. The psychological risks or discomforts due to participating in this study are minimal. This survey will explore aspects of sexuality that some may find uncomfortable. Should you experience discomfort, we will inform you about counseling services offered by the University of Alabama Counseling Center (205-348-3863).

What are the benefits (good things) that may happen if I am in this study?
Participation in this study may increase your awareness of and knowledge about hookup behaviors and condom use resistance tactics.

What are the benefits to science or society?
Findings from this study may be used to help design health education and promotion programs to decrease condom use resistance tactics and may help improve current or future education to educate students on how to negotiate condom use. As a result, society could benefit from a lower prevalence of sexually transmitted infections and unintended pregnancies.

How will my privacy be protected?
You do not have to answer any question that you do not want to. If you feel uncomfortable completing the survey during class time, you can take it in the private office of Ms. Evans. Please alert the researcher if you would like this option. All information collected is anonymous and confidential. I am not collecting any identifying information for you and I will be the only person to view these surveys.
How will my confidentiality be protected?
The number of people who can access data will be restricted, and the paper and pen surveys will be destroyed two months after data analysis.

What are the alternatives to being in this study? Do I have other choices?
The alternative is to not participate.

What are my rights as a participant in this study?
Taking part in this study is voluntary. It is your free choice. You can refuse to be in it at all. You may start and then change your mind and stop at any time. There will be no effect on your relations with the University of Alabama.

The University of Alabama Institutional Review Board ("the IRB") is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems?
If you have questions, concerns, or complaints about the study right now, please ask them. If you have questions, concerns, or complaints about the study later on, please email the investigator (Jennifer Evans) at jevans9@crimson.ua.edu or her faculty supervisor, Dr. David A. Birch at 205-348-4751.

If you have questions about your rights as a person in a research study, call Ms. Tanta Myles, the Research Compliance Officer of the University, at 205-348-8461 or toll-free at 1-877-820-3066.

You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach website at http://ovpred.ua.edu/research-compliance/prco/. You may e-mail the Research Compliance office at rscompliance@research.ua.edu

After you participate, you are encouraged to complete the survey for research participants that is online at the outreach website or you may ask the investigator for a copy of it and mail it to the University Office for Research Compliance, Box 870127, 358 Rose Administration Building, Tuscaloosa, AL 35487-0127.

**** BY COMPLETEING THE SURVEY, YOU INDICATE CONSENT FOR YOUR ANSWERS TO BE USED IN THIS RESEARCH STUDY.****

PLEASE KEEP THIS INFORMATION SHEET FOR YOUR RECORD

APPENDIX J

Summary of Scores for Questionnaire Subscales

Questionnaire Scoring Guide

All questionnaire item scales are measured from 1 to 7. Questionnaire items are scored as follows:

Attitudes toward the behavior construct score was obtained by first reverse-coding items 10-12, and 14, then summing the items 10 through 16. Possible subscale scores range from 7 to 49.

Subjective norms construct score was obtained by summing items 17 through 22. Possible subscale scores range from 6 to 42.

Perceived behavioral control construct score was obtained by first reverse-coding item 26, then summing the items 23 through 27. Possible subscale scores range from 5 to 35.

Behavioral intention construct score was obtained by first reverse-coding items 29 through 31 and then summing these items. Possible subscale scores range from 3 to 21.

Verbal direct subscale score was obtained by summing those items determined by Lam et al. (2004; see Appendix K). Possible subscale scores range from 6 to 42.

Verbal indirect subscale score was obtained by summing those items determined by Lam et al. (2004; see Appendix K). Possible subscale scores range from 5 to 35.

Nonverbal direct subscale score was obtained by summing those items determined by Lam et al. (2004; see Appendix K). Possible subscale scores range from 5 to 35.

Nonverbal indirect subscale score was obtained by summing those items determined by Lam et al. (2004; see Appendix K). Possible subscale scores range from 3 to 21.

APPENDIX K

Condom Negotiation Questions by Subscale

Condom Negotiation Questions by Subscale

Subscale	Questions in Subscale
Verbal Direct	Verbally threaten (e.g., "No condoms- no sex" Verbally express negative feelings (e.g., object or complain) Discussion (e.g., you and partner openly discuss condom use together) Give STD reason to use condoms Give pregnancy reason to use condoms Directly tell partner that you want to use condoms
Verbal Indirect Scale	Drop hints (e.g., "So-and-so just got pregnant") Flatter (e.g., "We will need to use extra-large condoms") Give relationship reason (e.g., "It will enhance our relationship") Offer trade off (e.g., "Do this for me, I'll do something for you") Mislead partner (e.g., tell partner you want to use condoms because you don't want to get pregnant, when you really are afraid of getting STDs)
Nonverbal Direct Scale	Place condoms on the pillow or somewhere in view Put condom on partner Physically withdraw (move away) from partner if he doesn't want to use condoms Display negative emotions (e.g., crying, looking angry, looking dissatisfied) Hand condom to partner
Nonverbal Indirect Scale	Leave safer sex article Seduction (e.g., increase partner's sexual arousal so that he forgets that you're using a condom) Look through purse or nightstand to show desire to use condom