

Sexual and Menstrual Attitudes as Predictors of Hookup Behavior and Attitudes among Undergraduate Women

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Abstract

Hooking up, broadly defined as engaging in sexual interaction outside of a committed relationship, is a common practice on college campuses. Recent research suggests as many as 86% of students, and 69% of women, have experienced a sexual hookup by their senior year.^{2,10,20,25} Hookups pose a threat to students' physical and mental health. Lifetime history of hookup behavior is associated with low rates of condom usage and increased rates of sexually transmitted infection diagnosis, psychological distress, and sexual violence; moreover, hookups may be associated with increased risk for sexual victimization.^{10,11,21,24} As a result of these possible health implications, hookups are a public health concern. A large body of research indicates that possible risk factors for hookup behaviors to include alcohol and marijuana usage, impulsivity and sensation-seeking personalities, low self-esteem, and intentions to hookup.^{12,31} However, menstrual and sexual attitudes have not been explored as a possible factor influencing hookup attitudes and behavior. To explore these constructs, undergraduate women (N=204) from a mid-sized Midwestern university completed an online survey including the Menstrual Attitude Questionnaire, the Brief Sexual Attitude Scale, and a hookup attitude instrument. It was expected that students with more positive sexual and menstrual attitudes would display more positive attitudes toward hooking up and a higher frequency of hookup behavior. Findings suggest that viewing menstruation as a bothersome event is positively associated with hookup attitudes and non-hookup behavior; being able to predict and anticipate the onset of menstruation is also positively associated with hookup behavior. A greater degree of sexual permissiveness is positively correlated with hookup attitudes and behavior; viewing alcohol as a tool to fuel hookup experiences is positively associated with hookup behavior. The present study extends the literature on predictors of hookup behavior and attitudes among undergraduate women beyond previously researched constructs. Findings may inform future intervention opportunities with regards to hooking up.

Keywords: Hookups, Menstrual Attitudes, Sexual Attitudes

1. Introduction

Hooking up is a common practice on United States college campuses and in the past two decades, a body of literature describing the hookup culture and its prevalence has emerged. Additionally, popular media has given considerable attention to the topic. Whereas no universal definition of hooking up exists, extant literature has sought to define the phenomenon. Hooking up may be defined by engaging in sexual interaction outside of a committed relationship.¹² Other research has suggested three attributes of hookups: (1) the hookup experience may include a variety of sexual behaviors, from kissing to penetrative intercourse, (2), the hookup partners are not in a committed relationship, and (3), the experience is short term and does not precede nor imply the development of a romantic relationship.⁷ Hookup prevalence varies by study, potentially because of the multiple definitions of the phenomenon. Generally, hookup prevalence ranges from 40-86%.^{10,20,25} Among college women specifically, 69% report at least one hookup by their senior year, with a median of three hookups in total during college.²

Both feminist and public health perspectives on the college hookup culture often frame the practice as risky and dangerous for women's emotional and physical health. Certainly, hookups may pose a threat to students' well-being, as lifetime history of hookup behavior is associated with myriad negative health behaviors and outcomes. Among women, hookups are associated with a condom use rate of 46-69%, which may increase hookups participants' risk for STIs or unintended pregnancy.^{10, 20} Women with negative attitudes toward hooking up and who disapprove of the activities during a hookup report more negative affect towards their most recent hook up experience.²⁰ Additionally, women engaging in penetrative sexual hookups may experience greater emotional distress and lower self-esteem.^{10, 24} As a result of these possible health implications, hookups are public health concern.

Despite these possible negative consequences and concerns, however, hooking up is linked to myriad benefits for women, such as sexual pleasure, positive emotions, and boosted self-esteem.²⁹ Moreover, women tend to experience more positive than negative reactions to hookups when the hookup experience is sought to boost self-confidence and self-esteem.³⁰ Additionally, women engaging in hookups who hold more permissive towards casual sex experience greater sexual well-being.¹⁹ In another study, a majority (86%) of women at least somewhat enjoyed a hookup and 50% very much enjoyed it.² Some scholars argue that popular media and research have focused too heavily on the negative consequences of hooking up.³⁰ This attention on the negative aspects may stigmatize young people, namely women, who choose to participate in the hookup culture.³ Some feminist perspectives that are more critical of the hookup culture suggest that while the culture encourages sexual liberation for college women—*freedom to*—women still do not have *freedom from* negative aspects of the hookup culture, such as sexual coercion and rape.⁹ Further, it is suggested that men's sexual pleasure in hookup experiences takes precedence over women's and that hookup culture facilitates sexual assault.¹⁶ While these are valid and real concerns for undergraduate women and for the broader campus hookup culture, it is critical to capture positive variables that may influence women's hookup attitudes personal choice to engage in hookups.

A large body of literature has explored possible predictors of hookups. Alcohol and marijuana usage, impulsive and sensation-seeking personality types, pre-college hookup behavior, and social comparison are a few frequently studied risk factors for engaging in a hookup.^{12, 21, 31} Additionally, among college students, pornography consumption is associated with a higher frequency of hookup experiences.⁴ Permissive sexual attitudes also predict higher hookup frequency.¹⁹ Understanding risk factors for engaging in hookups allows for the development of intervention opportunities that encourage women—and all college students who engage in hookups—to have safer hookup experiences. Extant research has not examined menstrual attitudes and sexual attitudes as correlates of hookup behavior and attitudes.

Many women experience a menstrual cycle, a marker of reproductive potential and sexual maturity.²⁶ Despite menstruation being a natural process for those who experience it, and a precursor for the development of life, it carries strong cultural stigma. Many girls and women report shame surrounding the appearance of menstrual blood and a desire to hide menstrual products. Some girls and women may also be embarrassed about the fact that they menstruate.^{18, 28} Menstruation and sexual activity generally occur in the same place on the body: the genitals. As a result, attitudes about menstruation, such as shame, disgust, or a feeling of menstruation as natural and normal, may influence attitudes about sexual activity. In fact, undergraduate women who report more comfort with menstruation also report more comfort with sexuality and sex during menstruation.²⁶ Additionally, undergraduate women who experience more shame about menstruation engage in less sexual activity but report engaging in more sexual risk-taking.^{27, 28} While research has linked women's menstrual attitudes, such as acceptance and shame, to both lifetime sexual activity and sexual activity during menstruation, no such studies have examined the relationship between menstrual attitudes and hookup frequency and attitudes. Thus, it is hypothesized that more open, accepting attitudes towards menstruation will predict greater hookup frequency and more positive attitudes towards hooking up.

Sexual attitudes may also predict hookup behavior and attitudes toward hooking up. Sexual attitudes refer to individuals' personal views on sex. Previous studies on sexual attitudes suggest stronger sexual attitudes (i.e. greater permissiveness towards casual sex or hookups) are positively associated with hooking up and with higher levels of alcohol consumption for men, but not for women.⁶ Furthermore, when sexual attitudes are congruent with sexual activity, women report greater sexual well-being.¹⁹ Thus, it is hypothesized that holding more permissive attitudes towards sexuality will predict greater hookup frequency and more positive attitudes towards hooking up.

Ultimately, the purpose of this study is to assess menstrual and sexual attitudes as possible correlates of hookup behavior and attitudes among undergraduate women. A secondary purpose is to extend the literature on hooking up as both a feminist and a public health issue. Combining feminist and public health perspectives on hookups may help to inform more robust future interventions or programming around risky hookups. Per previous research, it is clear that hookups have real health consequences and can involve risky sex. However, it is also important to understand how women's individual attitudes may influence their hookup behaviors and to build interventions that are sensitive to those attitudes.

2. Methods

2.1. Participants

Participants were undergraduate students at a mid-sized Midwestern university. Of the 264 participants, 204 (74.7%) identified as female. Given the focus of the current study, only the female participants were included in the analyses. The participants' mean age was 20.1 ($SD=1.1$). Freshman participants comprised 17.2% of the sample; 23.4% were sophomores, 32.2% were juniors, 20.5% were seniors, and 2.9% were fifth year or graduate students. Female participants were mostly white (92.6%) and non-Hispanic/Latina (93.6%); 5.9% were black, 5.4% were Asian American, 0.5% were Pacific Islander/Hawaiian, and 1% identified their race as other. Most participants identified as heterosexual (89.7%), with 7.8% identifying as bisexual, 1.5% as questioning, and 0.5% as lesbian.

2.2. Procedure

Data were collected from students at mid-sized Midwestern university. Snowball sampling was used to recruit participants. Students were emailed a link to an online survey in which they self-reported answers. Participants were informed of the voluntary nature of their participation and the confidential nature of the data. After survey completion, participants were invited to enter a drawing for one of four fifty-dollar gift cards.

2.3. Measures

2.3.1. *hookup attitudes and behavior*

Hookup and non-hookup sexual behavior was measured using four items: (1) In the last 30 days, how many hookups have you had? (2) In the last 6 months, how many hookups have you had? (3) In the last 30 days, how many sexual encounters have you had that you would not consider a hookup? (i.e. with a partner or significant other) and (4) In the last 6 months, how many sexual encounters have you had that you would not consider a hookup? (i.e. with a partner or significant other). Participants were provided with the following definition of "hookup": A hookup is defined as a "sexual encounter where two people are physically intimate (e.g., kissing, touching, oral sex, vaginal sex, anal sex) with someone whom they are not dating or in a romantic relationship with at the time, and in which it is understood there is no mutual expectation of a romantic commitment."¹¹ Responses were open-ended.

To assess hookup attitudes, participants responded to the following items developed by Fielder and Carey¹⁰: (1) Hooking up is part of the college experience, (2) College students are expected to hookup, (3) Everyone looks forward to hooking up in college, and (4) Hooking up is important to my college life. Items were measured using a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree), where a higher score indicates greater agreement with the items.

2.3.2. *menstrual attitudes*

Participants' attitudes towards menstruation were measured using the Menstrual Attitudes Questionnaire (MAQ).⁵ The MAQ consists of 35 statements to which participants respond using a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). A higher score on each subscale indicates greater agreement with each subscales' statements. Statements measure menstruation as a debilitating event (12 items), menstruation as a bothersome event (6), menstruation as a natural event (5), menstruation as an event that can be anticipated and predicted (5), and denial of the effects of menstruation (7). Sample statements include: "Avoiding certain activities when menstruating is often very wise," (debilitating) "In some ways I enjoy my menstrual periods," (bothersome) "Menstruation allows women to be more aware of their bodies," (natural) "I am more easily upset during my premenstrual or menstrual periods than at other times of the month," (anticipation and prediction) and "Women who complain of menstrual distress are just using that as an excuse" (denial).

2.3.3. sexual attitudes

Participants' sexual attitudes were measured with the Brief Sexual Attitudes Scale (BSAS).¹⁷ The 23-statement BSAS measures sexual attitudes as they relate to permissiveness, birth control, communion, and instrumentality. Items are rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A higher score on each subscale indicated a greater amount of each attitude. The permissiveness subscale (10 items) measures openness towards casual sexual relationships (e.g. "I do not need to be committed to a person to have sex with him/her"). Birth control (3) measures responsibility in birth control (e.g. "Birth control is part of responsible sexuality"). Communion (5) measures attitudes towards the importance of compatibility with sexual partners (e.g. "A sexual encounter between two people deeply in love is the ultimate human interaction"). Instrumentality (3) measures attitudes towards enjoying the physical aspect of sex (e.g. "Sex is best when you let yourself go and focus on your own pleasure," "Sex is primarily the taking of pleasure from another person," and "Sex is best between you and your significant other"). While the original instrument uses six items to measure instrumentality, three items were unintentionally omitted. An additional four-item sub-scale was created to measure attitudes towards having sex while under the influence of alcohol. Items included: (1) It is easier to say yes to sex when you are drunk, (2) It is okay to hook up with other people if you are drunk, even in an exclusive relationship, (3) Being drunk makes you more likely to hookup, and (4) You are more likely to cheat on your significant other while you are drunk vs while you are sober.

3. Results

Participants reported a mean of 0.74 hookups in the previous thirty days ($SD=3.09$) and a mean of 2.81 hookups in the previous six months ($SD=13.66$). 55.90% and 43.10% of the sample reported no hookups in the previous 30 days and the previous 6 months, respectively. Participants reported an average of 3.95 non-hookup sexual encounters ($SD=7.50$) in the past thirty days, and an average of 17.50 ($SD=32.52$) non-hook sexual interactions in the previous 6 months. In the previous 30 days and 6 months, 39.7% and 31.9%, respectively, reported no non-hookup sexual experiences. With regard to attitudes toward hooking up, participants more strongly agreed with the statements "hooking up is part of the college experience" ($M=3.51$; $SD=1.82$) and "college students are expected to hookup" ($M=3.64$; $SD=1.72$) than with the statements "Everyone looks forward to hooking up in college" ($M=2.86$; $SD=1.63$) and "Hooking up is important to my college life" ($M=2.13$; $SD=1.51$). Overall, participants reported a mean of 3.04 ($SD=1.36$) on the hookup attitude scale.

Participants also reported the current phase of their menstrual cycles, with 18.8% being in week 1 (the week of their menstrual period), 31.9% in week 2, 15.9% in week 3, and 18.1% in week 4 (the week before their menstrual period). 15.2% of participants reported not having a monthly menstrual period.

Table 1. Summary of Menstrual Attitude Questionnaire results

Subscales	Mean (SD)
Menstruation as a Debilitating Event	3.89 ($SD=0.90$)
Menstruation as a Bothersome Event	5.08 ($SD=1.07$)
Menstruation as a Natural Event	4.20 ($SD=1.40$)
Menstruation as an event that can be anticipated and predicted	5.15 ($SD=1.13$)
Denial of the effects of menstruation	2.46 ($SD=0.95$)

Absolute range, 1-7

Table 2. Summary of Brief Sexual Attitude Scale results

Subscales	Mean (SD)
Permissiveness	2.45 (SD=0.95)
Birth Control	3.20 (SD=0.64)
Communion	3.71 (SD=0.78)
Instrumentality	3.53 (SD=0.66)
Alcohol	2.93 (SD=0.78)

Absolute range, 1-5

A pearson's r was computed to assess the relationship between MAQ and BSAS subscale scores and hookup attitudes, as well as between MAQ and BSAS subscale scores and hookup behavior.

Table 3. Correlation between MAQ subscales and hookup attitudes and behavior

Variable	Hookup attitudes	Hookup in last 30 days	Hookup in last 6 months	Non-hookup sexual interaction in last 30 days	Non-hookup sexual interaction in last 6 months
1. Menstruation as a Debilitating Event	0.124	-0.158	-0.700	0.650	0.110
2. Menstruation as a Bothersome Event	0.202*	-0.130	-0.086	0.180*	0.177*
3. Menstruation as a Natural Event	0.030	-0.046	-0.11	0.086	0.122
4. Menstruation as an event that can be anticipated and predicted	0.190*	-0.149	-0.085	0.135	0.154
5. Denial of the effects of menstruation	-0.144	0.160	0.129	-0.105	-0.104

* = $p < 0.05$

** = $p < 0.01$

N=124-147

Table 4. Correlation between BSAS subscales

Variable	Hookup attitudes	Hookup in last 30 days	Hookup in last 6 months	Non-hookup sexual interaction in last 30 days	Non-hookup sexual interaction in last 6 months
1. Permissiveness	0.519**	0.230**	0.186*	-0.003	-0.14
2. Birth control	0.132	0.111	0.090	0.023	0.104
3. Communion	0.065	0.023	0.018	0.252**	0.256**
4. Instrumentality	0.139	0.053	0.047	0.148	0.118
5. Alcohol	0.361**	0.128	0.149	-0.166	-0.158

* = $p < 0.05$

** = $p < 0.01$

4. Discussion

The present study examined menstrual and sexual attitudes as possible predictors of hookup attitudes and behaviors. Findings described menstrual and sexual attitudes of undergraduate women and revealed several significant factors associated with hookup attitudes and behavior, which may inform interventions around hooking up and risky sexual behavior. With regard to menstrual attitudes, participants tended to agree more with menstruation as a bothersome event than as a debilitating event. Participants were more likely to view menstruation as a natural event and as an event that can be predicted and anticipated. Moreover, they generally did not deny effects of menstruation. With regard to sexual attitudes, participants tended to report moderate levels of permissiveness. They slightly agreed that using birth control is part of responsible sexuality, that sex is the highest form of intimacy and connection between two people (communion) and that sex is a physically pleasurable experience (instrumentality). Additionally, they slightly agreed, although less so than the previous three subscales, that alcohol is a fuel for hookup experiences.

Participants reported more non-hookup sexual experiences than hookup experiences. In general, they somewhat disagreed that hooking up is important to college life and that everyone looks forward to hooking up in college; however, they were more likely to support the idea that hooking up is part of the college experience and that college students are expected to hookup.

4.1. Menstrual Attitudes and Hookups

Among MAQ subscales, a positive relationship was found between the first four subscales and hookup attitudes (i.e. viewing menstruation as more debilitating was correlated with more positive attitudes toward hooking up), although not all relationships were significant. In contrast, a negative relationship was found between these subscales and hooking up in the last 30 days or 6 months. A negative relationship was found between denial of the effects of menstruation and hookup attitudes; the more a participant denied the effects of menstruation, the more negative her attitudes towards hooking up. The denial subscale, however, was positively associated with hooking up in the last 30 days and 6 months. Understanding menstruation as a bothersome event was significantly associated with more positive attitudes towards hookups and greater 30-day and 6-month hookup frequency. Similarly, anticipation and prediction of menstruation onset was also significantly, positively associated with positive attitudes towards hookups. Attitudes towards menstruation as a debilitating event, as a natural event, and denial of the effects of menstruation were not significantly correlated with hookup attitudes or behavior. Generally, more positive menstrual attitudes were correlated with more negative hookup attitudes and with greater 30-day and 6-month hookup exposure. Thus, although it was hypothesized that more positive attitudes toward menstruation would predict more positive hookup attitudes and behavior, results were mixed.

The observed relationships between menstrual attitudes and hookup attitudes may be mediated by the effects of menstrual and body shame and body objectification. Several studies have examined the links between negative attitudes toward menstruation and body shame and self-objectification. Specifically, negative attitudes toward menstruation are correlated with body shame, which in turn is associated with greater levels of risky sexual behavior.²⁸ Furthermore negative attitudes toward menstruation are linked with self-objectification and body self-consciousness.¹⁵ Additionally, Lovejoy²² suggests that self-objectification and societal and culture sexualization of women increases risk of using hookups for self-affirmation. Thus, there is perhaps a link between these constructs (menstrual shame and body shame) that explains the significant correlation between menstruation as a bothersome event and hookup attitudes. For women who view menstruation as bothersome, self-objectification or body shame may be a mediating factor between that menstrual attitude and more positive hookup attitudes.

With regard to the link between viewing menstruation as a bothersome event and non-hookup sexual interactions, this finding may be explained by feelings of negativity towards menstrual sex. Women who engage in hookups may choose not to seek out or engage in a hookup experience during menstruation. On the other hand, women in steady relationships may find sex during menstruation, which typically occurs monthly, to be bothersome, messy, and a barrier to regular sexual activity. Indeed, having sex while menstruating may require emotional, mental, and body management before, during, and after engaging in sexual activity.¹ Additionally, the finding that greater agreement with menstruation as a predictable and anticipated event significantly predicted more positive hookup attitudes may also be mediated by attitudes towards menstrual sex. Female heterosexual identity is associated with shame about menstrual sex⁸ and more negative views about menstruation are associated with lower occurrence of sex during

menstruation.²⁶ Thus, it is possible that the ability to predict and anticipate menstruation is significantly correlated with hookup attitudes because the former allows women to prevent sex or hookups during menstruation.

Moreover, results relating menstrual attitudes and hookup behavior and attitudes may have been influenced by participants' phase in their menstrual cycle. Although results were not analyzed by weekly phase, this is a possible correlation that has not been widely studied and presents an opportunity for future research.

4.2. Sexual Attitudes and Hookups

Among BSAS subscales, a greater degree of sexual permissiveness was significantly correlated with more positive hookup attitudes and a greater frequency of hookups in the past 30 days and 6 months. Greater agreement with the communion subscale (i.e. sex as the closest form of human connection and intimacy) significantly predicted more non-hookup sexual interactions in the past 30 days and 6 months. Finally, more positive attitudes towards alcohol-induced hookups was significantly associated with more positive attitudes towards hooking up overall. Furthermore, attitudes towards alcohol-induced hookups were positively associated with 30 day and 6 month hookup behavior, but not significantly. Neither the birth control nor the instrumentality subscales were significantly associated with hookup attitudes or behavior. As a result of these findings, the four hypotheses were only somewhat supported.

The finding that sexual permissiveness is significantly positively correlated with hookup attitudes and hookup behavior is not surprising, given previous literature. Several studies have linked a permissive attitude toward sex with greater hookup behavior.^{6,19} Among women with more permissive sexual attitudes, having recent hookup sex is associated with greater sexual-wellbeing, perhaps explaining the correlation between permissiveness and 30-day/6-month hookup behavior. Additionally, given the similarity between the items on the permissiveness BSAS subscale and the hookup attitude scale, it is reasonable that the former would significantly predict the latter. No study linking these two constructs was found in the literature; thus, the present study extends the literature on predictors of hookup attitudes.

With regard to the birth control subscale, low condom usage during (heterosexual) hookups might explain why this construct was not correlated with hookup attitudes and behavior. Hookups are associated with lower rates of condom usage when compared to non-casual sex.^{10,20} As a result, some participants who disagreed that birth control is a facet of responsible sexuality may have expressed more positive attitudes toward hookups. It is unsurprising that the communion subscale was significantly correlated with non-hookup sexual experiences, given the nature of this subscale. Communion measures attitudes towards sex as a the highest form of connection and intimacy between two people, two characteristics typically not associated with hookup sex. Steady relationships, as opposed to hookup relationships, tend to be marked by greater affection, commitment, and comfort between those involved.² Thus, it is understandable that participants who agreed with this subscale would also report more non-hookup sexual experiences. However, intimacy and relationship motives may also drive some women to seek hookups, suggesting that women may go into hookup experiences expecting to form longer-term, romantic relationships with hookup partners^{12,32} This study did not reveal such an association between communion and hookup attitudes, perhaps due to the fact that participants did not generally endorse strong hookup attitudes. However, this finding brings insight to the hookup literature and provides new potential framing for hookup and sexual risk behavior interventions. While all women should have the freedom to engage in sex—hookup or non-hookup—as frequently as they desire, perhaps emphasizing the responsibility in choosing sexual partners whom one trusts and feels comfortable with could reduce the negative affect (regret, embarrassment, etc.) or risky sex associated with hooking up.¹⁴

Instrumentality, measuring attitudes towards sex as a physically enjoyable experience, may not have been associated with hookup attitudes and behavior because several subscale items were unintentionally omitted from the survey. Finally, the finding that attitudes towards alcohol-induced hookups was significantly associated with overall hookup attitudes (but not with hookup behavior) may be explained by the mediating effect of peer attitudes. Perceptions of peer attitudes towards hooking up may influence individual attitudes, but not necessarily behavior.²³ Furthermore, individuals regularly exposed to alcohol may be similarly exposed to environments in which casual sexual behavior is common; thus, women may be motivated to hookup based on alcohol consumption or intoxication.^{6,21} Alcohol-induced hookup attitudes may also be influenced by self-objectification and self-sexualization, which is also associated with overall hookup attitudes.^{22,34} Ultimately, this finding emphasizes the fact that the attitudes do not necessarily imply behavior. Furthermore, it presents an additional angle for sexual-risk taking interventions, informed by perspectives of alcohol's role in individual's pursuit of hookups.

5. Limitations and Conclusion

Several study limitations should be accounted for when interpreting these results. The sample population was small, predominantly white, and mostly heterosexual. While some studies have assessed differences in menstrual, sexual, and hookup attitudes across race and sexual orientation, this is certainly an area that warrants additional research. Additionally, participants attended a university at which students tend to drink regularly and at levels higher than the national average, perhaps skewing results related to alcohol-induced hookups. Thus, results may not be generalizable to all undergraduate women. Furthermore, data were self-reported and collected through an online survey, and as such selection bias may exist among the sample. Furthermore, since this study evaluated correlations between constructs, no causality can be determined. Indeed, there may be several mediating or confounding factors that were not included in the survey, such as women's sexual agency, lifetime sexual experience, and personal comfort with sex during menstruation. In future research, these topics may be included to develop a more robust understanding of the relationship between menstrual and sexual attitudes and hookup behavior and attitudes.

Despite limitations, this study contributes to the body of literature describing predictors of hookup attitudes and behavior among undergraduate women. Findings may inform more robust interventions against risky hookup behavior, informed by perspectives of sexual and menstrual attitudes. Indeed, students with strong sexual attitudes—specifically, permissiveness—may be a potential group for sexual risk taking prevention programs.⁶ However, sexual permissiveness in women is highly socially stigmatized.³³ Those with strong permissive attitudes may be bothered or stigmatized in sexual risk or hookup prevention programming. Thus, these findings may allow for the development of interventions that are more sensitive to women's sexual attitudes. Future research may also investigate *why* women with stronger sexual attitudes may hold more positive attitudes towards hooking up and engage in more frequent hookup behavior. Additionally, an exploration of fluctuations in menstrual and sexual attitudes throughout the menstrual cycle might be useful in development of sexual risk prevention programming.

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