

Hooking Up and Risk Behaviors Among First Semester College Men: What is the Role of Precollege Experience?

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Some scholars assert that a hookup culture exists on college campuses and that individuals who attend college are socialized into a hookup script. This study examines hooking up among first-semester college men ($N=158$), with specific attention to precollege heavy episodic drinking (i.e., binge drinking) and precollege hookup experience. We found that freshman men begin a pattern of hooking up well before attending college. After controlling for known correlates of hooking up, men had more hookup partners during their first semester at college if they engaged in greater levels of precollege binge drinking and had greater precollege hookup experience. Men were also more likely to have penetrative sex hookups (i.e., oral sex and/or intercourse) if they had done so prior to college. Precollege binge drinking and precollege hookup experience were also associated with unplanned sexual activity when drinking, and men were more likely to have unprotected sex when drinking during their first semester if they engaged in more frequent precollege binge drinking. Implications for intervention and future research are discussed.

Introduction

The casual sex behavior commonly referred to as “hooking up” has received a great deal of recent attention from the popular press and scholars (Bogle, 2007; Garcia, Reiber, Massey, & Meriwether, 2012; Stinson, 2010). Hooking up involves “a sexual encounter ranging from kissing to intercourse that occurs on one occasion and where the partners do not necessarily expect future physical encounters of a committed relationship” (Owen, Rhoades, Stanley, & Fincham, 2010, p. 553). Recent studies have shed light on the correlates of hooking up, emotional responses to hookups, and exposure to health risks associated with engaging in “sexual” or “penetrative” hookups (i.e., oral sex and/or intercourse;

Lewis, Granato, Blayney, Lostutter, & Kilmer, 2012; Owen et al., 2010; Townsend & Wasserman, 2011).

Although a great deal of research has been conducted on the hookup experiences of college men and women, much less is known about hooking up among those making a transition to college (i.e., first-year college students). Studies (Fielder & Carey, 2010a, 2010b) have recently focused on the influence of precollege hookup experience on first-semester casual sex behavior. Some scholars (Bogle 2007, 2008; Heldman & Wade, 2010) have asserted that a hookup culture exists on college campuses and that over time individuals are socialized regarding the cultural norms and expectations associated with hooking up (termed the “hookup script”). Research, and research focused on those making a transition to college permits scholars to understand more fully when individuals are socialized regarding hookups. Given the limited attention to the reproductive and sexual health of college men (Forrest, 2001) and the need to examine college men’s hookup experiences (Stinson, 2010), our study focused on hooking up and other risky

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sexual behaviors of first-semester college men. Recent evidence shows that men are increasingly rejecting traditional male sexual scripts (Dworkin & O'Sullivan, 2005) and that many college men hold an expectation of engaging in sexual behavior within committed sexual relationships (Olmstead, Billen, Conrad, Pasley, & Fincham, 2013). The purpose of this study was to examine when socialization into a "hookup culture" occurs for men entering college. Using symbolic interaction as a framework, we conducted a short-term prospective study that used three waves of data collected from college men during their first semester.

Socialization into a Hookup Culture

One of the major concepts of the symbolic interaction framework is socialization, whereby individuals learn and integrate the attitudes, beliefs, symbols, and norms from the culture in which they are embedded (Burr, Leigh, Day, & Constantine, 1979). Individuals also take on a variety of roles that have associated norms and expectations; one's ability to enact a role is contingent on the process of socialization (Burr et al., 1979).

Scholars consistently demonstrate that hooking up is prevalent on college campuses across the United States (Garcia et al., 2012; Heldman & Wade, 2010). Symbolic interaction theory notes that for individuals to be socialized into a hookup culture, there must be attitudes, beliefs, and norms associated with this culture that are communicated to individuals so they enact a role (for a discussion of descriptive and injunctive norms associated with hooking up, see Barriger & Vélez-Blasini, 2013). Scholars have largely identified these beliefs and norms, which are sometimes referred to as a "hookup script" (Holman & Sillars, 2012). For example, one norm is that the term *hookup* is ambiguous (Glenn & Marquardt, 2001) such that a hookup can entail a variety of behaviors (i.e., from deep kissing to intercourse), which may or may not be considered "sex" (Gute, Eshbaugh, & Wiersma, 2008). A second norm is the implicit expectation that such encounters do not demonstrate nor should they necessarily lead to a romantic commitment between the two individuals involved (Bogle, 2008). A third norm is that a hookup encounter can take place between individuals with a range of interpersonal history. For example, two strangers may hook up, or a hookup can occur between ex-relationship partners, acquaintances, or friends (Fielder & Carey, 2010b; Gute & Eshbaugh, 2008; Lewis et al., 2012).

Some have argued that the process of socialization to learn and engage in the normative behaviors of a hookup culture largely occurs on college campuses over time. For example, the qualitative work of Bogle (2008) demonstrated socialization to the hookup culture:

It seems likely, as Violet suggests, that many young women are less aware of these [hooking up] norms,

particularly during freshman year. Thus, less experienced college women may be sexual with someone with the hope that such behavior will lead to a relationship; they may not suspect that their sexual availability decreases their chances of having the man pursue a relationship. . . . Indeed, members of the campus culture had to *learn over time* the rules of the hookup script. (p. 39, emphasis added)

Thus, individuals may learn the norms and expectations associated with the hookup culture while at college. Other scholars (Garcia & Reiber, 2008; Garcia et al., 2012) have argued that hooking up may be the result of the complex interaction of evolutionary factors (sexual strategies theory) and socialization regarding casual sex scripts (sexual scripts theory). Although we agree that both exert influence on engagement in hooking up, the focus of this study was on socialization.

By the time students reach college age, most U.S. men and women have engaged in sexual intercourse (Regnerus & Uecker, 2011). Recent studies using adolescent samples examined the prevalence of nonromantic sexual engagement (i.e., hooking up) and how involvement varies by gender. For example, Manning, Longmore, and Giordano (2005) found in their sample of 7,470 adolescents (grades 7 through 12) that about 15% had sexual intercourse with a nonromantic partner; however, among those who reported as sexually active ($n = 2,821$), about 38% had intercourse with a nonromantic partner. In a second study using 7th, 9th, and 11th graders, Manning, Giordano, and Longmore (2006) found that the majority (61%) of sexually active adolescents reported having sexual intercourse with a nonromantic partner, and this was more prevalent among men than women (68% and 52%, respectively).

Recent estimates are that most adolescents complete high school and attend college in the United States (70% in 2009; Snyder & Dillow, 2011). Given the recent evidence that the process of socialization, or learning the norms and rules associated with the hookup culture, likely begins prior to college attendance (Fielder & Carey, 2010a, 2010b; Garcia et al., 2012), such precollege socialization may have an important (and understudied) influence on sexual practice early in the college experience.

Hooking Up Among College Men

Most research on hooking up compares men and women. Such comparisons have found both similarities and differences, as well as mixed findings. For example, some studies show that men hook up more often than women (Manning et al., 2005), whereas others failed to replicate this finding (Owen et al., 2010). Although men and women report similar motivations for hooking up (e.g., physical, emotional, peer pressure), men were more interested in additional hookups, and women were

more interested in forming a romantic relationship as possible outcomes for hooking up (Garcia & Reiber, 2008). Regarding emotional reactions to hookups, Owen and Fincham (2011b) found both similarities and differences between the sexes. Whereas both men and women reported more positive than negative emotional reactions to hooking up, men were more positive in their reactions and had fewer negative emotions associated with their hookups compared to women. Lewis and colleagues (2012) obtained similar results for negative reactions, but they did not find sex differences for positive emotional responses. Further, Townsend and Wasserman (2011) found that men reported fewer feelings of worry-vulnerability associated with a greater number of casual sex partners, whereas women reported greater feelings of worry-vulnerability when casual sex partners increased. Fielder and Carey (2010a) examined the influence of precollege sexual hookups among a sample ($n = 140$; 21% were men) of first-semester college students. They found that the strongest predictors of both oral sex and vaginal sex hookups during the first semester were precollege oral sex and vaginal sex hookups, respectively.

In addition to the hookup literature that focuses on gender differences, a sizable body of literature has formed regarding women's experiences with hooking up. These studies focused on a variety of topics, including sexual regret (Eshbaugh & Gute, 2008), motives to engage in casual sex (Weaver & Herold, 2000), and general patterns and correlates of hooking up (Glenn & Marquardt, 2001). Of interest to our study, Fielder and Carey (2010b) examined the hookup experiences of freshman women during their first semester of college. In their sample ($n = 118$), most had a precollege hookup that included nonpenetrative sex, with a sizable minority reporting oral and vaginal sex hookups (47% and 30%, respectively) prior to college. By the end of the first semester, the number of overall lifetime hookup partners significantly increased; however, this finding provides limited utility for understanding hookups among college men.

Fewer studies have focused exclusively on college men's hookup experiences. Bancroft and colleagues (2004) examined the role of personality characteristics on young men's sexual risk taking and casual sex partners. They found that men who reported higher levels of disinhibition were more likely to have vaginal and anal sex partners. They also found that greater alcohol use was related to having more sexual partners in the past year and a greater number of sexual partners over the past three years wherein condoms were not used. More recently, Epstein, Calzo, Smiler, and Ward (2009) conducted a qualitative analysis of men's negotiations of casual sex relationships (hooking up; friends with benefits). Their results demonstrated the diverse nature of men's casual sex experiences, and that some college men reject the traditional male sexual script (Simon &

Gagnon, 1986) of pursuing sexual relations with multiple partners.

Olmstead, Pasley, and Fincham (2013) examined correlates that differentiate college men regarding their hookup experiences. Most (69%) of the men in their study hooked up during the semester, and these hookups largely included penetrative sex behaviors (73%, oral sex and/or intercourse). Central to the current study, they found that men were more likely to hook up if they had done so in the four months prior to the study. We attempted to extend these findings by examining how precollege hookup experience is related to hooking up specifically among freshman men. We included several known correlates of hooking up as controls to examine the influence of precollege hookup experience.

Alcohol, Hookups, and Risky Sex Behaviors

Scholars have identified a prominent culture of drinking alcohol on college campus in the United States (Vander Ven, 2011). The influence of alcohol consumption on hooking up has been studied extensively, and studies have relied on a variety of measures of alcohol use as it relates to hooking up. Some studies examined general alcohol use (Cooper, 2002) and found that those who more frequently consumed greater amounts of alcohol were also more likely to hook up and have more hookup partners (Fielder & Carey, 2010a; Olmstead, Pasley, & Fincham, 2013; Owen et al., 2010). Situational alcohol use (i.e., within a specific context; Cooper, 2002) is also related to hooking up. For example, Fielder and Carey (2010b) found that individuals typically consumed more alcohol prior to a hookup encounter compared to those who were in a committed relationship. One study (Lewis et al., 2012) that included both a global and a situational measure of alcohol use found that their global measure (typical drinks per week) was related to oral and vaginal sex hookups, whereas their situational measure (drinks during hookups) was not. Thus, for the purposes of our study, we focused on heavy episodic drinking (i.e., binge drinking) rather than drinking during the hookup.

Alcohol use plays a critical role in influencing involvement in hooking up behavior. For example, Vander Ven and Beck (2009) found that alcohol intoxication was used by college students to lower their inhibitions. Such lowered inhibition served to promote opportunities to engage in behaviors that they might not otherwise have engaged in (Vander Ven, 2011). They also found that alcohol use served as a ready excuse to justify engaging in "casual coupling." Although many report more positive than negative emotional reactions to hooking up (reviewed earlier), such drunken hookup episodes are commonly associated with feelings of regret, shame, and sexual victimization, particularly among women (Flack et al., 2007; Vander Ven & Beck, 2009).

In a review by Cooper (2002), global and situational alcohol use were generally connected to having a greater

number of sexual partners, less condom use, and more frequent instances of unprotected sex with multiple partners. Given the relationship between alcohol use and sexual risk taking, we also explored the role of pre-college binge drinking on sexual risk-taking behaviors during the first semester among college men. Men who consumed “five or more alcoholic drinks in a row at least once in the prior two weeks” are considered binge drinkers (Vander Ven, 2011, p. 4). For this study, we adopted Cooper’s (2002) definition of high-risk sexual behavior: “any behavior that increases the probability of negative consequences associated with sexual contact” (p. 101). This definition includes multiple or casual sex partners and a lack of protection (i.e., condom use).

Known Correlates of Hooking Up

Previous studies on college student hookups have examined a variety of individual, social, and relational correlates of hooking up. Because we were interested in the influence of precollege risk behavior above that which is known to be associated with hooking up at college, several were included. More permissive attitudes toward casual sex and having a more extraverted personality have both been positively associated with hooking up (Gute & Eshbaugh, 2008; Olmstead, Pasley, & Fincham, 2013; Owen et al., 2010). Also, more frequent church attendance and being in a committed romantic relationship have been found to be associated with less hooking up (Burdette, Ellison, Hill, & Glenn, 2009; Olmstead, Pasley, & Fincham, 2013). The extent to which individuals make thoughtful decisions regarding their relationships (termed “sliding versus deciding”; Stanley, Rhoades, & Markman, 2006) has been linked with hookup behavior: greater levels of thoughtful decision making are negatively associated with hooking up (Olmstead, Pasley, & Fincham, 2013; Owen et al. 2010; Owen, Fincham, & Moore, 2011).

Current Study

We add to the extant literature in several ways. First, we focused on the experiences of first-semester college men. Although studies have examined hooking up among first-year college students, these studies have often focused on women (Fielder & Carey 2010b; Fielder, Carey, & Carey, 2012) or included only small samples of men (Fielder & Carey 2010a; Wade & Heldman, 2012), which provides limited knowledge about the experiences of first-semester college men. Given recent changes in men’s acceptance and enactment of traditional sexual scripts (Dworkin & O’Sullivan, 2005; Olmstead, Billen et al., 2013), knowing how these college men vary in their engagement in risky sexual practice may inform gender-specific intervention efforts to promote college men’s sexual and reproductive well-being (Forrest, 2001). Second, we examined the point in which

the socialization process of involvement in the hookup culture occurs among first-semester freshman men. We addressed this issue by using a short-term prospective design with multiple reporting times, including self-reported behaviors that occurred prior to going to college (T1). Third, we focused on freshmen to pinpoint specific points of potential intervention for promoting sexual health and well-being, including risky behaviors prior to going to college, at the beginning of the college experience, or shortly thereafter. Last, we contribute to the literature on alcohol use and risky sexual behavior by including a precollege alcohol use measure and examining how early signs of problem drinking may be related to problematic behaviors associated with binge drinking, such as unplanned sexual activity and lack of protection during sexual encounters when drinking.

Based on a symbolic interaction lens and the extant literature, after accounting for known correlates of hooking up, we hypothesized the following:

- H1:** A greater number of hookup partners during the first semester would be associated with (a) more precollege binge drinking episodes and (b) greater hookup experience prior to college.
- H2:** Among men who reported hooking up during the first semester, having a penetrative sex hookup (oral sex and/or intercourse) would be associated with (a) more precollege binge drinking episodes and (b) penetrative sex hookup experience prior to college.
- H3:** More frequent engagement in unplanned sexual activity when drinking during the first semester would be associated with (a) more precollege binge drinking episodes and (b) greater hookup experience prior to college.
- H4:** Unprotected sex when drinking during the first semester would be associated with (a) more precollege binge drinking episodes and (b) greater hookup experience prior to college.

Method

Participants

The sample was drawn from undergraduate men and women enrolled in a course on marital and family relationships at a large Southeastern university. Given the study purposes, we first limited the sample to men. We then combined data from two separate fall semesters to increase our sample size: 2009 ($n = 241$) and 2010 ($n = 262$). After combining these data, the sample was reduced to include only first-semester freshmen above age 18 ($N = 197$). Due to the short-term prospective nature of the study, some men dropped out of the study during the semester. Of the 197 men, 19 dropped out of the study from fall 2009 (8 between T1 and T2; 11 between T2 and T3) and 20 dropped out of the study from fall 2010 (10 between T1 and T2; 10 between T2

and T3). These men were excluded from the analysis because the dependent variables were derived from those measured at T2 and T3.

Due to sample attrition (19.8%), we compared men who dropped out of the study with those who completed all three waves of data collection. No differences were found on any demographic or psychosocial variables measured at T1 (analyses not shown). The final sample of men ($n = 158$) had a mean age of 18.09 years ($SD = .28$). Most (72.2%) reported as White, followed by Latino (12.7%), African American (7.0%), Asian American (4.4%), and Other (3.8%). Men largely reported their parents' marital status as married and living together (72.8%), followed by separated or divorced (17.1%), one deceased parent (4.4%), parents never married (4.4%), and Other (1.3%). Also, most (94.3%) identified as heterosexual, followed by homosexual (3.8%), bisexual (0.6%), and 1.3% did not respond to this item.

Procedure

Data were collected as part of a larger research project about emerging adult romantic relationships, which was approved by the university institutional review board. After providing informed consent, participants completed surveys at three different points during the semester (T1 = week 1; T2 = week 8; T3 = week 15). Participants received a link to a restricted access survey to complete the measures during a time and in a location that was convenient for them. Men who chose to participate received course credit for completing the surveys, whereas those who chose not to participate completed an alternative written assignment for course credit.

Measures

Independent variables: known correlates of hooking up. Five known correlates of hooking up were included in the study: casual sex attitudes, religious service attendance, thoughtful relationship decisions, extraverted personality, and stable committed romantic relationship.

Casual sex attitudes. Casual sex attitudes were measured at T3 using Simpson and Gangestad's (1991) three-item attitudinal measure of sociosexuality. These items were: "Sex without love is okay"; "I can imagine myself being comfortable and enjoying 'casual' sex with different partners"; and "I would have to be closely attached to someone (both emotionally and psychologically) before I can feel comfortable and fully enjoy having sex with him or her" (reverse coded). Responses ranged from (1) *Strongly disagree* to (9) *Strongly agree*. Responses were averaged for a possible range of 1 to 9. Cronbach's alpha for this sample was .85.

Religious service attendance. Religious service attendance was measured at T1 using a single item: "How often do you attend religious services?" Responses ranged from (1) *Never or almost never* to (4) *One or more times per week*.

Thoughtful relationship decisions. This variable was measured at T1 using the Thoughtful Relationship Decisions subscale from Owen and Fincham's (2011a) Relationship Awareness Scale (RAS). Although items make reference to "relationship" or "partner," respondents are not asked to identify a specific or current romantic partner but to consider relationships in a general sense. Thus, items were applicable to those who were and were not currently involved in a romantic relationship. This subscale has four items: "With romantic partners, I weigh the pros and cons before allowing myself to take the next step in the relationship (e.g., be physically intimate)"; "It is important to make conscious decisions about whether to take each major step in romantic relationships"; "It is important to me to discuss with my partner each major step we take in the relationship"; and "It is better to 'go with the flow' than to think carefully about each step in a romantic relationship" (reverse coded). Responses ranged from (1) *Strongly disagree* to (5) *Strongly agree*, with higher scores demonstrating greater relationship thoughtfulness. Items were averaged with a possible range of 1 to 5. Cronbach's alpha for this sample was .57.

Extraverted personality. Having an extroverted personality was measured at T1 using the extroverted personality subscale of Gosling, Rentfrow, and Swann's (2003) brief measure of the big five. Participants indicated the extent to which they saw themselves as "extraverted, enthusiastic" (item 1) and "reserved, quiet" (item 2, reverse coded). Responses ranged from (1) *Disagree strongly* to (7) *Agree strongly*. Item responses were averaged with a possible range of 1 to 7, and higher scores indicated a more extroverted personality. Cronbach's alpha for this two-item measure was .60.

Stable committed romantic relationship. With each data collection point participants indicated whether they were in a romantic relationship and the relationship type (*dating nonexclusively*, *dating exclusively*, *engaged*, or *married*). At T2 and T3, participants also reported if they had ended a romantic relationship and if they had begun a new romantic relationship since the last survey. From this combination of items we determined which men remained in stable committed romantic relationships throughout the semester. A dichotomous variable was created to indicate stability of committed romantic relationships (0 = *Not in a stable committed relationship over the semester*, 1 = *In a stable committed relationship over the semester*).

Independent variables: precollege risk behaviors.

This study focused on three precollege risk behaviors: binge drinking, hookup experience, and penetrative sex hookup experience.

Precollege binge drinking. At T1, participants responded to the following item, "How often in the last 30 days did you have five or more drinks on one occasion?" Responses ranged from (1) *Never happened* to (9) *More than 10 times*. Because the item was given in the first week of the semester, higher scores indicated more frequent binge drinking prior to arriving on campus. This item (see Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) has been used in other studies on college student hookups (Olmstead, Pasley, & Fincham, 2013; Owen et al., 2010).

Precollege hookup experience. At T1, participants were provided with the following definition of hooking up: "Some people say that a 'hook up' is when two people get together for a physical encounter and don't necessarily expect anything further (e.g., no plan or intention to do it again)." Participants then responded to the following question, "Based on this definition, how many different people did you 'hook up' with in the past 12 months?" Responses ranged from 0 to 10 or more. Higher scores represent greater levels of precollege hookup experience. This measure has been used in previous studies on hooking up (Owen et al., 2010).

Precollege penetrative sex hookup experience. At T1, after responding to the question about number of different hookup partners in the past 12 months, participants were asked to "Check all the types of physical intimacy that occurred during your hookup(s)." Response options included *Kissing*, *Sexual touching*, *Oral sex*, and *Intercourse (vaginal/anal)*, and participants checked all that applied. A dichotomous variable was created for participants who reported that they had hooked up. Consistent with previous studies on hooking up (Owen & Fincham, 2011b), those who checked only kissing and/or sexual touching were coded as 0 (*nonpenetrative sex hookup experience*) and those who also checked oral sex and/or intercourse were coded as 1 (*penetrative sex hookup experience*).

Dependent variables. Four dependent variables were included: hookup during the semester, penetrative sex hookup during the semester, unplanned sexual behavior, and unprotected sex.

Hooking up during the semester. At T2 and T3, participants were provided with the same definition of hooking up as provided at T1. They then indicated how many different people that they had hooked up

with since the last survey. Response options at each time ranged from 0 to 6 or more. To measure hookup experience during the semester, we summed the two responses. For example, if a participant reported two hookup partners at T2 and six or more partners at T3, this participant had hooked up with at least eight different partners during the semester. Thus, higher scores represent more hookup partners during the semester.

Penetrative sex hookup during the semester. At T2 and T3, after responding to the question about number of hookup partners since the last survey, participants checked all the behaviors in which they had engaged during their hookup(s). Response options included *Kissing*, *Sexual touching*, *Oral sex*, and *Intercourse (vaginal, anal)*. Responses at T2 and T3 were combined to indicate, among men who had hooked up during the semester, whether they had engaged in a penetrative sex hookup at any point (0 = *No*, 1 = *Yes*). This coding is consistent with previous studies on college student hookups (Garneau, Olmstead, Pasley, & Fincham, 2013; Owen & Fincham, 2011b).

Unplanned sexual activity when drinking. We used a single item from the College Alcohol Problems Scale (CAPS; Maddock, Laforge, Rossi, & O'Hare, 2001). At T3, participants were asked to "Rate how often you have had any of the following problems over the past four months as a result of drinking alcoholic beverages." Participants responded to the item, "Engaged in unplanned sexual activity" and responses ranged from (0) *Never* to (5) *10 or more times*. Higher scores indicated more frequent unplanned sex due to alcohol use.

Unprotected sex when drinking. For this measure, we used another single item from the CAPS scale (Maddock et al., 2001). Similar to unplanned sexual activity, participants indicated at T3 the frequency of the following event occurring in the past four months as a result of drinking alcoholic beverages: "Did not use protection when engaging in sex." Responses ranged from (0) *Never* to (5) *10 or more times*, and higher scores indicated more frequent unprotected sex due to alcohol use.

Control variable. Due to use of data from two different semesters, we included semester as a control variable for all multivariate analyses (0 = *Fall 2009*, 1 = *Fall 2010*).

Results

Descriptive Analyses

Table 1 shows the descriptive information for the study variables. Prior to testing our study hypotheses,

Table 1. *Descriptive Information for Study Variables*
(*N* = 158)

Variables	<i>M</i> (<i>SD</i>)	Range
Known correlates of hooking up		
Casual sex attitudes	5.47 (2.53)	1–9
Religious service attendance	2.19 (1.05)	1–4
Thoughtful relationship decisions ^a	3.43 (.71)	1–5
Extraverted personality	4.70 (.96)	0–5
Stable committed romantic relationship (% yes)	16.5%	
Precollege risk behaviors		
Precollege binge drinking	3.27 (2.56)	1–9
Precollege hookup experience	3.49 (3.37)	0–10
Precollege penetrative sex hookup experience ^b (% yes)	69.7%	
Dependent variables		
Hook up partners during the semester	2.30 (2.92)	0–12
Penetrative sex hookup during the semester ^b (% yes)	65.9%	
Unplanned sexual activity when drinking ^c	.68 (1.12)	0–5
Unprotected sex when drinking ^c	.39 (.96)	0–5

^aSubscale of the Relationship Awareness Scale.

^bAmong those who reported one or more hookups.

^cSingle item from the College Alcohol Problems Scale.

we examined hookup experiences prior to participants' first semester on campus. Overall, 77.2% reported that they had one or more different hookup partners in the year prior to college. Among those who had hooked up (*n* = 118), the average number of partners was 3.49 (*SD* = 3.37, median = 3.00) and most (92.4%) reported kissing, followed by sexual touch (71.2%), oral sex (62.7%), and intercourse (vaginal/anal; 54.2%). Regarding overall penetrative sex behavior (oral sex and/or intercourse), 69.7% reported having a penetrative sex hookup.

Second, we examined participants' hookup experiences during their first semester on campus. At T2, less than half (47.5%) had hooked up. Of those who did, they averaged 2.32 (*SD* = 1.54, median = 2.00) hookup partners and reported kissing (92.0%), sexual touch (74.7%), oral sex (48.0%), and intercourse (44.0%), with 64% having engaged in a penetrative sex hookup. At T3, 46.8% reported one or more hookups since T2 (seven weeks). Of these, the average number of hookup partners was 2.55 (*SD* = 1.41, median = 2.00) and most reported kissing (91.9%), followed by sexual touch (75.7%), oral sex (51.4%), and intercourse (43.2%), with 59.5% having engaged in a penetrative sex hookup. Overall, 57.6% reported having hooked up one or more times during their first semester on campus. Those who hooked up had an average of 2.30 different hookup partners (*SD* = 2.92, median = 1.00), and 65.9% engaged in a penetrative sex hookup.

We further examined the patterns of hookup behavior while transitioning to college. The patterns generally do not support the notion that men go to college and are *then* socialized into a hookup culture. That is,

only 3.2% reported that they did not hook up in the 12 months prior to college but then hooked up during the first semester. In all, 19.6% reported no hookups in the 12 months prior to or during the first semester, and 22.8% had hooked up in the 12 months prior to college but did not hook up during their first semester. Involvement in committed romantic relationships may account for not hooking up. For example, for those who never hooked up before or during the semester, 35% were in a committed relationship throughout this period. For those who had hooked up previously but did not hook up during the semester, 22% were in a stable committed relationship. However, the majority of men in this study (54.4%) hooked up before college and also did so at some point during the semester.

Hypothesis 1: Which Men Have More Hookup Partners?

We first examined the correlations between the independent variables and number of different hookup partners during the semester. All of the independent variables were significantly correlated with number of hookup partners during the semester, except religious service attendance (see Table 2). We then conducted a hierarchical regression to examine specifically the influence of precollege binge drinking and hookup experience on number of first semester hookup partners.

In Model 1, semester was entered to control for the year in which the data were collected. In Model 2, known correlates of hooking up were entered (attitudes toward casual sex, religious service attendance, thoughtful relationship decisions, extraverted personality, committed romantic relationship status). These variables accounted for 28% of the variance in number of hookup partners during the first semester. In this model, attitudes toward casual sex ($\beta = .31, p \leq .001$), extraverted personality ($\beta = .17, p = .011$) and committed romantic relationship status ($\beta = -.35, p \leq .001$) were significant. Precollege binge drinking was added in Model 3 and was significant ($\beta = .34, p \leq .001$) and explained an additional 10% of the variance. In the final model (Model 4; see Table 3), precollege hookup experience was added and was significant ($\beta = .51, p \leq .001$). Also, committed romantic relationship status ($\beta = -.18, p = .003$) and precollege binge drinking ($\beta = .17, p = .007$) remained significant, and casual sex attitudes trended toward significance ($\beta = .12, p = .053$). This final model was significant, $F(8, 158) = 22.59, p \leq .001$, and explained 54.8% of the variance in number of hookup partners during the first semester. These findings support our hypothesis that precollege binge drinking and hookup experience would be associated with having a greater number of hookup partners during the first semester of college.

Table 2. *Bivariate Correlations With Dependent Variables (N = 158)*

Independent variables	Dependent variables			
	Number of hookup partners	Penetrative sex hookup ^{a,b}	Unplanned sex when drinking	Unprotected sex when drinking ^a
Known correlates of hooking up				
Casual sex attitudes	.34***	.30**	.31***	.21**
Religious service attendance	-.12	-.03	-.22**	-.05
Thoughtful relationship decisions	-.16*	-.24*	-.15 [†]	-.20*
Extraverted personality	.25***	-.09	.15 [†]	.13
Stable committed romantic relationship ^a	-.31***	-.06	-.10	.02
Precollege risk behaviors				
Precollege binge drinking	.45***	.22*	.35***	.24**
Precollege hookup experience	.69***	—	.39***	.10
Precollege penetrative sex hookup experience ^a	—	.42***	—	—
Control variable				
Semester (fall 2010)	-.04	-.12	-.01	-.01

^a0 = no, 1 = yes.

^bN = 89.

[†]p < .10.

*p < .05.

**p ≤ .01.

***p ≤ .001.

Hypothesis 2: Which Men Have Penetrative Sex Hookups?

Similar to hypothesis 1, we tested hypothesis 2 by first examining correlations between the independent variables and the dependent variable (penetrative sex hookup during the semester). Of these, semester, religious service attendance, extraversion, and committed romantic relationship status were not significant (see Table 2). We then conducted a hierarchical logistic regression to examine how precollege penetrative sex hookup experience was related to first-semester penetrative sex hookups. Romantic relationship status

was not included in these analyses, because it was not significantly correlated with any other variables in the model.

In Block 1, semester was entered as a control variable. Block 2 included attitudes toward casual sex, religious service attendance, relationship thoughtfulness, and extraverted personality. These variables explained 23.3% of penetrative sex hookup behavior during the semester (Nagelkerke *R*²). Precollege binge drinking was added in Block 3 and explained an additional 4.4% of variance. Last, precollege penetrative sex hookup experience was added in Block 4. This model was significant, $\chi^2(7, N = 89) = 26.60, p \leq .001$ and fit the data well, $\chi^2(7, N = 89) = 5.17, p = .83$ (Hosmer and Lemeshow test). Taken together, the variables in the final model explained 35.8% of the variance in penetrative sex hookup behavior during the semester (Nagelkerke *R*²). In the final model, only attitudes toward casual sex and precollege penetrative sex hookup experience were significant correlates of having a penetrative sex hookup during the first semester (see Table 4).

After controlling for all other variables, men were more likely to have a penetrative sex hookup in their first semester on campus for each unit increase in casual sex attitudes (OR = 1.30, *p* < .05) and if they had precollege penetrative sex hookup experience (OR = 4.40, *p* ≤ .01). Overall, 88.1% of the 58 men who had penetrative sex hookups were correctly classified, whereas 56.7% of the 31 men who did not were correctly classified.

Hypothesis 3: Unplanned Sexual Activity When Drinking

Next, we examined men's self-reports of alcohol-related behaviors during the semester. First, we

Table 3. *Hierarchical Regression Analysis for Number of Hookup Partners During the Semester (N = 158)*

Variables	Model 4	
	B (SE)	β
Control variable		
Semester (fall 2010)	.05 (.33)	.01
Known correlates of hooking up		
Casual sex attitudes	.14 (.07)	.12 [†]
Religious service attendance	.15 (.17)	.05
Thoughtful relationship decisions	-.36 (.24)	-.09
Extraverted personality	.10 (.13)	.05
Committed romantic relationship status (yes)	-1.42 (.46)	-.18**
Precollege risk behavior		
Precollege binge drinking	.20 (.07)	.17**
Precollege hookup experience	.44 (.06)	.51***
<i>R</i> ²	.548	
<i>F</i> statistic	22.59***	

[†]p = .053.

**p ≤ .01.

***p ≤ .001.

Table 4. Hierarchical Logistic Regression of Penetrative Sex Hookups During the First Semester ($N = 89$)

Variables	<i>B</i> (<i>SE</i>)	Exp(<i>B</i>) ^a	95% CI
Nonpenetrative ($n = 31$) versus penetrative ($n = 58$)			
Control variable			
Semester (fall 2010)	-.43 (.54)	.65	.22–1.88
Known correlates of hooking up			
Casual sex attitudes	.26 (.13)	1.30*	1.00–1.69
Religious service attendance	.27 (.33)	1.31	.68–2.51
Thoughtful relationship decisions	-.68 (.43)	.50	.22–1.18
Extraverted personality	-.28 (.25)	.75	.47–1.22
Precollege risk behaviors			
Precollege binge drinking	.16 (.11)	1.17	.94–1.46
Precollege penetrative sex hookup experience (yes)	1.48 (.58)	4.40**	1.42–13.62

^aAdjusted odds ratios.

* $p < .05$.

** $p \leq .01$.

examined the correlations between the independent variables and the dependent variable (see Table 2). Only committed romantic relationship status was not significantly correlated with unplanned sexual activity. We then conducted a hierarchical regression to examine the relationship between precollege behaviors (binge drinking, hookup experience) and unplanned sexual activity when drinking. In Model 1, semester was entered as a control variable. Model 2 consisted of casual sex attitudes, religious service attendance, thoughtful relationship decisions, extraverted personality, and committed romantic relationship status. These variables accounted for 12.8% of the variance in unplanned sexual activity when drinking. In this model, only casual sex attitudes was significant ($\beta = .24, p = .005$). Model 3 tested the influence of precollege binge drinking, which was significantly related to later unplanned sexual activity ($\beta = .26, p = .001$). Precollege binge drinking accounted for an additional 5.9% of variance explained. In the final model (Model 4, see Table 5) precollege hookup experience was added and was significantly associated with unplanned sexual activity when drinking ($\beta = .26, p = .003$). Also, precollege binge drinking remained significant ($\beta = .17, p = .04$). The final model was significant, $F(8, 158) = 5.73, p < .001$, and explained 23.5% of the variance in unplanned sexual behavior. These findings supported our hypothesis that precollege drinking and precollege hookup experience would be significant predictors of more unplanned sexual activity when drinking during the semester.

Hypothesis 4: Unprotected Sex When Drinking

First, we examined the distribution of responses to this variable. Most (82.3%) indicated that they had never experienced unprotected sex as a result of drinking alcohol. Thus, we created a dichotomous variable and

Table 5. Hierarchical Regression Analysis for Unplanned Sexual Activity When Drinking ($N = 158$)

Variables	Model 4	
	<i>B</i> (<i>SE</i>)	β
Control variable		
Semester (fall 2010)	.01 (.16)	.01
Known correlates of hooking up		
Casual sex attitudes	.06 (.04)	.13
Religious service attendance	-.09 (.08)	-.09
Thoughtful relationship decisions	-.11 (.12)	-.07
Extraverted personality	.01 (.06)	.01
Committed romantic relationship status (yes)	-.01 (.17)	-.01
Precollege risk behavior		
Precollege binge drinking	.07 (.04)	.17*
Precollege hookup experience	.09 (.04)	.26**
R^2	.235	
F statistic	5.73***	

* $p < .05$.

** $p \leq .01$.

*** $p \leq .001$.

examined whether men had ever failed to use protection during sex over the course of their first semester. Next, we examined the correlation between study variables. Religious service attendance, extraverted personality, committed romantic relationship status, and precollege hookup experience were not significantly correlated with unprotected sex when drinking.

We then conducted a hierarchical logistic regression. In Block 1, semester was entered as a control variable. Block 2 included attitudes toward casual sex, religious service attendance, relationship thoughtfulness, extraverted personality, and committed romantic relationship status. These variables explained 14.8% of the variance in unprotected sex when drinking (Nagelkerke R^2). Precollege binge drinking was added in Block 3 and explained an additional 4.4% of variance. Last, precollege hookup experience was added in Block 4. This final model was significant, $\chi^2(8, N = 158) = 19.58, p = .012$ and fit the data well, $\chi^2(8, N = 158) = 7.21, p = .51$ (Hosmer and Lemeshow test). Taken together, these variables explained 19.2% of the variance in engagement in unprotected sex when drinking (Nagelkerke R^2). In the final model, relationship thoughtfulness and precollege binge drinking were significant, and attitudes toward casual sex approached significance ($p = .089$).

Overall, after controlling for other variables in the model, men were less likely to have unprotected sex for each unit increase in relationship thoughtfulness (OR = .45, $p < .05$) and were more likely to have unprotected sex for each unit increase in precollege binge drinking (OR = 1.21, $p < .05$). Also, men were more likely to have unprotected sex when drinking for each unit increase in casual sex attitudes (OR = 1.22, $p = .089$). Overall, 81.6% of 158 participants were correctly classified given the variables in the model.

Discussion

Some scholars (Heldman & Wade, 2010) have suggested that a hookup culture exists on college campuses, that individuals are socialized into this culture (Garcia et al., 2012), and that socialization into a hookup culture occurs during the college experience (Bogle, 2008). Socialization is the process wherein the norms, rules, and expectations are learned when enacting a particular role (Burr et al., 1979). The purpose of this study was to examine whether socialization regarding the hookup script begins for college men prior to arriving on campus. We also examined their engagement in other risky sexual behaviors and the association with men's precollege behaviors.

Hooking Up

The findings regarding hookups do not support the notion that college students, specifically men, learn the hookup script when they get to college. The majority of our sample (77.2%) had hooked up prior to coming to college, and for most (54.4%) this pattern continued in the first semester. Further, participants who hooked up prior to college had on average 3.5 hookup partners. As such, our findings are consistent with others (Fielder & Carey, 2010a, 2010b; Garcia et al., 2012) that socialization into a hookup culture and the hookup script likely takes place prior to arrival at college. Our first hypothesis regarding hooking up during the first semester was supported. We urge caution when interpreting findings associated with this hypothesis given the number of independent variables tested and our sample size. After including several known correlates of hooking up (e.g., casual sex attitudes, personality, relationship thoughtfulness), men had a greater number of hookup partners during the first semester if they had engaged in higher levels of precollege binge drinking and had a greater number of precollege hookup partners. This finding is consistent with Fielder and Carey (2010b), who found similar patterns among first-semester college women. Although there are perhaps certain characteristics of the college environment that may facilitate hooking up (greater access to alcohol, greater autonomy), patterns of casual sex behavior do not appear to *begin* in this environment for most emerging adult men. Thus, our findings are consistent with others that have shown previous sexual behavior is a strong predictor of engagement in the same behavior in the future (Olmstead, Pasley, & Fincham, 2013; Paik, 2010).

Hooking up has the potential to pose health risks to those involved, depending on the behaviors in which one engages while hooking up. Those who engage in penetrative sex hookups (oral sex and/or intercourse) have increased exposure to sexually transmitted infections (STIs). Our findings suggest that penetrative sex hookup experience is also a pattern that begins prior to college. Almost 70% of the men who had hooked up engaged in

penetrative sex hookups before college. We hypothesized that men would be more likely to have a penetrative sex hookup when they experienced such prior to college and if they engaged in greater levels of precollege binge drinking. This hypothesis was partially supported. Although precollege binge drinking was significant in bivariate analyses, this relationship did not hold in a multivariate context. Instead, men were more likely to have a penetrative sex hookup during their first semester when they had such experience prior to arriving on campus. This finding is consistent with previous studies that show college men with previous penetrative sex hookups were more likely to later engage in penetrative hookups (Olmstead, Pasley, & Fincham, 2013).

Unplanned and Unprotected Sex When Drinking

Beyond hooking up, we examined other risky sex behaviors among our sample of college men. Consistent with Cooper's (2002) definition of risky behavior, we considered how known correlates of hooking up may be associated with unplanned sexual activity. In bivariate analyses, many known correlates of hooking up were also related to unplanned sex when drinking. We hypothesized that precollege binge drinking and precollege hookup experience would be related to unplanned sex when drinking among freshman men. Our hypothesis that men who engaged in binge drinking more often prior to college and had more hookup partners would have a greater number of hookup partners during the first semester was supported. We also examined unprotected sex and hypothesized that men would be more likely to have unprotected sex if they had precollege hookup experience and had engaged in higher levels of precollege binge drinking. Findings did not fully support our hypothesis. Precollege drinking was significantly associated with unprotected sex when drinking during the semester; however, thoughtful relationship decisions was associated with a decreased likelihood of having unprotected sex. This finding suggests that these men may be more attentive to issues of sexual safety even when engaging in problem drinking behavior.

Binge Drinking

Consistent with the broader literature on hooking up and other risky behaviors, we found that engagement in precollege binge drinking was related to engagement in hooking up and other risky behaviors. Although it was related to all of our dependent variables when examining bivariate correlations, binge drinking did not influence engagement in penetrative sex hookup behavior during the semester when controlling for other variables. Thus, it is possible that although men may become involved in behaviors that potentially increase their exposure to risk (hooking up, unplanned and unprotected sexual activity), the specific behaviors in which they

engage do not appear to be influenced by precollege binge drinking. It is possible that we did not find an association because we measured behavior prior to arriving on campus, and perhaps more immediate drinking experiences (i.e., drinking during the semester) exerts a greater influence on specific hookup behaviors during college. Future research is needed to continue to examine the diverse ways in which binge drinking influences hooking up and other risky behaviors among college men.

Limitations

Our findings should be considered in light of several study limitations. First, study results are not generalizable to all college men. Men were from one university and were recruited from a course on marriage and family relationships. Future studies using men from several universities across the United States and who are randomly selected should be examined to confirm (or disconfirm) our findings.

We suggest caution when interpreting our findings due to the assessment of precollege hooking up and binge drinking. Men were asked during the first week to report these behaviors retrospectively. For hooking up and associated hookup behaviors, men reported on the previous year. For binge drinking, men reported on the past 30 days. Such retrospective reporting is subject to recall error. Further, all variables were from participant self-reports of attitudes and behaviors and are potentially affected by self-report biases. Research is needed that uses longitudinal data of actual precollege behavior reported during high school. Also, measures should be included to assess the extent to which participants are engaged in self-report biases (i.e., reporting in a socially desirable manner).

The current study utilized a reasonably sized sample; however, given the limited number of participants and the number who dropped out over time, fewer variables were able to be included. We focused on a few well-known variables shown to be associated with hooking up in previous studies. A larger sample would allow for the inclusion of more variables and the use of more sophisticated statistical techniques. For example, the use of structural equation modeling would allow for the testing of both mediating and moderating variables to help explain *why* men develop hookup patterns and potential variables that influence the strength of these relationships (e.g., racial/ethnic background, family structure, religious background).

Another limitation was our measurement of unplanned sexual activity when drinking. Although the item came from a reliable measure of problematic college drinking, the term *sexual activity* could be interpreted by participants in a variety of ways. For example, recent evidence shows considerable variability in the behaviors individuals define as “having sex” (Byers,

Henderson, & Hobson, 2009). Future studies should be more specific in the type of sexual activities measured (e.g., unplanned penile-vaginal intercourse). Also, our measure of hookup behavior was limited in that it asked individuals to report behaviors over a period of time (T1 = 12 months, T2 and T3 = 7 weeks) and across multiple hookup experiences, which hindered our ability to identify and then test discrete groups of men based on their behaviors (e.g., those who engage only in intercourse, oral sex, or a combination of the two). Future research can address this limitation by examining a most recent hookup experience, including specific behaviors or using event-level methods of data collection (e.g., daily diary methods).

Finally, we did not measure condom use while engaging in penetrative sex hookups during the semester or prior to college. Thus, men may have been engaged in safer-sex practices while hooking up and may have decreased their health risks. Despite this limitation, studies show that college students infrequently use condoms during oral sex hookups (Downing-Matibag & Geisinger, 2009; Fielder & Carey, 2010b), and some report contracting STIs as a result of hooking up (Lewis et al., 2012). Future studies should include measures of condom use and other protective measures while hooking up to assess the extent to which risk exists during such encounters.

Implications

Our findings have implications for interventions that address the casual sex behaviors of adolescent and emerging adult men as well as future studies on hooking up. It appears that many men go to college having already been socialized regarding the hookup script. Further, many men enter college having engaged in frequent binge drinking. University administrators should increase efforts to promote safer-sex practices and address problem drinking among this population when they first arrive on campus. Such efforts may include freshman seminars devoted to increasing knowledge and awareness regarding hooking up as a behavior that may increase exposure to risk and potential negative outcomes. Although encouraging condom use as a protective measure within all relationship types (casual and committed) is warranted, many emerging adults may be at increased risk because of a lack of condom use during oral sex hookups and inconsistent use during hookups that include vaginal or anal sex.

Students would also benefit from greater knowledge regarding emotional reactions to hookups. Although many men and women report positive reactions to hookups, research shows that men report more positive and less negative reactions (Lewis et al., 2012; Owen & Fincham, 2011b) and less worry or feelings of vulnerability (Townsend & Wasserman, 2011) compared to women. Other studies show that many women also

report feelings of shame and regret associated with hookups (Eshbaugh & Gute, 2008; Flack et al., 2007). Knowing how women may react emotionally to hookups can be used to increase men's awareness and more thoughtful deliberation of their willingness to hook up and the behaviors with which they engage during hookups.

Freshmen in a first semester seminar may also benefit from knowing the role of alcohol in hookups. Our study showed that men are more likely to hook up, have unplanned sex when drinking, and have unprotected sex when drinking, if they engaged in binge drinking prior to arriving on campus. Thus, to promote the sexual health of first-semester freshmen, colleges should address issues associated with problem drinking early on. Many students may be unaware that individuals are not able to consent to sex while intoxicated. Further, many women report unwanted sex when drinking (Flack et al., 2007) or feeling unable to consent during hookups (Lewis et al., 2012). Given the ambiguous and uncommitted nature of hookups (Glenn & Marquardt, 2001), some men may also be unaware that they are engaged in sexual victimization during hookups, particularly when alcohol is present.

Future research on hooking up among college men would benefit from a longitudinal design using multiple time points during high school and in the college years, so better understanding of the developmental trajectory of hooking up results. As discussed, such a design would decrease recall bias and provide a more accurate picture of any developing pattern. We agree with Fielder and Carey (2010a) that interventions regarding hooking up should begin prior to attending college. We also suggest that research focus on how such early interventions influence later decisions to engage in hooking up prior to college and hookups while at college. Specific to men, future research should examine men's decisions to use condoms during hookups that include alcohol. Our findings showed that men who were more thoughtful in their relationship decisions were less likely to have unprotected sex as a result of drinking. However, given our analyses, we are unable to explain *why* this is the case. Future research should explore other traits or attitudes that may serve to decrease the likelihood of men engaging in behaviors that increase their exposure to health risks.

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