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Sexual Practices, Learning, and Love: Accounting for Women's Orgasm and Sexual Enjoyment in College Hookups and Relationships

### **ABSTRACT**

This paper investigates the determinants of orgasm and sexual enjoyment in "hookup" and relationship sex among college women. We use data from an online survey of approximately 14,600 undergraduates at 19 colleges and universities and from 60 in-depth interviews at two of the universities. We identify three general views of the sources of sexual satisfaction — competent genital stimulation, partner-specific learning, and love — and draw on gender theory to develop expectations about the gendered operation of these mechanisms. We find that women orgasm more often in relationships than in hookups. Regression analyses reveal that prior sexual experience, specific sexual practices, experience with a particular partner, and affection all predict orgasm and sexual enjoyment. Qualitative analysis provides insight into the gendered operation of these mechanisms and how they reinforce each other.

"Hooking up" is common among American adolescents and young adults, particularly on college campuses (England, Shafer, and Fogarty 2007; Paul, McManus, and Hayes 2000). While the term is ambiguous, most young people seem to agree that hooking up involves sexual activity, ranging from kissing to intercourse, outside of an exclusive relationship. Much of the growing body of research on hooking up expresses concern for the well-being of women, and suggests that hookups benefit men at the expense of women (Bogle 2008; Glenn and Marquardt 2001). This concern is based in part on the assumption that a committed relationship, ideally marriage, is the most likely context for pleasurable sex, especially for women. Research supports the claim that sex in committed relationships is better (Laumann et al. 1994; Waite and Joyner 2001a, 2001b; Richters et al. 2006; Pederson and Blekesaune 2003), particularly for women (Mah and Binik 2001; Darling, Davidson, and Cox 1991; Davidson and Darling 1989; Hurlbert and Apt 1994). As a result of lack of empirical research on the quality of the sex in college hookups and relationships, it is not known if these patterns hold for this group. In fact, relatively little is known about the quality of sex among adolescents and young adults more generally, as most existing research focuses on explaining early sexual debut and detailing its negative consequences. Given that the vast majority of Americans from recent cohorts engage in premarital sex, and do so in contexts ranging from high to no commitment, attention to the quality of these sexual experiences is warranted.

This paper investigates the determinants of orgasm and sexual enjoyment in hookup and relationship sex among heterosexual women college students. Our decision to treat orgasm as a central measure of the quality of young women's sexual experiences may be viewed as controversial. Some might see this decision as flowing from male-centered and medicalized

views of sex, and argue that women are not particularly concerned about orgasm (Bancroft, Loftus, and Long 2003; Gavey, McPhillips, and Braun 1999; Nicholson and Burr 2003). We did not want to assume, a priori, that women would not prefer sex to include orgasm. As there is not much systematic research examining the role of orgasm in young American women's sexual satisfaction, we decided to investigate this relationship empirically.

We use data from an online survey of approximately 14,600 undergraduates at 19 public and private colleges and universities, and from in-depth interviews at two of the universities. The survey data, while not derived from a probability sample, result from nearly full-population responses from the classes in which recruitment took place. To our knowledge, this data set is the only survey of Americans to include both detailed questions about sexual practices in the last sexual event (e.g. whether intercourse occurred, who gave and received oral sex or hand stimulation of genitals) and information on the relational context of the event (whether it was a "hookup," and if so how many times the partners had hooked up before, or whether it was part of a girlfriend/boyfriend relationship). This paper capitalizes on the strengths of this unique data set to examine effects of specific sexual practices on women's orgasm and sexual enjoyment in both hookups and relationships, and to observe how orgasm and sexual enjoyment differ between hookups and relationships. Supplementation with in-depth interviews deepens our understanding of the differences between hookup and relationship sex.

#### THEORY AND PAST RESEARCH

We identify three general ways that prior research has conceptualized the sources of sexual satisfaction. One view focuses on the sexual practices engaged in, implicitly treating good sex as a technical accomplishment, an activity at which people get better over time. A second view focuses on relationship-specific skills acquired by a partner over time. A third

perspective sees good sex as a consequence of love. The framework we develop relies on the integration of three separate research traditions—interdisciplinary sex research, sociological theories of gender, and social psychological research on close relationships. We draw particularly on the research of Waite and Joyner (2001a; 2001b) and Laumann et al. (1994), who explicitly theorize about how committed and uncommitted sexual liaisons differ, and the research of Parish et al. (2007) and others who identify general factors associated with satisfying sex. Much past research on sexual practices and orgasm often focuses only on committed couples (e.g. Parish et al. 2007; Bancroft et al. 2003, see Christopher and Sprecher 2000 for a review). Other research (e.g. Waite and Joyner 2001; McNulty and Fisher 2008) focuses on the relationship between sexual satisfaction and relationship context, ignoring sexual practices. Neither sex research nor social psychological research on relationships incorporates gender theory. After outlining these general perspectives we explain how the gendered operation of these mechanisms might account for why commitment seems to matter more for women. We develop hypotheses as we proceed.

## **Conceptions of the Sources of Sexual Satisfaction**

Technical Perspective: This approach treats orgasm and sexual enjoyment as primarily a consequence of the delivery of competent genital stimulation. The nature of the stimulation provided and its duration are expected to be highly associated with orgasm and sexual enjoyment. Studies to date find a strong association between form of stimulation and orgasm (Mah and Binik 2001; Singh et al. 1998; Fugl-Meyer et al. 2006). Men and women are both more likely to orgasm if they engage in a greater number of sexual practices (Ritchers et al. 2006; Haavio-Mannila and Kontula 1997; Parish et al. 2007). Viewing sexual competence as a learned skill generates the expectation that individuals who start sex at earlier ages or who have had

more partners might orgasm more easily. Anatomical and other erotic knowledge would also be expected to increase sexual satisfaction, while physical health problems are expected to diminish it (Parish et al. 2007). Erotic competence is viewed as portable, so that a woman who knows how to reach orgasm is likely to be able to achieve orgasm with any partner who is willing to provide her with the stimulation she needs. Part of why, in this view, sexual competence can be portable across partners is the central sociological insight of Gagnon and Simon (1973) that sex is socially scripted, so that one knows what to expect with a partner, and perhaps how it varies by context. Differences in rates of orgasm and sexual enjoyment between committed and casual sexual liaisons are expected to be accounted for by the ways that sexual practices vary by relationship context. Once practices and the prior sexual experience of partners are controlled for, sexual satisfaction should be similar in committed and casual sexual events.

Partner-Specific Experience. Laumann et al. (1994) articulated a rational choice perspective on sexuality which, like the technical view, assumes that sexual satisfaction is a consequence of skill. But Laumann et al. (1994) view individual sexual tastes or needs as variable, so that it takes time to learn how to please a new partner. Given this, sexual competence is viewed as partner-specific rather than as portable. They argue that investing in learning to pleasure a particular partner is rational. One might question whether learning the sexual needs of a new partner qualifies as onerous enough to be deemed "investment," which implies a cost now for a later gain. In some cases, the awkwardness involved in getting "in sync" may indeed be onerous. Even if this is not true, what Laumann et al. point out to be costly in effort is finding a

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<sup>&</sup>lt;sup>1</sup> The technical approach suggests that stimulation matters, which implies that the embodied character of sexuality matters. Viewing sexual problems as "dysfunction" and turning to pharmacological solutions goes even further toward viewing sexuality as embodied—by extracting sexuality from social lifeand places it in the purview of biology. Tiefer and colleagues (Tiefer 1996; Kaschak and Tiefer 2001) criticize this tendency to medicalize sexuality, particularly women's sexuality. We agree, but note that the technical view we test is about practices.

new partner, which makes sticking with one partner and learning his or her needs rational if there is a reasonable prospect that the relationship will last.<sup>2</sup> In our view, the primary insight of this approach is that sex involves teaching a partner what one likes and learning how to please a partner, whether or not the term "investment" is apt. As Waite and Joyner (2001:248) note, "Sex with the partner who knows what one likes and how to provide it is bound to be more satisfying than sex with a partner who lacks such skills." This perspective predicts that ongoing relationships will lead to orgasm more than hookups because the partners have more practice with each other (as well as more motivation to learn what a partner likes). First-time hookups with a particular partner will be less enjoyable because little partner-specific learning has occurred. If deliberate investment is required to learn to please a partner, we would expect women's orgasm to remain low across all hookups—even repeated hookups—as investment is presumed to be motivated by commitment. But if learning is somewhat automatic, then we would expect that sex would get better with each event, even if the context is a hookup rather than a relationship.

Love: A romantic perspective sees sexual satisfaction as generated by love and commitment instead of learned skills. In this perspective, sexual pleasure is viewed as resulting more from emotion than from competent sexual technique—a clumsy but passionate dyad would be expected to have more physical pleasure than a technically accomplished, but emotionally disconnected duo. Orgasm is expected to be less an outcome of specific sexual practices or amount of partner-specific experience, and more associated with the quality of the connection.

<sup>&</sup>lt;sup>2</sup> This perspective borrows from economic theories of labor market behavior; general sexual experience is like general employment experience, while partner-specific experience is like firm-specific human capital. See England and Farkas (1986) for discussion of parallels between processes in households and employment.

Empirical research supports that how partners feel about each other—relationship satisfaction—influences sexual satisfaction and vice versa (Parish et al. 2007).

These three approaches may not be mutually exclusive; the mechanisms may operate in reinforcing ways. Affection may speed up partner-specific learning, and influence whether a partner is willing to do what they learn you like. Having a partner with (portable) technical skill and who one is trained regarding one's own preferences may increase affection for them. Moreover, repeated sexual experiences with a single partner may produce both the partner-specific learning emphasized by rational choice theory as well as love and commitment. The latter is the implication of Collins' (2004) theory of interaction ritual chains. He argues that coming together face-to-face for a somewhat ritualized activity as a joint focus often builds emotion and solidarity, which increases across more encounters.

### Gender Beliefs, Gendered Preferences, and Sexual Satisfaction

Gender scholars view gender as a system produced at multiple levels of society: gender is not only embedded in individual selves, but also in interaction and organizational arrangements (Connell 1987; Glenn 1999; Risman 2004). We attend to both interactional and individual levels—looking both at how public gender beliefs and their private internalization organize sexual interaction.

Ridgeway and Correll (2004) argue for the power of cultural beliefs about gender in organizing interaction in all spheres of social life. They argue that we immediately classify individuals as men or women, and interact based on beliefs about typical gender differences.

Men are viewed as more competent, agentic, and worthy of power and status. Women are expected to be more communal—"nicer," to put it colloquially. These gender beliefs also organize sexuality (Hamilton and Armstrong 2009). Consistent with the general belief that men

are more agentic than women, men are assumed to have a strong, active drive to seek sex, whereas women are viewed as more sexually passive, as responding to men's desire.<sup>3</sup> These views about "normal" men and women suggest that men will be penalized for failure to demonstrate active, assertive desire, and women will be viewed as "not nice" if viewed as overly sexually agentic or desiring. In addition, the high value given to men suggests that the presumed intense sexual appetites of men will receive social deference.

But gender beliefs related to sexuality are not static. Over the past half-century, the stigma associated with premarital sex within relationships for young adult women has almost entirely disappeared in the U.S., except among conservative religious groups (Regnerus 2007; Laumann et al. 1994). However, women who seek sexual pleasure *outside* of committed relationships continue to be judged more harshly than men who do so (Crawford and Popp 2003; Risman and Schwartz 2002; Weinberg, Lottes, and Shaver 2000). This sexual double standard may also involve judgments about appropriate levels of sexual enthusiasm, pleasure, or initiative. In relationships unmarried women may now express sexual desire, engage in sexual exploration, and expect their partners to attend to their sexual needs. At the same time, both men and women may be ambivalent about women's sexual pleasure in more casual contexts.

These views about men's and women's sexual natures may also be internalized by men and women. Women, more than men, may come to connect love and sex, developing a sexuality that is "more relationship-oriented and less genitally focused than men's" (McHugh 2006: 262; see also Conway-Turner 1992 and Peplau and Gordon 1985). Scholars have offered a variety of

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<sup>&</sup>lt;sup>3</sup> As a number of scholars have noted, these beliefs assert both gender difference and heterosexuality simultaneously (Hamilton 2007).

<sup>&</sup>lt;sup>4</sup>Laumann et al. (1994) find that 8.7% of men and 12.8% of women who were 18-29 when interviewed in 1992 fell into the "conservative traditional" normative cluster—the only group who agreed that premarital sex among adults is always wrong.

explanations for the development of internalized gender differences in approaches to sex. For example, Simon, Eder, and Evans (1992), describe how adolescent girls learn to valorize romantic love in the context of peer group interaction. Some scholars argue that gender is internalized through modeling and reinforcement (Bandura and Walters 1963), while others emphasize children's role in gendering themselves as they make sense of their culture (Bem 1983). Psychoanalytic feminist theory suggests that women approach sexuality in a more relational way because both boys and girls typically have a female primary caretaker, and, to mature, boys must individuate more, while girls maintain this relationship to a greater extent, yielding adult women who desire connection more than adult men (Chodorow 1978). Evolutionary psychologists assert that humans are "hard-wired" in ways that lead men to enjoy casual sex more than women (Buss 1989; Knoth, Boyd, and Singer 1988). Below we explain how a focus on cultural beliefs about gender and internalized gendered preferences help to "gender" the predictions from each of the three theoretical perspectives.

Gendering the Technical Perspective. A technical perspective suggests that genital stimulation matters for orgasm. But the belief that women are less entitled to sexual pleasure might lead women to get less clitoral stimulation than men get penile stimulation. Moreover, heterosexual sexual scripts are organized around vaginal intercourse, which provides more penile than clitoral stimulation (Gagnon and Simon 1987). Many men can orgasm from vaginal intercourse alone, while for women the addition or substitution of oral and manual genital stimulation increase orgasm (Richters et al. 2006:221; Fugl-Meyer et al. 2006; Singh et al. 1998; Bancroft 2002). In the 1970s, feminists suggested that the privileging of intercourse and the marginalization of sexual practices that work better for many women was evidence of gender inequality (Koedt 1973; Hite 1976; Gavey et al. 1999). We can see this privileging as consistent

with seeing men as more worthy of pleasure and deference. Thus, a gender-sensitive version of the technical perspective predicts that women will orgasm more frequently when sex includes practices that provide clitoral stimulation.<sup>5</sup>

A greater acceptance of women's pleasure in relationships than hookups may lead practices more conducive to women's orgasm to occur more in relationships. Davidson and Darling (1988) reported that women with many lifetime partners complained more about "lack of adequate foreplay"—meaning insufficient manual or oral genital stimulation prior to vaginal intercourse—than did women with only one lifetime partner. Pederson and Blekesaune (2003) found that both men and women in stable unions reported higher levels of sexual satisfaction than those having sex outside of stable unions, but that for women a good share of this difference was explained by what sexual practices occurred inside versus outside stable unions.

Gendering the Partner-Specific Learning Perspective. The partner-specific learning perspective predicts that acquiring sexual experience with a partner will increase orgasm.

Learning to please a partner may require some level of motivation—at minimum, a concern that the partner enjoys the sex. This learning may also require communication—an individual needs to convey information about what feels good, either verbally or non-verbally, and the partner needs to be willing to try what is suggested.

We hypothesize that gender beliefs influence how and when men and women become motivated to learn to pleasure their partners. The belief that men's desire for casual sex is natural, while women's is problematic, may reduce men's motivation to learn to please hookup

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<sup>&</sup>lt;sup>5</sup> Scholars who question the salience of orgasm to women's sexual satisfaction (Bancroft, Loftus and Long 2003; Kaschak and Tiefer 2001; Tiefer 1996) might agree with our prediction that appropriate stimulation will contribute to women's orgasm, but disagree with our expectation that orgasm will be associated with women's sexual enjoyment.

partners. In hookups, men may be more selfish sexually because of their tacit lack of respect for women's right to be sexually agentic. Women participating in hookups may not feel entitled to communicate their sexual needs. Or, disrespect on the part of a partner may block women's desire (Graham et al. 2004; Tolman 1994). Deferring to men's presumed sexual drives, and more generally to men's higher status, women may strive to please. This gender dynamic is likely to most powerfully influence first hookups—before any learning has a chance to occur. The true test might be, though, whether women orgasm as much in higher-order hookups as in relationships. If they do, this would suggest that gendered interactional dynamics do not impede learning in hookups.

But, as we argued above, women's right to sexual pleasure in relationships is now widely accepted. In this context, men are more likely to invest in learning to please their partners. His affection for her may lead to a relaxation of the gender deference dynamic, and motivate him to please her as much as she is interested in pleasing him. This may lead him to be willing to perform cunnilingus. Thus, we hypothesize that sex is better in relationships for women in part because in this context women are more likely to feel "comfortable" asking for and receiving pleasure and men are more likely to believe in women's entitlement to sexual pleasure. In sum, gender beliefs may generate gender inequalities in motivation to learn to please sexual partners in hookups, but less so in relationships.

Gendering the Love Perspective. Love and commitment would presumably affect the sexual enjoyment of both men and women. If, however, women have internalized the gender beliefs discussed above, and connect sex and love more than men do, they may find it more difficult than men to orgasm or enjoy sex outside of relationships. Many scholars have claimed that emotional factors are particularly relevant for women's sexual response. Some scholars have

focused on the importance of relationship quality (Bancroft et al. 2003; Kashack and Tiefer 2001), while others have focused on the importance of commitment (Waite and Joyner 2001a, b). The belief that women are more emotional about sex than men may also influence women's experience of sex even if this gender socialization is not fully or deeply internalized. Men may believe that "good" women only have sex when in love and consequently treat their casual sex partners less respectfully than committed partners. Women, aware that they are expected to connect sex and love and that they will be held accountable if they do not (e.g., perhaps by being called a "slut") may engage in forms of self-monitoring that block their feelings of sexual desire (Fine 1988; Martin 1996; Tolman 1994; West and Zimmerman 1987).

#### DATA AND METHODS

## Data

The quantitative portion of our analysis uses the Online College Social Life Survey (OCSLS), initiated in 2005.<sup>6</sup> The 15-20 minute survey is administered online. With an overall sample size of approximately 14,600 from 19 colleges and universities, the sample contains 9,656 female undergraduates, of whom 7,932 reported that they had had at least one hookup, or a relationship of at least 6 months in duration, or both.<sup>7</sup> This mode of data collection afforded the privacy crucial to getting honest responses to questions about sexual behavior. Self-administered questionnaires produce higher rates of reporting of sensitive behaviors than face-to-face interviews (Bradburn and Sudman 1979; Shroder, Carey, and Vanable 2003); for example, the

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<sup>&</sup>lt;sup>6</sup> As OCSLS data collection is ongoing, the N varies with the version of the dataset. This paper uses the June 2009 version of the data set.

<sup>&</sup>lt;sup>7</sup> Participating universities include Beloit College, Foothill College, Framingham State College (Massachusetts), University of California-Irvine, University of Pennsylvania, University of Washington, University of California-Riverside, Stanford University, University of California-Santa Barbara, Indiana University, University of Arizona, State University of New York-Stony Brook, Whitman College, Ithaca College, Evergreen College, University of Massachusetts-Amherst, and Ohio State University.

National Health and Social Life Survey (NHSLS), the most rigorous survey of American sexual practices to date, included four short self-administered questionnaires on sensitive topics in addition to a face-to-face interview (Laumann et al. 1994).

The bulk of our recruitment took place in classes, many of which were sociology courses. Almost all participating instructors gave students some course credit for taking the survey. To make the survey truly voluntary, students were offered the option of an alternative assignment designed to take the same amount of time. However, virtually no one elected this option or to forgo the credit. Thus, the response rate in most classes was 99-100%.

Probability samples are the "gold standard" in survey research, provided they can achieve a high response rate. The National Health and Social Life Survey (NHSLS) employed a probability sample and achieved a response rate of 79% (Laumann et al. 1994:558). Could we have achieved more representativeness with a sampling frame of students' phone numbers or email addresses? We believe not. We employed a random sample at Stanford for the collection of qualitative interviews, and achieved only a 50% response rate after extensive efforts, and despite paying \$20 an interview. We have no reason to think that we could have achieved higher rate for the online survey. We believe that to get a response rate of 70% from a probability sample of university students, we would have had to compensate respondents at the rate of \$50, which is prohibitively expensive for a large sample.

As our sample is nearly a census of classes, any non-representativeness emerges from who selects into participating classes. While we cannot accurately assess the bias coming from course selection, we were able to examine whether responses differed nontrivially between

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<sup>&</sup>lt;sup>8</sup> We contacted students twice by U.S. mail, repeatedly by university e-mail, and through Facebook (via a fellow student where possible). We also attempted to contact respondents by telephone, but available numbers were often disconnected dormitory land lines.

sociology majors (who are overrepresented in sociology courses) and other majors. We found few differences (results not shown). Specifically, among female heterosexual students sociology majors and other majors were within about 2 percentage points of each other on each of the following measures: the percent who had an orgasm on the most recent date, had an orgasm on the most recent hookup, gave oral sex on either of these events, or received oral sex on either of these events. As sociology courses are often electives, only 11% of our sample was sociology majors. Although the sample was only 10% majors in engineering, computer science, math, and natural science, students in those majors in our sample are also very similar to others on the variables mentioned above. Given this, and the exceedingly high response rate within participating classes, we are optimistic that the sample is fairly representative of youth attending secular four year residential universities and colleges in the U.S.

The OCSLS is the only existing data set suited to our research questions. While the NHSLS (Laumann et al. 1994) collected reports of orgasm and sexual satisfaction in a recent sexual experience, the study included few youth of college age, and excluded those living in group quarters, such as dormitories. And, as NHSLS data collection occurred in 1992, the youngest respondents were of a different generation than our respondents. NHSLS questions about the last sex event did not ask about the respondent's relationship with the sex partner, and only asked about a few sexual practices (anal/vaginal intercourse and oral sex). One national survey of college women was based on probability sampling from students in college directories with a listed phone number, but the response rate is not published (Glenn and Marquart 2001). While it asked about hookups and relationships, it did not collect detailed data on practices occurring in particular sexual events, and did not ask about orgasm. The National Survey of Adolescent Health (Add Health) did not ask about orgasm and its first wave asked nothing about

oral sex. While it has some questions about how much respondents enjoy sex with a particular partner, the questions are not specific to an event in which we know what sexual practices occurred.

Our quantitative analyses are largely based on the reports by heterosexual undergraduate women on their most recent hookup and/or their most recent sexual occasion in their current or most recent relationship that lasted at least six months. In the latter case, they were asked about the last time they and this partner did anything sexual "that went beyond kissing." Questions about the most recent hookup were preceded two questions asking students how many times they have hooked up with someone they did not know before, and with someone they already knew.<sup>9</sup> The instrument did not define "hookup" for students, but said "Use whatever definition of 'hookup' you and your friends use." In each case they were asked about all the sexual practices that occurred in the event with a "check all that apply" list, and asked about whether they had an orgasm and how much they enjoyed the sexual aspect of the event. Most of our analysis utilizes the 5,680 heterosexual undergraduate women who reported on their most recent hookup (with a man) and the overlapping group of the 5,404 heterosexual undergraduate women who reported on the most recent sexual event in their most recent (sometimes current) relationship (with a man) of over 6 months during college. 10 While the subsamples contain some women not in the other, they overlap substantially.<sup>11</sup>

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<sup>&</sup>lt;sup>9</sup> The question also specified that the hookup on which they report be one that is not with someone with whom they are already in a romantic relationship. Students generally do not use the term "hookup" in such cases, but occasionally they do, so we explicitly worded the question to exclude relationship sex.

<sup>&</sup>lt;sup>10</sup> Comparison of orgasm in lesbian and heterosexual hookups would be a way to explore the role of gender in hookups. Unfortunately, the small number of lesbians reporting hookups prohibits this analysis.

<sup>&</sup>lt;sup>11</sup> The June 2009 version of the OSCSL data includes a total of 11,802 heterosexual undergraduate women, but 2,553 did not report a hookup or a relationship in college. The sample includes 3,268 who reported on both a hookup and a relationship and thus appear in both hookup and relationship analyses, 2,555 who had been in a relationship not a hookup, and 3,426 who had experienced a hookup but no relationship. Therefore, 5,832 respondents had a

We augment the survey data with in-depth interviews gathered in 2006 and 2007 at Indiana University (n=17) and Stanford University (N=43), using the same interview guide (available upon request) at the two institutions. The interviews, lasting approximately one hour, were with female college seniors, and asked about experiences with hooking up, dating, and relationships from their freshman year to their senior year. Twenty-six of the 43 Stanford respondents were recruited from a probability sample of college seniors, with a response rate of approximately 50% during 2006-07. Our goal was to delve into the meanings of sex for this population and to identify mechanisms rather than to provide representative incidence statistics. Thus, to achieve more diversity in the sample, we added a convenience sample from Indiana (17) as well as more women from a convenience sample from Stanford during 2007-08.

Interviewers were female graduate and undergraduate students, and occasionally one of the faculty Principal Investigators. Interviews were conducted in a private place on campus selected by the respondent. Using a semi-structured interview guide, and a conversational manner, interviewers led respondents through their college years, asking about any hookups, dates, or relationships in each year and in the summers between academic years. They were asked about their experiences with orgasm as they described specific events, and also asked about their experiences with and views on orgasm in more general terms toward the end of the interview. They were explicitly asked whether sex was better in hookups or relationships, and more generally about the advantages and disadvantages of being in a relationship versus being open to hookups.

#### **Statistical Models**

We conducted logistic regressions on two dichotomous dependent variables to assess determinants of women's orgasm and enjoyment of the sexual activity in the event. For each dependent variable (orgasm and enjoyment of the sexual activity) we estimate four regression models; one for all hookup events, one for only the hookup events that included intercourse, one for all relationship sexual events, and one for only the relationship events that included intercourse. We provide separate models for events that included intercourse (which are a minority of all hookup events but the vast majority of relationship events) since the effects of other sexual practices may be different when intercourse is not present.

We also use regression results to compute predicted orgasm probabilities under specified assumptions of interest. We show the predicted probability of orgasm with and without selected practices, while holding all else at its mean. We also decompose the difference between women's orgasm rate in hookups and relationship events by assessing how different the orgasm rate in hookups would be if the sexual practices observed in relationships were to occur in that context; this entails substituting means from the sample of relationship events into the regression equation for hookups.

#### **Variables**

Dependent Variables. Our two dependent variables are the respondent's report of whether she had an orgasm in the event reported on, and the level of enjoyment she reported. The latter dependent variable is from the responses to the question, "How much did you enjoy whatever happened physically?" Respondents chose: "I did not enjoy the sexual activity at all," "I enjoyed the sexual activity very little," "I enjoyed the sexual activity somewhat," and "I enjoyed the sexual activity very much." We dichotomize responses for enjoyment, splitting them into the top two and the bottom two. Analyses dichotomizing the variable so that the

bottom three categories were combined in the reference category yielded qualitatively similar results. (Descriptive statistics in Table 1 retain the full detail for comparison.)

Technical Perspective: Variables measuring the technical perspective include both reports of sexual practices and prior sexual experience. Sexual practices in the last sexual event are reported in a dichotomous fashion, and coded into dummy variables scored 1 if the behavior occurred. All are asked separately about the most recent hookup and relationship event. The variables are: Her Hand Stimulated Own Genitals, indicating if the respondent self-stimulated her genitals with her hand; His Hand Stimulated Her Genitals, indicating if her partner stimulated her genitals with his hand; Her Hand Stimulated His Genitals, indicating if she stimulated her partner's genitals with her hand; Received Oral Sex, indicating if she received oral sex from her partner; Performed Oral Sex, indicating if she performed oral sex on her partner; Had Intercourse, indicating if the pair had vaginal intercourse; and Had Anal Sex, indicating if the respondent was anally penetrated by her partner.

Prior sexual experience is measured by these variables: *Age at First Intercourse* is the response to the question, "At what age did you first have vaginal intercourse?" We have categorized women into "before 16," "16-18," "19 and above," and "not yet." *How Many Prior Partners for Intercourse* indicates the number of intercourse partners the woman reported. These two variables cannot both be included in the same model since the "not yet" category of age at first intercourse implies no previous partners; accordingly we present Model 1 with the former and Model 2 with the latter for all models predicting orgasm. We only use number of partners in models predicting sexual enjoyment to simplify tables; which experience measure we use does not affect other coefficients nontrivially (results not shown).

Partner-Specific Experience: In models pertaining to hookups, partner-specific experience is tapped by the variable Number of Previous Hookups with this Partner. The responses to the question, "how many times had you previously hooked up with this person before this hook up?" are coded "None," "1-2," "3-5," and "6 or more hookups."

Love: In models pertaining to relationships, love is (indirectly) measured with two variables. <sup>12</sup> One measure is whether the couple has cohabited. Regarding the person they were in a relationship with, respondents were asked, "Have you ever lived together with this significant other?" and response categories were "No, we never lived together in any fashion," "We had our own places, but spent most of our nights together," and "We shared an apartment or room." The second measure of love and seriousness of the relationship that we use is *Likelihood* of marrying partner. Respondents still in the relationship were asked "How likely do you think it is that you will want to marry this partner?" with response categories of "very unlikely," "somewhat unlikely," "somewhat likely," and "very likely." We combined somewhat and very unlikely into one category, and used the other two categories. We created a separate category for those no longer in the relationship, since they were not asked the question and in most cases would not aspire to marrying this ex-partner. In models pertaining to hookups, we measured a weaker notion of love—or at least relational intent, *Interested in relationship prior to hookup*. Respondents were asked "Were you interested in having a romantic relationship with the person you hooked up with before you hooked up?" Response categories were "No, I wasn't at all

<sup>&</sup>lt;sup>12</sup> We are aware that these are imperfect measures of love—as decisions to cohabit, marry, or participate in a relationship may be shaped be factors other than love, and people may feel love for individuals with whom they would never want to be in a relationship with, live with, or marry.

interested," "Possibly; I didn't really know yet," "Maybe; it has some appeal," and "Yes, I was definitely interested." We dichotomized into the top two and bottom two categories.

Table 1 shows means for all variables for the subsamples used for separate regression models, including control variables not described in detail here.

#### TABLE 1 ABOUT HERE

### **QUANTITATIVE RESULTS**

## Overview of Women's Sexual and Romantic Activity in College

To set the stage for our analysis of the quality of college sex, we begin with an overview of women's sexual and romantic activity in college. We need to know *what* they are doing before addressing whether it leads to orgasm or enjoyment. By their senior year, 69% of heterosexual women report at least one hookup and 43% of senior women report a hookup with someone they did not know beforehand. The median number of hookups reported by senior year was 3 (retaining those with no hookups in the analysis). Sometimes hookups involve just kissing, sometimes manual stimulation of his or her genitals, sometimes oral sex, or, less frequently, intercourse. The rise of hookups has not meant the demise of college relationships. By their senior year, 73% of women reported that they had been in a relationship that lasted at least six months while in college. In interviews we learned that many more have had shorter relationships. Almost one-fifth (18%) of female college seniors report virginity. The median number of intercourse partners senior women report is 3 (retaining those with no partners).

## Orgasm and Sexual Enjoyment in Hookups and Relationships

Figure 1 shows what percent of undergraduate men and women had an orgasm in first hookups, higher-order hookups, and relationship sexual events.

### FIGURE 1 ABOUT HERE

Both men and women orgasm more in repeat hookups compared to with a new hookup partner. And relationship sex leads to orgasm most for both men and women. Women report orgasms in 11% of first hookups, 16% of 2<sup>nd</sup> or 3<sup>rd</sup> hookups, 33% of higher-order hookups and 68% of relationship sexual events. As Kinsey et al. (1953), Laumann et al. (1994), and others have also found a gender gap in orgasm.<sup>13</sup> This gap exists in all contexts, but is less severe in repeat hookups than first hookups, and least severe in relationships. If we take the percent of women having an orgasm as a ratio of the male percent, those ratios are .35 for first hookups, .37 if they have hooked up 1-2 previous times with this person, .52 on higher-order hookups, and .80 in relationships. This means that women orgasm only 35% as often as men in first hookups, but 80% as often in relationships, to take the two extremes.

Both men and women report higher levels of sexual enjoyment in relationships than hookups. Women report that they enjoyed the sexual activity "very much" in 50% of hookups (see Table 1 for the full distribution of women's responses) and 81% of relationship sexual events. Men reported that they enjoyed the sexual activity "very much" in 54% of hookups and in 89% of relationship sexual events (results not shown) If we also include those who enjoyed the event "somewhat," reported levels of sexual enjoyment reach 87% for women in hookups, 97% for women in relationships (Table 1), and 91% for men in hookups and 98% relationships

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<sup>&</sup>lt;sup>13</sup> All research on the prevalence of orgasm in partnered heterosexual intercourse has found that men reach orgasm more frequently than women. These findings have been reproduced in recent surveys conducted in the U.S. (Laumann et al. 1994), Finland (Haavio-Manilla 1997), China (Parish et al. 2007), and Australia (Richters et al. 2006). Rates of orgasm reported by men and women and the size of the gender gap vary substantially among studies. Little meaning can be derived from these differences, though, because of inconsistencies in question wording and other aspects of study design. Laumann et al. (1994), asking about whether orgasm usually occurs, found the lowest prevalence of orgasm for women (29%) and the largest gender gap (29% as compared to 75%). Haavio-Mannila and Kontula (1997) ask both whether orgasm usually occurs and about orgasm in the most recent sexual event. They found a smaller gender gap in orgasm when respondents were asked about the most recent sexual event. The highest prevalence of orgasm for women (72%) and the smallest gap (72% as compared to 95%) was found among 20-29 year old Australians asked about the last sexual event in 2000-01 (Richters et al. 2006).

(results for men not shown). This high level of sexual enjoyment on the part of both women and men is important to keep in mind as we focus on gender differences. A gender gap in sexual enjoyment exists, but this gap does not vary much by context and is much smaller than the gender gap in orgasm.

On the face of it, the fact that the "enjoyment gap" is much smaller than the "orgasm gap" suggests that orgasm matters less to women and thus is not a good measure to use for the quality of women's sexual experience. It is also true that women often report that they enjoyed the sexual activity "very much" even when they did not orgasm, but so do men. Moreover, there is evidence that women care a lot about orgasm, as much or more than men, from crosstabulations (not shown) revealing that orgasm is more strongly associated with whether respondents reported enjoying the sexual activity "very much" for women than men. We found that 81% of women who report orgasm in hookups reported that they enjoyed the sexual activity "very much," while only 42% of those who did not report an orgasm reported that level of sexual enjoyment. In comparison, 70% of men who reported orgasms in hookups reported enjoying the sexual activity very much, as compared to 42% who did not orgasm. In relationship events, 90% of women who reported orgasm reported that they enjoyed the sexual activity "very much," as compared to 61% of those who did not orgasm; while the comparable percents for men were 91% versus 71% for those who did not orgasm.

# Determinants of Orgasm and Sexual Enjoyment in Women's Hookups and Relationships

We now turn to the results of regression analyses of determinants of women's orgasm (Table 2) and sexual enjoyment (Table 3). To make the implications of the regressions more concrete, we also present Table 4 which, for each of the two hookup regressions provides predicted or "fitted" values showing the predicted probability of women having an orgasm with

and without certain sexual practices being present, while all other variables (including other sexual practices) are held at the sample mean for that regression.

Sexual Practices and General Experience. In general, past sexual experience has positive effects on orgasm. Among those who have had intercourse previously, those who started before age 16, and thus have had more years of sexual experience, orgasm more in hookups and relationships than those having first intercourse at 19 and above (Table 2). Women with no more than one past intercourse partner orgasm less in hookups and relationships, also suggesting that experience helps (Table 2). 15

Tables 2, 3, and 4 show the importance of sexual practices to women's orgasm and sexual enjoyment. Virtually every sexual practice on our checklist has strong positive effects on orgasm in both hookups and relationships (Table 2). The odds of orgasm are greater when the couple has intercourse, with odds of orgasm about 4 times as great in hookups if intercourse happens and 2-3 times as great in relationships if intercourse occurs (Table 2). Vaginal intercourse is more predictive of women's orgasm than some authors have claimed (Hite 1976; Gavey et al. 1999). While many women do not orgasm from intercourse alone, intercourse is

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<sup>&</sup>lt;sup>14</sup> While women in the sample vary in age, the fact that we are controlling for age as we assess age at first intercourse suggests that the coefficient on the latter is largely picking up years of sexual activity. In general, those who started earlier orgasm more. However, there is a nonlinearity in the effect, such that those who have never had intercourse do not have their odds lessened even relative to those who had sex before age 16. A look at the underlying descriptive data shows that this is not a result of virgins having orgasm at as high a rate as those with more experience, but rather that the virgins engage in many fewer sexual practices, all of which lower their odds of orgasm, but their odds are not depressed any more because of lack of experience. Indeed, relative to how few practices they engage in, their odds of orgasm are surprisingly high.

<sup>15</sup> These findings are subject to another interpretation as well. Some women may, for social or biological reasons,

<sup>&</sup>lt;sup>15</sup> These findings are subject to another interpretation as well. Some women may, for social or biological reasons, have a stronger libido and an easier orgasmic response. This may motivate them to start sex earlier and seek out more partners. Thus, it is possible that their past sexual experience is caused by ease of orgasm rather than the reverse. Unfortunately, without longitudinal data we cannot adjudicate between this endogeneity-based interpretation and a causal interpretation of experience. Relatively recently, two questions were added to the survey asking respondents when they first (if ever) masturbated and masturbated to orgasm. We replicated the models in Table 2 on the subsample asked about masturbation, and found that when women started masturbating has no significant net association with orgasm, but whether or not a woman has ever masturbated to orgasm is strongly associated with orgasm in the event reported. This result too could indicate that experience promotes orgasm, or that those with an easier orgasm response early on seek out more experience.

among the sexual acts that contribute to women's orgasm. The predicted probability calculation in Table 4 shows that a hookup without intercourse (and all else at the "all hookups" sample means) offers women only an 8% probability of orgasm, while one with intercourse boosts this to 26%. Within relationship events, the probability of orgasm without intercourse (with all else at the relationship means) is 54%, whereas with intercourse it is 77% (Table 4).<sup>16</sup>

### TABLES 2, 3, AND 4 ABOUT HERE

Practices that provide direct clitoral stimulation are extremely important to orgasm and enjoyment. Women who stimulate their own genitals during sexual activity more than double their odds of orgasm in hookups or relationships, and these large effects are true even when intercourse also took place (Table 2). As Table 4 shows, all else held at the mean, women who self-stimulate their genitals boost their rate of orgasm from 12% to 25% in hookups taken as a whole, from 39% to 60% in hookups with intercourse, from 69% to 83% in relationship events taken as a whole, and 75% to 86% in relationship sex involving intercourse. When men use their hands to stimulate women's genitals there is a similar effect; however, especially in hookups it is smaller than the effect of self-stimulation (Table 2). Receiving oral sex also increases women's orgasm, increasing the odds by approximately half in hookups with intercourse, nearly doubling the odds in all hookups, and doubling to tripling the odds in relationships (Table 2). Table 4 shows that when hookups do not provide oral sex for the woman, we predict an 11% probability of the woman's orgasm, which rises to 20% with receipt of oral sex. In hookups with intercourse, receiving oral sex moves the probability of orgasm from 37% to 48%. Oral sex helps women in

<sup>&</sup>lt;sup>16</sup> The finding that intercourse increases the odds of orgasm is also subject to another interpretation. In interview research, Gavey, McPhillips, and Braun (1999) found women reporting that having an orgasm increased their interest in intercourse.

relationships as well—boosting her probability of orgasm from 60% to 81% in all relationship events combined, and from 67% to 84% in relationship events with intercourse (Table 4).

Several practices that do not entail stimulation of women's genitals nonetheless show significant "effects" in Table 2 and create nontrivial increases in the probability of orgasm in Table 4, raising questions about the mechanism. For example, in hookups or relationships, a woman is more likely to orgasm if she used her hands to stimulate her partner's genitals. In a relationship (but not in 3 of the 4 hookup models), if she performs oral sex her chances of orgasm are higher. Having anal sex is fairly rare (happening in 1% of hookups and 7% of relationship events, as seen in Table 1), but when it occurs within relationships the woman is more likely to orgasm (according to 3 out of 4 of our models). None of these practices provide direct clitoral stimulation for women, so at first glance it is surprising that they increase orgasm. Nor are these significant effects simply revealing that women who give hand stimulation or oral sex or engage in receptive anal sex orgasm more because their behavior leads men to reciprocate with giving her oral sex or hand stimulation. This "tit for tat" mechanism may well occur, but it is *not* what Tables 2 and 4 reveal, since the effects of all other practices are statistically controlled. We suspect that willingness to engage in a variety of sexual practices indicates that the partners are erotically "in sync." It is possible that being erotically in sync generates both a diversity of practices (some of which do not directly produce orgasm themselves) and orgasm.

As we have shown, virtually all sexual practices increase orgasm, lending support to the technical perspective. Perhaps more surprisingly, some also increase—or decrease—sexual enjoyment over and above their effects through orgasm. These effects can be seen in the third regression reported for each subsample in Table 3, reporting models that control for whether the woman had an orgasm while predicting sexual enjoyment. After adjusting for effects coming

through whether they had an orgasm, hand stimulation or having intercourse increased sexual enjoyment in relationships. Women reported more sexual enjoyment in hookups, net of whether they had an orgasm, if her partner engaged in hand stimulation of her genitals. In the models for all hookups and for relationship events (all, or entailing intercourse), women report more enjoyment if they received oral sex, net of whether they had an orgasm. But, in hookups, they reported less enjoyment if they had intercourse. If we interpret hand stimulation of genitals and cunnilingus as signalling a more female-centered sexual event, and the occurrence of intercourse as signalling a more male-centered event, the findings suggest that women enjoy sex more in female-centered sexual events, net of whether they had an orgasm.

The most important finding from regressions predicting enjoyment, however, is seen in the effect of orgasm itself (Model 3 of Table 3). Confirming the results of the crosstabulations shown earlier, we see that the odds of reporting enjoyment are increased 4-6 times by having an orgasm in both all hookups and all relationship events.<sup>17</sup> These huge effects should put to rest any lingering doubt about whether women care about orgasm. Moreover, if we run regressions like those in Table 3 for men, we find that the net effect of having an orgasm on enjoyment is larger for women than men, indicating that women care about orgasm as much or more than men do (results not shown).

Partner-Specific Experience. We saw in Figure 1 that women orgasm much more in relationships than in hookups, highlighting the importance of relational context. This effect supports the importance of partner-specific learning, as all the relationships reported on here had lasted at least 6 months. Within the hookup context, we also see an effect of partner-specific

<sup>&</sup>lt;sup>17</sup> In one model, for relationship events with intercourse, the effect of orgasm on enjoyment is not statistically significant, although the coefficient indicates that it elevates the odds of enjoyment by about 40%.

experience; the more times a woman has previously hooked up with her current hookup partner, the more likely she is to orgasm. Compared to a first hookup with this partner, those who hooked up with this partner 3-5 times before are approximately 30-45% more likely to orgasm, and those who have hooked up more than 6 times are more than twice as likely to orgasm. Past experience with this hookup partner also increases the odds that a woman says she enjoyed the hookup sexually (Table 3), whether she had an orgasm or not. Of course, these findings could reflect selection rather than a causal effect of learning. That is, if women will not hook up again if the sex is not good, this too would lead to higher rates of orgasm and enjoyment among those who have hooked up more times, even in the absence of learning making sex better. We suspect, however, that some learning is present. If so, this suggests that the sexual double standard does not prevent men from learning something about their partner's needs in hookups. Yet Figure 1 indicates that rates of women's orgasm in repeat hookups never converge with rates of orgasm in relationships, hinting that there may be a categorical difference between hookups and relationships in men's investment in women's gratification.

Love. We have only one variable tapping love or relational orientation asked about hookup partners: whether the woman was interested in a relationship before the hookup. Those who were interested in a relationship were a fifth to a third more likely to orgasm, net of sexual behaviors, suggesting a role for affect. Those interested in a relationship were more than twice as likely to say they enjoyed the hookup. This suggests that romantic interest enhances sexual enjoyment for women, or that enjoying the sex increases romantic interest.

For those in a relationship of 6 months, we treated how likely the respondent thought it was that she would want to marry this partner as an indicator of love. Those who had already broken up and those in the relationship who said they were unlikely to marry had no different

odds of orgasm, but relative to the first group, those who said it was somewhat likely were about a third to half again as likely to orgasm, while those who said it was very likely were more than twice as likely to orgasm. Finally, those reporting on sex in a relationship were asked about cohabitation, which we could take as a measure of seriousness of the relationship. Compared to those who had never cohabited in any fashion, those who had spent most nights together (although having two residences) or actually cohabited in a single residence were approximately a third to a half again more likely to orgasm, but having actually had only one residence made little difference relative to just spending most nights together.

# Do Differences in Sexual Practices Explain the Higher Orgasm Rate in Relationships?

Our regression analysis shows that sexual practices matter for women's orgasm and enjoyment. Our previous descriptive results (Figure 1) as well as the probabilities in Table 4 establish that the base level of orgasm and sexual enjoyment is much higher in relationships than in hookups. Here we quantitatively examine how much of the hookup/relationship gap in women's orgasm can be explained by the fact that the sexual practices that occur in relationships are more conducive to women's orgasm, as the technical perspective suggests. To answer this question, we use predicted probabilities from our logistic regressions under varying assumptions of values of the independent variables. We take the means on independent variables from relationships and substitute them into the hookup regressions (slopes and intercepts). Doing this, a variable at a time, speaks to the following thought experiment: What if women in hookups experienced this sexual behavior (for example, receipt of oral sex) at the level observed for

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<sup>&</sup>lt;sup>18</sup> As mentioned above, in results not shown we controlled for duration of the relationship, and found that it was never significant in predicting orgasm. Also, importantly, this control did not diminish the effects of interest in marriage. Thus, we are not concerned that interest in marriage simply proxies a longer relationship; rather it appears that either the love or the forward looking view entailed in thinking one will want to marry a partner improves sex. Alternatively, it is possible that good sex increases the likelihood that one will report marital interest.

women in relationships, but had all other variables remain at the average for hookups, and, equally importantly, had the intercept and slopes from the hookup equation. (Results discussed in this paragraph are not shown in tables.) Taken one variable at a time, the effects look very small, often increasing the probability 1-3 percentage points. For example, women receive oral sex 22% of the time in hookups and 57% of the time in relationship sexual events; if hookups moved to this 57% and held all else constant, including the intercept and slopes associated with hookups, women's rate of orgasm would increase from 13% to 16%. Intercourse happens in 40% of hookups but 80% of relationship events: Simply adding intercourse to hookups could boost the female hookup orgasm rate from 13% to 21%. While the boosts from individual variables other than intercourse are relatively small, if we simultaneously gave women the relationship means on all the sexual practices, their orgasm would be boosted from 13% to 37%, clearly a big jump, but still much below the rate of orgasm predicted from these same means if we use the slopes and intercepts in force for relationship events—73%. Thus, practices explain less than half of the hookup-relationship difference in orgasm. We turn now to our qualitative data to deepen our understanding of how hookups and relationships differ.

### **QUALITATIVE RESULTS**

Qualitative analysis confirmed the importance of technical expertise, partner-specific experience, and affection for sexual satisfaction. Additionally, though, it enabled us to see mechanisms that quantitative analysis is not well-suited to identify. It provided insight into how the mechanisms reinforce each other, and into how gender beliefs affect the interactional dynamics of hookups and relationships.

<sup>&</sup>lt;sup>19</sup> Thirteen percent is the predicted rate of orgasm for women in all hookups when all variables are at their observed means (Table 1) for hookups.

## Love, Learning, and Practices as Synergistic

Respondents experienced sex as shaped simultaneously by technical, emotional and interactional factors. With a few exceptions, women told us that relationship sex was better than hookup sex, and most cited "love," "emotion," "intimacy," or "caring," as a reason why. For example, a woman explained:

I don't think it's ever been not emotional for me. And so the time that I was like very, very much in love with the person, those sexual interactions were very intense and very loaded with a lot of stuff, in addition to being really physically pleasurable.

Women suggested that the lack of the emotional bond mattered enough to get in the way of orgasm:

You just have this bond that makes you feel good because ... you care about him and they care about you back. ... But when you're just randomly having sex with somebody, it's just sex. ... And yeah, it's a lot harder to orgasm when you just don't feel that love to such an intense degree.

But respondents clarified that it was not only emotion that made relationship sex better.

Many indicated the importance of partner-specific learning. For example, one woman explained that:

I think with any relationship over time, they just learn how to please you and you learn how to please them and you work with each other. So I guess the benefit of a relationship is that you can tweak your skills.

Respondents typically did not see these processes as mutually exclusive, but rather, as one woman eloquently explained, caring facilitated the communication key to learning to sexually please a partner:

I think it's because when you actually care about the other person, you're also more in tune with what they want and so you can be more comfortable communicating and more knowledgeable and intuitive about their body and their needs and really work together, passing the awkward steps or any obstacles and work past that. And also, relationships lead to more constant physical interaction so you only get better from there.

Her suggestion that partners get "in tune" with each other through "constant physical interaction" offers support for interaction ritual chains as a mechanism generating satisfying sex (Collins 2004). This woman spoke of the importance of comfort, as did virtually everyone interviewed. "Comfort" was frequently juxtaposed with "awkwardness," further suggesting that women experienced satisfying sex as an interactional accomplishment. One woman asserted that:

No one who has sex with someone for the first time is gonna say that it wasn't an awkward experience. Like body parts, not sure what the other person wants, it's hard what to say, you know, and all that. So as you get more comfortable, you ... do stop thinking ... about the way you look when he's looking down at you.

This quotation suggests that comfort is a result of ironing out interactional wrinkles, sorting out what to do with various body parts and figuring out what the other person likes.

As another woman explained, part of becoming comfortable involves learning each others' bodies:

And I think it was so good because we were both very, very familiar and comfortable with each other's bodies and were still not so far into a relationship where we weren't willing to try to be experimental to try new things but also knew what worked and what didn't and were completely comfortable saying so, without defense or without any like personal meaning attached to like, "Oh, well, they don't like this thing that I'm doing."

The way women used the word "comfort" suggests that the pleasure of sex, like the pleasure derived from other cultural experiences, may rest on a tension between familiarity and novelty.

The importance of balancing the familiar and the novel also emerges in this woman's discussion:

I think at first it's fun and new, but ... with Jack after three years, it was like, "Now he's gonna do this. And now he's gonna do this. And right here, he's gonna do this." Whereas with Bob, you know, it's been almost two years and I still don't feel like that, so I think that's a good sign. [It's good when] it's routine enough that I'm comfortable and I can anticipate some things, which is kind of nice because you don't want to just feel like you have no idea what's going on every time.

While overly scripted sex may become boring, sex with someone for the first time often lacks the predictability key to pleasure.

Women also used the term "comfort" in several other ways. Women referred to the necessity of physical comfort for good sex—here the contrast is pain: "It was uncomfortable the first time." Also, as hinted above, women equated comfort with lack of self-consciousness. A number of women suggested that in hookups, particularly first hookups, they worried that their bodies or behaviors would be judged negatively by their male partners (Graham et al. 2004). For example, a woman explained that "you hope...the person that you're hooking up with has made you feel comfortable with your body." And, as another woman suggested, comfort also involves trust that one's sexual boundaries will be respected: "I felt comfortable with him, to tell him you know, what to do, what not to do, when to stop."

Many of the quotations above suggest "comfort" involves being able to communicate sexual tastes. This was important because, as a number of women explained, the right kind of stimulation was necessary for orgasm. What practices women preferred varied, though, with many reporting needing cunnilingus to orgasm while others had orgasms only in particular positions or with the use of a vibrator. For example, one woman explained that,

I only ever orgasmed in like missionary or like legs on bottom. .... I've definitely done many other positions but I just don't actually get off in those positions. I chalk it up to just physicality and like my G spot is best served when I'm on the bottom.

Women viewed erotic skills as at least partly portable, as some women complained of men whom they viewed as generically sexually incompetent. Respondents also viewed their own erotic skills as portable. For example, one woman attributed her less positive sexual experiences to inexperience. When asked what would have made her sexual experience better, she responded:

I guess practice. I mean like touching and being touched. Like being with the first guy I was like, "Man, I don't know how a guy likes to be touched." So the whole thing was just so mechanical, and I didn't feel comfortable exploring. I'm sure it was, you know, lack of strong communication skills. And so like the next partner, I'd hope they'd be someone that is close enough to like explore and reach a level of comfort.

She views a strong dyadic connection as key to creating the context in which she can get the "practice" that she believes she needs to become a better lover.

# **Gendered Interactional Dynamics**

Women's reports of interactions with hookup and relationship partners suggest that the contemporary sexual double standard shapes sexual interactions in both contexts. Women described their interactions with hookup and relationship partners in different ways. They often complained of a lack of mutuality in hookups. For example, one woman said, "When I ... meet somebody and I'm gonna have a random hookup ... from what I have seen, they're not even trying to, you know, make it a mutual thing." Another woman, complained of a recent encounter, "I just was with some stupid guy at a frat party and we were in his room and I gave head. And I was kind of waiting and he fell asleep. And I was like, 'Fuck this,' and I just left. It's degrading." In contrast, women often told us about sexually generous boyfriends. In describing the sexual virtues of their boyfriends, women often emphasized attentiveness:

I know that he wants to make me happy. I know that he wants me to orgasm. I know that, and like just me knowing that we are connected and like we're going for the same thing and that like he cares.

Women often also highlighted their boyfriends' willingness to perform oral sex. One woman explained, "And I didn't come during sex but I did come from oral sex. ... so he made sure I came before he came. And he was like okay with having sex and then going down on me, so I came, and then going back to having sex and then he came. ... It was great." Another said, "He was always very...considerate and conscious of my side....I didn't have an orgasm from intercourse but from....like oral or touching."

While it is likely that relationships lead both men and women to be more sexually considerate, evidence suggests that women are generally more solicitous of hookup partners than men. Table 1 shows that women reported receiving oral sex in 26% of hookups as compared to 62% of relationship events. Men reported receiving oral sex in 41% of hookups and 70% of relationship events (male results not shown). Men appear to be more likely to perform cunnilingus when they are invested in their partner's pleasure—that is, with girlfriends. In contrast, most women viewed providing orgasms for their partners as important, even in hookups. One woman explains that in hookups, "I will do everything in my power to like, whoever I'm with, to get them off." Another woman explained, "I am a giver. Like I don't feel like I've had a sexual experience if the guy doesn't come." Some women reported performing fellatio to please hookup partners even when they found it unpleasant:

The entire thing is gross but you do it because it gets them off and they're happy about it. Some girls get turned on by you know, giving a guy head. I don't. You know, I do it because they like it. I don't mind it. Whatever. But that's just the way it is.

Women's comments suggest that they do not feel fully entitled to pleasure in hookups. For example, one woman explained that, for her, "being able to communicate" about what she wanted and needed was important for good sex, but, she added, "I feel like when it's just a hookup, I just feel like I almost like don't have the right. Or not that I don't have the right but it's just not comfortable enough to be like, 'You know, hey, this isn't doing for me.'" Another explained that,

I didn't feel comfortable I guess. I don't know. I think I felt kind a guilty almost, like I felt like I was kind of subjecting people to something they didn't want to do and I felt bad about it. Um, so I think that was partly it. Um, but probably I just got so much encouragement like from giving ... but I didn't even really like it to be honest. I like ... making someone feel good.

This woman expressed guilt about having her sexual needs met, but at the same time she is matter-of-fact about performing sexual acts that she personally does not "really like" in service of her partner's pleasure.

A few women were able to assert themselves in hookups. One woman reported her strategy to ensure reciprocal oral sex: "I just switch it around to make them go down first usually. And some guys say no and then I just say no if they say no." Another very assertive woman reported that she found that "the techniques that you can use in bed to get an orgasm are the same you use in a leadership conference." She found herself frustrated with the lack of assertiveness of her female friends. She told us this story:

One of my friends was talking the other day. ... She was telling me that he didn't know where the hell the clitoris was. And when he touched her nipples, it was like a radio dial. You know, he just didn't know what to do and I said, "Well, did you say anything?" And she's like, "Well, it was the first time we were hooking up, so I didn't really wanna make him feel bad," and ... I told her, "This is what you need to say to him. You just need to be like, oh that feels good but it feels so much better here."

This woman holds other women responsible for their lack of assertiveness. We suggest, though, that women's difficulty asking for what they wanted in hookups is primarily a result of the lack of cultural supports for women's sexual pleasure outside of relationships.

The same women, however, when in relationships, found it possible to be clear about their sexual desires. Women explained that the expectation of "equality" in relationships made it a lot easier to be assertive. One woman, implicitly contrasting relationships with hookups, pointed to the more egalitarian nature of relationship sex:

I think also just because in a relationship, there's much more expected as far as like equality wise, like give and take sexually. If you're gonna be in a relationship, it's expected, like more equality. You can be more fun when you're in a relationship and you're really comfortable with someone. You can explore more, be more fun and goofy and stuff like that which I think is always fun too.

She suggests that the equality of relationships generates comfort. In contrast, she suggests that hookups are not situations where equality can be expected and hints that this is a reason why they are often less comfortable. Her reference to "exploring" suggests that relationships, by creating a space in which sex is viewed as acceptable for women, give women permission to relax (e.g., be "goofy") and experiment. Another woman explained:

I think that I'm assertive enough of a person to know what it takes for me to orgasm and like be able to communicate that. I probably would try to work it out, try to give him more practice, more lessons, before I would ultimately break off the relationship. But I I'm gonna say this very hesitatingly, I probably would end the relationship after having tried many, many things to fix it so that it's sexually pleasurable.

While she was willing to work hard with a boyfriend to improve the sex, she viewed lack of success as grounds to end the relationship.

The gender dynamics of relationships and the importance of particular sexual practices intersect: One woman, who "never orgasmed from anything but oral sex," noted that for a long time she did not expect orgasm because she did not think she could ask her partners for what would work for her. She explained, "I feel bad, like making someone take the time or whatever, if it takes a lot of extra time or something. ... So I felt kind of like I couldn't ask them to do that." But, she said that she now expects orgasms because in her current relationship her "boyfriend is very willing ... So I guess it's kind of increased in importance since I don't have to feel bad about it and it's more accessible. Like they happen more and more. That's great and so it's become more of an important part of my sex life since, with this partner."

## DISCUSSION AND CONCLUSION

Both our quantitative and qualitative analyses provide evidence that varied sexual practices, partner-specific learning, and love matter for women's orgasm. A woman's orgasm is most likely when her partner cares about her pleasure and is willing to engage in sexual practices

conducive to it, when she feels comfortable enough to communicate her sexual wants, and when the two have enough experience with each other to learn each other's preferences.

In direct contradiction to much recent research on women's sexuality, our quantitative analysis shows that whether a woman has an orgasm has a huge effect on how satisfying she finds a sexual event, increasing the odds about fivefold in either relationship or hookup sex. Our qualitative data, too, show that many women care about orgasm, but that they often accept the gender gap in orgasm as inevitable. It seems that when orgasm is not available—either because they have not figured out how to have orgasms at all or because their partners are not willing to work with them on achieving them—women dismiss their importance in their conversations with us. Often they treat the gender gap in orgasm in hookups as a biological given, despite seeing orgasm as quite possible within relationships. Here the quantitative results help clarify the somewhat muddled story emerging from the interview data.

Our qualitative analyses provide evidence that experience and practices matter, as claimed by the "technical" perspective. While most existing research focuses on the risks of pregnancies and sexually transmitted infections associated with earlier sexual initiation—risks that are certainly real—our results show some gains to women's pleasure from earlier initiation. Those whose age at first intercourse was earlier had higher rates of orgasm, as did those for whom the current partner was not their first. Tolman et al. (2003:4) argue that adolescent sexual health involves not only abstaining from risky behavior, but learning "to express affection, love, and intimacy in ways consistent with one's own values." Becoming sexually active is a normal part of adolescent and young adult development (Schalet 2004). Future research should focus not only on the risks of sex, but on the processes and timing of transitions to healthy adult sexuality (e.g., Meier 2007).

The technical perspective was also supported by our finding that most sexual practices increase women's orgasm. Intercourse itself increases orgasm. Equally importantly, across hookups and relationships, and regardless of whether the event also included intercourse, women's orgasm is enhanced by receiving oral sex, or by having her genitals stimulated by her own or her partner's hand. These findings suggest that 1970s feminists such as Hite and Koedt were correct about the importance of direct clitoral stimulation. At the same time, though, by emphasizing that few women have orgasms through intercourse alone Hite may have led to inaccurate understandings of the contributions of intercourse to women's orgasm. Some practices that do not provide direct or even indirect clitoral stimulation showed positive "effects" on women's orgasm—giving oral sex and stimulating her partner's penis by hand. In a mechanical sense, these are unlikely to achieve her orgasm. Our qualitative data suggest an interpretation for these coefficients: Being erotically in sync generates both a variety of practices and orgasm. Women we interviewed talked at length about the importance of feeling comfortable with a partner and the erotic energy generated by being in sync.

All sexual practices were much more common in relationship sex than in hookups. The sum total of differences in practices explained some of why women were so much more likely to orgasm in relationship sex than hookups (especially first hookups), but more than half the gap remained. Our qualitative data proved critical to seeing the ways in which these processes are gendered, and in particular, how gendered dynamics create differences in the quality of hookup and relationship sex for women. That sex is different in the two contexts is a reminder of the power and variability of sexual scripts. Interview data suggest that men's entitlement to sexual satisfaction in hookups is viewed as natural, while women's pleasure in hookups is viewed as more problematic. The ambivalence about women's pleasure does not extend to relationships, as

interviewees assume that sexual reciprocity is appropriate in relationships. It seems that sometime in the last 40 years college students began taken-for-granted reciprocity in premarital sexual relationships. We believe this is an important change in gender relationships.

Quantitative and qualitative findings hint at a gender power struggle in college sex over what practices occur in what contexts. With respect to quantitative results, the finding that, net of whether they had an orgasm, women reported more sexual enjoyment in hookups involving receipt of hand stimulation or receiving oral sex, and less in hookups involving intercourse, is provocative. It suggests that women are particularly pleased when they receive clitoral stimulation and that perhaps sometimes they engage in intercourse when they would rather not. Qualitative results confirm that women often do not receive the kind of clitoral simulation that many women need for orgasm in hookups, and that many find this to be disappointing. Clitoral stimulation is much more part of the script in relationships than in hookups. Thus, 1970s feminists such as Shere Hite might claim a partially victory; heterosexual sexual repertoires within relationships appear to have become more reciprocal, including more acts conducive to female orgasm. A more complete victory would involve extending women's entitlement to sexual pleasure to casual contexts.

Hookups, especially first ones, often involve effort on women's part to please men, but little concern for women's pleasure. Sexual interactional dynamics—like interaction in the workplace or in marriages—reflect gender beliefs about men's greater status-worthiness and the expectation that women be "nice." Applying Ridgeway and Correll's (2004) more general argument to the realm of sexuality, women defer to men's wishes in hookups just as they defer to their opinions in work situations. The qualitative findings show women to be quite concerned with men's opinion in hookups, enough so that they were attentive to protecting the self-esteem

of male partners, sometimes engaging in acts that they did not find pleasurable to sexually please their partners. They also report that they find it difficult to communicate their sexual needs in hookups, but not in relationships. If we were just looking at hookups, we would see the notion that men are seen as worthy of deference while women are to be nice as the more parsimonious explanation. However, the fact that women report men to be more sexually generous in relationships is consistent with the new version of the double standard described above.

Our claims that sexual interaction is shaped by women's deference to men suggests that it is of utmost importance to incorporate men's perspectives in further research. Future research should investigate what heterosexual men think about sexuality—their own and that of the women with whom they have sex. This research might delve deeply into how men think about the importance of their partners' sexual pleasure—and whether this varies by context—and about which practices they prefer.

College sexuality is characterized by gender inequality. Our research suggests that building cultural supports for women's sexual pleasure, both within and outside of relationships, is key to improving the quality of college sex for women. The data are unambiguous that in the contemporary gender order, relationships make sense for college women who want good sex. Yet most women report enjoying hookup sex and not all women want relationships with their hookup partners (Armstrong, England, and Fogarty 2009; Hamilton and Armstrong 2009). Focusing exclusively on getting sex back into relationships would not further improve hookup sex, while dismantling lingering ambivalence about women's sexual pleasure could lead to more orgasm in both hookups and relationships.

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Table 1. Range, Mean, and Standard Deviation for Variables, For Heterosexual College Women Reporting on Selected Events

Table 1. Range, Mean, an	d Standard Deviation for Variables, I	For Heterosexu	al College Wor	nen Reporting	on Selected Ev	vents
			Mean for	Mean for	Mean for	Mean for
			Women	Women	Women	Women
			Reporting on	Reporting on	Reporting on	Reporting on
			Most Recent	Most Recent	Most Recent	Most Recent
			Hookup	Hookup With	Relationship	Relationship
Variables		Range		Intercourse	Sexual Event	Event with
Dependent Variables		range				
Orgasm		0 – 1	0.21	0.42	0.68	0.75
Sexual enjoyment	Very Much	0 – 1	0.50	0.58	0.81	0.84
	Somewhat	0 – 1	0.37	0.31	0.16	0.14
	Very Little	0 – 1	0.09	0.07	0.02	0.02
	Not at all	0 – 1	0.04	0.03	0.01	0.01
Independent Variables						
Sexual Practices		0 4	0.05	0.44	0.04	0.07
R's hand stimulated own genitals P's hand stimulated R's genitals		0 – 1 0 – 1	0.05 0.52	0.11 0.76	0.24 0.82	0.27 0.87
R's hand stimulated P's genitals		0 – 1	0.32	0.70	0.84	0.88
Received oral sex		0 – 1	0.43	0.39	0.57	0.63
Performed oral sex		0 – 1	0.26	0.43	0.62	0.66
Had intercourse		0 – 1	0.40		0.80	
Had anal sex		0 – 1	0.01	0.02	0.07	0.08
General sexual Experience						
Age at first intercourse	Before 16*	0 – 1	0.17	0.24	0.19	0.22
	16 - 18	0 – 1	0.54	0.64	0.59	0.64
	19 and above	0 – 1	0.12	0.11	0.14	0.14
Number of interesures perfore	Not yet	0 – 1 0 – 1	0.17	 0.68	0.08	0.41
Number of intercourse partners	4 or more* 2-3	0 – 1	0.44 0.23	0.68 0.24	0.37 0.26	0.41 0.28
	1	0 – 1	0.25	0.07	0.29	0.30
	zero	0 – 1	0.13		0.08	
Partner-Specific Experience		-				
Previous hookups w/ partner	None*	0 – 1	0.41	0.28		
	1-2 hookups	0 – 1	0.19	0.17		
	3-5 hookups	0 – 1	0.14	0.14		
	6 or more hookups	0 – 1	0.27	0.41		
Love	run.	0 – 1	0.46	0.54		
Interested in relationship prior to hook Cohabited with partner	Never cohabited	0 – 1 0 – 1	0.46	0.54	 0.48	 0.45
Conabiled with partner	Most nights	0 – 1			0.46	0.45
	Cohabited	0 – 1			0.15	0.17
Likelihood of marrying partner	No longer in relationship*	0 – 1			0.28	0.27
, 51	Unlikely	0 – 1			0.08	0.08
	Somewhat likely	0 – 1			0.25	0.25
	Very likely	0 – 1			0.39	0.40
Controls	40.40*	0 4	0.40	0.40	0.00	0.00
Age	18-19* 20 and above	0 – 1 0 – 1	0.48 0.52	0.40	0.38 0.62	0.38 0.62
Self-rated physical attractiveness	20 and above	1 – 10	7.14	0.60 7.23	7.17	7.21
Race	White*	0 – 1	0.73	0.73	0.68	0.69
1,400	Black	0 – 1	0.05	0.06	0.05	0.05
	Hispanic	0 – 1	0.01	0.01	0.02	0.01
	Asian	0 – 1	0.05	0.05	0.06	0.05
	Other	0 – 1	0.10	0.09	0.12	0.12
Race of partner	White*	0 – 1	0.75	0.75	0.71	0.72
	Black	0 – 1	0.10	0.12	0.09	0.08
	Hispanic	0 – 1	0.12	0.12	0.15	0.15
	Asian	0 – 1	0.05	0.04	0.10	0.09
	Other	0 – 1	0.03	0.03	0.05	0.05
Immigrant		0 – 1	0.08	0.07	0.11	0.10
Mother's education	No Bachelors degree	0 – 1	0.47	0.51	0.53	0.54
From had also 8	Bachelors degree or more*	0 – 1	0.53	0.49	0.47	0.46
Ever had simultaneous partners		0 – 1	0.17	0.28	0.15	0.17
Ever alternated between partners		0 – 1 0 – 32	0.39	0.61 3.62 (3.91)	0.33	0.37
Number of drinks consumed prior Used drugs prior to event		0 – 32 0 – 1	3.66 (3.67) 0.10	0.14	0.62 (2.84) 0.06	0.64 (3.07) 0.07
Partner attends same college		0 – 1	0.58	0.49	0.40	0.39
Time knew partner before relp	Less than 1 month*	0 – 1			0.21	0.22
•	1-6 months	0 – 1			0.43	0.43
	>6 months	0 – 1			0.36	0.35
University	Indiana University*	0 – 1	0.07	0.08	0.07	0.07
	Stanford University	0 – 1	0.07	0.04	0.05	0.04
	University of Arizona	0 – 1	0.08	0.09	0.08	0.08
	Stony Brook University	0 – 1 0 – 1	0.04	0.04	0.04	0.04
	UC Santa Barbara University of Massachusetts	0 – 1	0.18 0.17	0.16 0.15	0.15 0.14	0.16 0.14
	Ohio State University	0 – 1	0.17	0.15	0.14	0.14
	UI-Chicago	0 – 1	0.07	0.09	0.08	0.08
	Washington	0 – 1	0.03	0.04	0.03	0.04
	Other school <sup>2</sup>	0 – 1	0.19	0.23	0.26	0.26
Sample Size			5680	2279	5404	4355
* Reference category						

<sup>\*</sup>Reference category

R = respondent, P = respondent's partner

Includes Evergreen, Harvard, Framingham, Radford, Beloit, Riverside, Penn, Foothill, Ithaca, UC Merced, Whitman Standard deviations are in parentheses next to the mean, when applicable

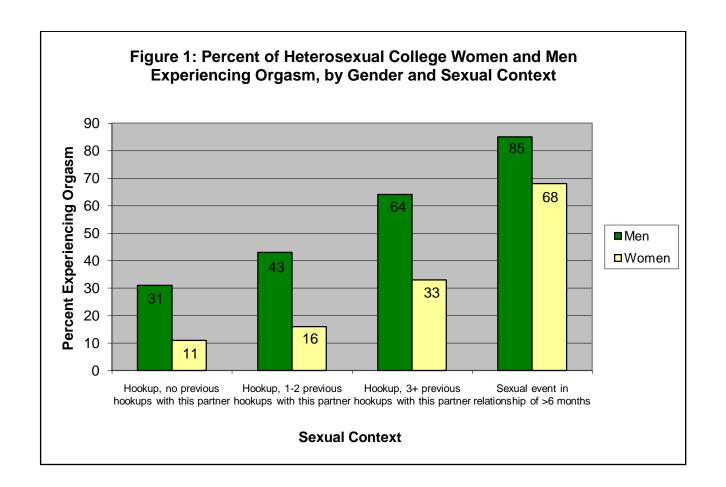


Table 2. Odds Ratios for Effects on Whether Heterosexual College Women Had an Orgasm in Most Recent Hookup or Most Recent Sexual Event Within Relationship

Variables			All Hookups Hookups with Intercourse		All Deletie sekie France		Relationship Events With		
						All Relations		Interco	
Sexual Practices		Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
		2.40 **	2.38 **	2.31 **	2.29 **	2.27 **	2 26 **	2.07 **	2.00 **
R's hand stimulated own genitals <sup>1</sup>							2.26 **		2.08 **
P's hand stimulated R's genitals <sup>1</sup>		2.03 **	2.04 **	1.31 *	1.32 *	2.06 **	2.10 **	1.63 **	1.64 **
R's hand stimulated P's genitals <sup>1</sup>		1.72 **	1.72 **	1.29 *	1.31 *	1.78 **	1.78 **	1.91 **	1.89 **
Received oral sex		1.93 **	1.94 **	1.54 **	1.57 **	2.86 **	2.87 **	2.58 **	2.56 **
Performed oral sex		1.18 **	1.18 +	1.09	1.10	1.13 *	1.19 *	1.23 *	1.24 *
Had intercourse		4.20 **	3.92 **			2.82 **	2.53 **		
Had anal sex		1.21	1.20	1.64	1.64	1.79 *	1.77 *	1.55 *	1.12
General Sexual Experience									
Age at first intercourse	16 - 18	0.86		0.80 *		0.98		1.00	
Reference = Before 16	19 and above	0.62 **		0.47 **		0.79 +		0.75 *	
	Not yet	0.79				1.18			
Number of sexual partners	2-3		0.91		1.00		0.94		0.92
Reference = 4 or more	zero-1		0.71 *		0.53 *		0.82 +		0.71
Partner-Specific Experience									
Previous hookups w/ partner	1-2 hookups	1.34 *	1.33 *	1.04	1.05				
Reference = None	3-5 hookups	1.42 **	1.43 **	1.30 +	1.33 +				
	6 or more hookups	2.32 **	2.36 **	2.15 **	2.24 **				
Love									
Interested in relationship prior to hookup		1.20 *	1.20 *	1.33 *	1.33 *				
Cohabited with partner	Most nights					1.37 **	1.34 **	1.46 **	1.43 **
Reference = never cohabited	Cohabited					1.38 **	1.34 *	1.35 *	1.32 *
Likelihood of marrying partner	Not likely					1.11	1.13	1.15	1.18
Reference = no longer in relationship	Somewhat likely					1.33 *	1.35 *	1.51 **	1.57 **
	Very likely					1.74 **	1.78 **	2.07 **	2.17 **
Controls									
Age: Reference = 18 or 19	20 and above	1.00	0.93	1.14	1.02	1.02	0.95	1.12	1.02
Self-rated physical attractiveness		1.02	1.01	1.04	1.04	0.99	0.99	0.98	0.98
Race	Black	1.04	1.04	1.00	1.00	0.69 +	0.68 *	0.91	0.81
Reference = White	Hispanic	0.92	0.96	1.25	1.15	0.88	0.91	0.96	0.96
	Asian	0.63 *	0.65 *	0.62 *	0.65 +	0.65 **	0.65 **	0.69 *	0.69 *
	Other	1.28	1.28	1.37 +	1.39 +	1.00	1.00	1.02	1.02
Race of Partner	Black	0.94	0.95	1.06	1.08	1.25	1.26	1.25	1.23
Reference = White	Hispanic	0.86	0.87	0.76 +	0.79	1.07	1.07	1.10	1.11
	Asian	1.46	1.47	1.25	1.24	1.04	1.05	1.10	1.09
	Other	1.30	1.33	1.35	1.38	1.02	1.01	1.00	1.00
Immigrant		1.22	1.21	1.36 +	1.32	0.98	0.97	0.98	0.96
Mother's education	Bachelors or more	0.94	0.94	0.89	0.89	0.99	0.99	0.98	0.98
Ever had simultaneous partners		1.07	1.07	1.12	1.13	0.93	0.92	0.99	0.98
Ever alternated between partners		1.07	1.03	1.08	1.07	0.99	0.93	0.97	0.88
# of drinks prior to event		0.96 **	0.96 **	0.97 **	0.97 *	0.99	1.00	1.00	1.00
Used drugs prior to event		1.22	1.22	1.25	1.28	0.82	0.82	0.87	0.87
Partner attends same college		0.94	0.90	0.92	0.91	0.02	0.02	0.87 +	0.86 +
Time knew partner before relp	1-6 months	0.94	0.90	0.92	0.91	1.20 *	1.20 +	1.23 *	1.24 *
Reference = less than one month	>6 months					1.20	1.20 +	1.23	1.24
Sample Size	>0 IIIOIIII18	577		2285		5441		4355	1.01
** p< .01: * p< .05: + p<.1		5//	ı	2200	,	J44 I		4300	

<sup>\*\*</sup> p< .01; \* p< .05; + p<.1
R = respondent, P = respondent's partner

Note: University is controlled in all regressions.

Table 3. Odds Ratios for Effects on Whether Heterosexual College Women Reported Sexual Enjoyment in Most Recent Hookup or Most Recent Sexual Event Within Relationship

Variables			All Hookups	3	Hookups with Intercourse		All Relationship Events			Relationship Events With Intercourse			
variables		Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	
Sexual Practices		Model I	Model 2	Model 3	Model I	Model 2	Model 3	Model I	Model 2	Model 3	Model I	Model 2	Model
R's hand stimulated own genitals <sup>1</sup>			1.71 **	1.28		1.55 *	1.14		1.15	0.91		0.76	0.74
P's hand stimulated R's genitals <sup>1</sup>			1.71	1.20		1.58 **	1.14		1.15	1.17		1.36	1.33
R's hand stimulated P's genitals <sup>1</sup>			1.26	1.17 +		1.25 +	1.15		1.40	0.99		1.56	1.44
Received oral sex			1.10				1.13		1.17			1.68 *	1.44
				1.30 *		1.39 *			1.37 *	1.35		1.68 *	
Performed oral sex			0.99	0.94		1.17	1.16						1.67
Had intercourse			0.86 *	0.63 **					1.40	1.63		0.54	0.47
Had anal sex			1.00	0.91		0.98	0.80		1.39 +	1.26		2.54	2.47
Had an orgasm				4.84 **			5.71 **			4.51 **			1.39
General Sexual Experience	0.0	4.04	4.04	4.00	0.04	0.00	0.04	0.00	4.00	4.05	0.00	0.00	0.00
Number of sexual partners	23	1.01	1.01	1.03	0.94	0.92	0.91	0.99	1.02	1.05	0.83	0.88	0.89
Reference = 4 or more	0-1	0.93	0.95	0.99	0.83	0.79	0.98	0.65 **	0.77 *	0.78 +	0.83	0.86	0.87
Partner-Specific Experience													
Previous hookups w/ partner	1-2 hookups	0.99	0.95	0.92	1.12	1.10	1.10						
Reference = None	3-5 hookups	1.62 **	1.49 **	1.46 **	1.36 *	1.25	1.17						
	6 or more hookups	2.76 **	2.44 **	2.18 **	3.18 **	2.83 **	2.36 **						
Love													
Interested in relationship prior to hoo	okup	2.43 **	2.41 **	2.47 **	2.21 **	2.18 **	2.20 **						
Cohabited with partner	Most nights							1.12	1.00	0.91 *	0.97	0.96	0.95
Reference = never cohabited	Cohabited							0.85	0.78 +		0.74	0.78	0.78
Likelihood of marrying partner	Not likely							1.61 **	1.79 **	1.79 **	0.64 +	0.72	0.71
Reference = no longer in relp	Somewhat likely							3.13 **	3.33 **	3.32 **	1.79 *	1.81 *	1.80 *
	Very likely							4.94 **	5.39 **	5.19 **	6.65 **	6.98 **	6.93 *
Controls													
Age: Reference = 18 or 19	20 and above	1.03	1.01	1.02	1.00	0.97	0.95	0.82 *	0.88	0.89	0.78	0.79	0.79
Self-rated physical attractiveness		1.08 **	1.08 *	1.08 *	1.09 *	1.09 *	1.09 *	1.05 +	1.04	1.04	1.18 *	1.18	1.18 *
Race	Black	1.04	1.02	1.01	0.96	0.99	0.99	0.61 *	0.65 *	0.76	1.41	1.40 *	1.45
Reference = White	Hispanic	0.62 +	0.63 +	0.63 +	1.98	2.26	2.18	0.99	1.08	1.12	0.89	0.87	0.89
	Asian	0.63 *	0.59 **	0.63 *	0.57 *	0.57 *	0.63 *	0.64 *	0.65 *	0.71 *	0.42 *	0.40 *	0.41 *
	Other	1.10	1.13	1.10	1.14	1.27	1.14	1.01	1.05	1.08	0.90	0.87	0.87
Race of partner	Black	0.92	0.94	0.94	0.94	1.01	0.96	1.56 *	1.64 *	1.52 *	1.99	2.10	2.10
Reference = White	Hispanic	0.93	0.92	0.95	1.05	1.05	1.19	0.96	0.94	0.92	0.70	0.71	0.71
	Asian	0.89	0.91	0.84	0.83	0.88	0.79	0.84	0.85	0.82	1.91 +	2.03 *	2.02
	Other	1.04	1.04	0.99	0.68	0.68	0.55 *	0.91	0.92	0.91	3.35	2.59 +	3.52 +
Immigrant		1.04	1.08	1.05	1.16	1.19	1.06	0.84	0.83	0.82	0.94	1.07	1.10
Mother's education:	Bachelors or more	1.06	1.06	1.08	1.09	1.08	1.14	1.14 +	1.12	1.13	1.38 +	1.39 +	1.38
Ever had simultaneous partners		1.37 **	1.31 *	1.30 *	1.43 *	1.35 *	1.31 *	0.73 *		0.67 *	0.73	0.69	0.69
Ever alternated between partners		1.05	1.03	1.02	1.11	1.09	1.07	1.08	0.96 *	0.96	0.83	0.84	0.84
# of drinks prior to event		0.97 *	0.97 **	0.98 *	0.96 *	0.96 *	0.97 *	1.00	1.00	1.00	0.97	0.97	0.97
Used drugs prior to event		1.21 +	1.14	1.10	1.24	1.16	1.08	0.81	0.72 *	0.74 +	1.14	0.96	0.97
Partner attends same college		0.88 *	0.91	0.91	1.00	1.03	1.08	0.95	1.02	1.03	0.85	0.85	0.84
Time knew partner before relp	1-6 months							1.04	1.07	1.04	0.78	0.77	0.76
Reference = less than 1 month	>6 months							0.97	1.00	0.99	1.00	1.01	1.00
Sample Size	- 0 111011110		5680			2279		0.07	5404	0.00		4335	1.00
** p< .01; * p< .05; + p<.1		1	0000						0.107			.500	

Table 4. Predicted Probability of Heterosexual College Women's' Orgasm, Manipulating One Variable and Setting Others to their Mean

Variables		All Hookups	Hookups with Intercourse	All Relationships	Relationships with Intercourse
Sexual Practices		All Hookups	intercourse	All Relationships	intercourse
R's hand stimulated own genitals <sup>1</sup>	No	0.12	0.39	0.69	0.75
	Yes	0.25	0.60	0.83	0.86
P's hand stimulated R's genitals <sup>1</sup>	No	0.09	0.37	0.60	0.71
. o nana omnanasa reo gomano	Yes	0.17	0.43	0.75	0.80
R's hand stimulated P's genitals <sup>1</sup>	No	0.17		0.62	0.68
Tro Harra diminatara F di gormano	Yes	0.16	0.43	0.75	0.80
Received oral sex	No	0.11	0.37	0.60	0.67
. 1000.100 010.100.1	Yes	0.20	0.48	0.81	0.84
Performed oral sex	No	0.13		0.71	0.77
	Yes	0.14	0.42	0.74	0.80
Had intercourse	No	0.08		0.54	
	Yes	0.26		0.77	
Had anal sex	No	0.13	0.41	0.72	0.78
	Yes	0.15	0.54	0.82	0.85
General sexual Experience					
Age at first intercourse	Before 16*	0.15	0.47	0.73	0.80
·	16 - 18	0.13	0.41	0.73	0.80
	19 and above	0.10	0.29	0.68	0.75
	Not yet	0.12		0.77	
Partner-Specific Experience					
Previous hookups w/ partner	None*	0.10	0.33		
	1-2 hookups	0.12	0.34		
	3-5 hookups	0.13	0.39		
	6 or more hookups	0.20	0.51		
Love					
Interested in relationship prior to hookup	No	0.12	0.38		
	Yes	0.14	0.44		
Cohabited with partner	Never cohabited			0.69	0.75
	Most nights			0.76	0.82
	Cohabited			0.76	0.81
Likelihood of marrying partner	No longer in relationship*			0.67	0.71
	Unlikely			0.69	0.74
	Somewhat likely			0.73	0.79
	Very likely			0.78	0.84

<sup>\*</sup> Reference category

Note: Predicted probabilities calculated from Model 1 in Table 2 holding all other variables at their means

<sup>&</sup>lt;sup>1</sup> R = respondent, P = respondent's partner