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The Nature and Impact of Gendered Patterns of Peer Sexual Communications among Heterosexual Emerging Adults

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Abstract

Although previous research demonstrates that peers serve as top sexual informants and advisers, little is known about how peer sexual communications may be a gendered phenomenon. Do communications about sex and romantic relationships vary according to who is speaking to whom? The current study examined 517 college students' reports of male and female peers' communications of four sexual scripts and the associations between reports of such communications and participants' sexual attitudes and levels of sexual and dating experience. Results suggest that peer messages about sex and relationships vary by the gender of the recipient and the gender of the communicator. Women reported more frequent communications of all sexual scripts from female peers than did men. In terms of male peers' sexual communications, only one gender difference emerged: men reported receiving significantly fewer messages about the relational script than women. Compared to same-sex peer communications, there were more associations between other-sex peer communications and undergraduates' sexual attitudes and levels of sexual and dating experience. Implications for the role of same- and other-sex peers in sexual socialization are discussed.

Keywords

gender roles; gender differences; psychology and sexuality; college students

In the popular imagination, peer sexual communications often consist of groups of men telling raunchy stories about their sexual conquests and pairs of women sharing advice about love and relationships. These gendered portrayals reflect the sexual double standard, whereby men are expected to be sex-driven and women are expected to be relationship-focused. In either case, peer sexual communications may carry significant weight. Unlike the prolific yet impersonal communications of mass media and the restrictive and infrequent messages of parents, peer messages are simultaneously personal, protective, informative, and diverse. Indeed, common sexual values communicated include waiting until marriage

(i.e., procreational script), having sex for pleasure (i.e., recreational script), having sex to express love to one's partner (i.e., relational script), and gendered sexual norms that construct women as passive and men as active in pursuing sexual encounters (i.e., Heterosexual Script) (DeLamater, 1989; Kim et al., 2007). The goals of the current study were to examine the gendered nature of college students' reports of peer sexual communications during their formative years (i.e., ages 5-18) and to investigate the contributions of these communications to their sexual attitudes and levels of sexual and dating experience.

Pluralistic Ignorance: Reality versus Peer Perceptions

Communications among young people and their peers have not been the central focus in the sexual socialization literature. Instead, research has largely focused on perceived sexual norms, or ideas about the extent to which young people believe their peers are sexually active. Findings here indicate that college students consistently overestimate the extent of their peers' sexual experiences, believing, for example, that their peers have more sexual partners, hookup more often, and take more sexual risks than they actually do (Lewis, Lee, Patrick, & Fossos, 2007; Scholly, Katz, Gascoigne, & Holck, 2005; Stephenson & Sullivan, 2009). College students also believe that their peers are more comfortable during these sexual experiences than they, themselves, are (Lambert, Kahn, & Apple, 2003; Reiber & Garcia, 2010). How do college students come to believe that “everyone is doing it” and loving it?

One major factor contributing to these misperceptions is that peer communications about sex are diverse (Bogle, 2008; Currier, 2013). They vary in form, and include direct statements as well as innuendos, jokes, gossip, and anecdotes (e.g., Armstrong & Hamilton, 2013; Bogle, 2008; Eder, Evans, & Stephens, 1995; Korobov, 2011; Tolman, 2002). They vary in timing, typically emerging in adolescence, continuing into emerging adulthood, and changing over time. They also vary in their content. Analyses documenting the specific sexual themes communicated indicate that college students report occasional or frequent discussions regarding the importance of relationships, acceptance of casual sex, and endorsement of gendered sexual roles, and infrequent discussions regarding abstinence until marriage (Fletcher, Ward, Thomas, Foust, Levin, & Trinh, in press; Manago, Ward, & Aldana, in press; Trinh, Ward, Day, Thomas, & Levin, 2014). Similarly, Morgan and Zurbriggen (2012) found that college students report valuing mutual respect, romantic relationships, consent, and sexual pleasure. College students' complex sexual values contrast with widely held notions that young people hold uniformly hedonistic, risk-free views towards sex. Indeed, few college students report a completely pleasure-focused approach to sex (Knox, Cooper, & Zusman, 2001; Richey, Knox, & Zusman, 2009). Because young people frequently turn to their peers for sexual information and advice, understanding the content of these communications may yield insight into the complex sexual values that college students hold.

One considerable challenge to studying sexual communications is the ambiguities. Among college students and their peers, stories regarding sexual experiences typically lack clarity. For example, young people report having vague notions about what it means when their

friends tell them that they hooked up (Bogle, 2008). Indeed, there is little consensus regarding the definition of hookups, which entail a range of sexual behaviors from kissing to intercourse. (Currier, 2013; Epstein, Calzo, Smiler, & Ward, 2009). Given that nearly 80% of college students report at least one hookup, and that 98% report that it is typical to talk to their friends after their hookup, young people are left with the impression that hookups are common, but without a full understanding of what, exactly, occurred (England & Thomas, 2006; Paul & Hayes, 2002). On the other hand, some youth report minimal peer sexual communications, and paradoxically, they attribute the lack of communications to presumptions regarding shared understandings about sex and relationships (Lyons, Giordano, Manning, & Longmore, 2011). Among college students, everyone is assumed to be “doing it,” but few know what “it” entails.

“Locker Room Talk” vs. “Girl Talk”: The Role of Gender in Peer Sexual Communications

In addition to being common and ambiguous, sexual communications among peers are frequently gendered. Findings indicate that such communications largely reinforce traditional sex roles and the sexual double standard. Much of the evidence to support this work has drawn on qualitative interviews of young women and men. Here findings indicate that among boys and young men, exchanging stories about one's sexual experiences confers status, affirms masculinity, and strengthens peer bonds (Eder et al., 1995; Flood, 2008; Kimmel, 2009; Knight et al., 2012; Smiler, 2012; Stompler, 1994). Indeed, Morrison et al. (2014) found that the traditional masculinity script (e.g., men have insatiable sex drives) emerged as a common theme in undergraduate men's stories about their committed romantic relationships, casual sexual relationships, and one-night stands. Sexual jokes, in particular, represent a unique opportunity to bond young adult men with their same-sex peers. Whereas sharing anecdotes of their sexual experiences can lead to competition (i.e., who is *the* man?), telling sexist jokes helps to solidify bonds between men (Hunt & Gonsalkorale, 2014; Lyman, 1987). Acting “cool” about one's romantic relationships also aligns with the traditional masculinity script in which sex is second to none; therefore, discussions about relationships may be particularly ambivalent or negative. For example, Korobov and Thorne (2006) analyzed conversations of undergraduate men and their same-sex friends regarding romantic relationships, and they found twice as many negative statements (e.g., mistrust of partner) were made than positive statements (e.g., emotional closeness with one's partner) (Korobov & Thorne, 2006). Ultimately, adolescent boys' and young men's conversations about sex and relationships typically reinforce stereotypical notions about gender and sex.

Conversations about sex among adolescent girls and young women have been shown to be equally gendered albeit more complex. Young women are acutely aware of the elusive balance they need to strike to gain and to avoid losing respect and approval. Interviews and focus group studies reveal that much of adolescent girls' and young women's discussions about sex focuses on what this balancing act entails: being sexy, but not sexual; being sexually active, but only in the context of romantic relationships; having fun by hooking up, but not too often; and prioritizing men's sexual needs and desires over their own, but still being assertive enough to avoid becoming a victim of sexual violence (Armstrong &

Hamilton, 2013; Bay-Cheng, Livingston, & Fava, 2013; Lyons, Giordano, Manning, & Longmore, 2011). Given the confusion and uncertainty regarding how to enact the “to dos” and “not to dos,” it is unsurprising that adolescent girls and young women turn to their female peers who are confronted with the same dilemmas.

Contributions of Peer Sexual Communications to Sexual Behaviors and Attitudes

Peer sexual communications are not without consequences; there is a small but growing body of literature that documents associations between reports of peer communications and emerging adults' sexual behaviors and attitudes. For example, college students' reports of exposure to peer messages promoting recreational sex are associated with higher levels of sexual experience, more casual sexual encounters, and more sexual partners (Manago et al., in press; Trinh et al., 2014). On the other hand, college students' reports of peer messages promoting abstinence until marriage predicted less dating experience (Fletcher et al., in press). College students' discussions about sexual behaviors and feelings with their same-sex best friends are associated with higher levels of condom use self-efficacy (Lefkowitz, Boone, & Shearer, 2004). Similar results have been found for the role of peer sexual communications on sexual attitudes. For example, peer communications regarding hookups predicted greater likelihood of hookup participation, especially for college students who reported feeling close to their peers (Holman & Sillars, 2012). Frequent peer sexual communications predicted greater endorsement that sex is pleasurable and socially beneficial (i.e., increases one's popularity) and weaker endorsement that sexual involvement is stigmatizing (Ragsdale et al., 2014). This literature on peer sexual communications complements the larger literature on peer sexual norms and has the potential to illustrate how peers shape sexual socialization.

The Current Study

Peers are widely acknowledged as influential sexual socialization agents. It is likely, however, that their influences are not monolithic. Whereas previous research has demonstrated that peer sexual *norms and expectations* are salient and gendered, the role of gender on peer sexual *communications* has received less attention. The few studies that have explicitly documented the gendered qualities of peer sexual communications have been qualitative or ethnographic in nature. Our goal is to complement and expand on previous work by assessing whether gendered patterns of communications emerge using quantitative measures of sexual scripts. In doing so, we address two gaps in the nascent literature. The first gap is the need to consider the role of gender in peer sexual communications. Do communications vary according to who is speaking to whom? The second gap is the need for specificity in communication measures, given the diverse sexual values that college students hold. Accordingly, the current study examines how peer communications of four distinct sexual scripts (e.g., relational, procreational, recreational, and Heterosexual) may vary depending on the gender of the recipient and messenger. Additionally, this study examines which messages contribute most to emerging adults' sexual attitudes and levels of

sexual and dating experience. The current study tests the following hypotheses and research question:

H1. Collapsing across reports of male peers' and female peers' messages, undergraduate women would report receiving more restrictive messages about sex (i.e., relational script, procreational script, Heterosexual Script) than undergraduate men.

H2. Taking into consideration the gender of one's peers, undergraduate women would receive more messages from their same-sex peers about the relational and procreational scripts than men, who would receive more messages from their same-sex peers about the recreational and Heterosexual scripts than women. Other-sex peers would convey more recreational script messages to undergraduate women and more relational script messages to undergraduate men.

RQ1. Will the contributions of same- and other-sex peers to sexual attitudes and levels of sexual and dating experience differ for men and women? The relative contribution of same- and other-sex peers to sexual socialization is unclear. It is possible that same-sex peers may be more influential because they are more likely to advise young people about sex and relationships than other-sex peers. At the same time, other-sex peers' less frequent communications may be more valued and influential than same-sex peers' because the former represents a "different perspective."

Method

Participants

Participants were recruited through the Psychology Subject Pool, which consists of all undergraduates enrolled in Introduction to Psychology courses. Participation was open to anyone in the Psychology Subject Pool, and course credit was given for participation. A total of 566 college students completed the survey. Ninety-six percent of participants identified as exclusively or predominantly heterosexual. Few participants identified as exclusively or predominantly homosexual (2%) or bisexual (1%), and few stated that they were unsure of how they identified (1%). Because the small sample of sexual minorities was not sufficient for comparative analyses and because it was unclear if sexual communications differed between groups, we focused exclusively on all participants who identified as exclusively or predominantly heterosexual. Ten participants did not complete the surveys or provided response sets. Therefore, only participants with complete responses and who identified as heterosexual were retained for analyses ($n=517$). All participants were traditional college students and ranged in age from 17 to 22 ($M= 19.29$, $SD=0.87$). Young women made up 55.3% of the sample. Nearly one-third of women and men belonged to sororities and fraternities, respectively. Approximately 70% of participants identified as white/Caucasian/European American, and 18.5% identified as Asian/Pacific Islander/Asian American. Fewer participants identified as black/African American (4.5%), Latino/Hispanic/ Native American (2.5%), Middle Eastern (3%), or multi-racial (1%). Three participants (0.5%) did not respond. Parents' education was measured in number of years of schooling completed. Mothers, on average, graduated from college ($M=16.39$ years of schooling, $SD=2.34$), and fathers, on average, received some form of graduate training ($M=17.19$ years, $SD=2.77$).

Measures

Sexual attitudes and experiences—There were two measures of sexual attitudes. The first measure was the Adolescent Masculinity Ideology in Relationships Scale (AMIRS), which is a 12-item measure that assesses the degree to which one endorses hegemonic (i.e., traditional) masculinity in the context of social and romantic relationships (Chu, Porche, & Tolman, 2005). Participants used a 6-point scale anchored from 1 (*strongly disagree*) to 6 (*strongly agree*) to indicate how much they agreed with statements such as “In a good dating relationship, the guy gets his way most of the time.” A mean score was computed across the items such that higher scores indicated greater acceptance of hegemonic masculinity. The second measure tested endorsement of the Heterosexual Script (Authors names omitted to maintain anonymity, in preparation), including gender-specific orientations to commitment and courtship and acceptance of a sexual double standard. Participants used a 6-point scale anchored from 1 (*strongly disagree*) to 6 (*strongly agree*) to indicate their level of agreement (or disagreement) with 22 statements ($\alpha=.89$). An example item is, “It is worse for a woman to sleep around than it is for a man.” We also included one measure of sexual and dating experience. Participants rated their level of experience with dating and sexual relationships using a 10-point scale with the following anchors: 0 (*just starting out*), 3 (*some dating*), 4 (*1-2 sexual relationships and no longer a virgin*), and 10 (*having had several sexual relationships*).

Peer Communications—Peer sexual communications were assessed with 21 items, each relating a cultural message/script about sexuality and sexual relationships. Participants used a 4-point scale anchored from 0 (*none*) to 3 (*a lot*) to indicate how frequently they were exposed to each message during their formative years (i.e., ages 5-18). Participants completed this measure twice, once with regard to what their *female* peers told them and once with regard to what their *male* peers told them. Items tapped into DeLamater's (1989) three types of sexual scripts (i.e., relational, procreational, and recreational), and Kim et al.'s (2009) Heterosexual Script. The relational script ($\alpha_{\text{female peers}} = .78$, $\alpha_{\text{male peers}} = .76$) consists of 5 items (e.g., “Sex is best when partners are in a loving and committed relationship”). The procreational script ($\alpha_{\text{female peers}} = .82$, $\alpha_{\text{male peers}} = .77$) consists of 4 items (e.g., “Sex outside marriage is a sin”). The recreational script ($\alpha_{\text{female peers}} = .78$, $\alpha_{\text{male peers}} = .80$) consists of 6 items (e.g., “Having sex is just something fun to do”). The Heterosexual Script ($\alpha_{\text{female peers}} = .80$, $\alpha_{\text{male peers}} = .80$) consists of 6 items (e.g., “It is worse for a woman to sleep around than it is for a man”). A version of this measure has been used in previous research (Fletcher et al., in press; Manago et al., in press; Trinh et al., 2014).

Religiosity was measured with three items. Participants indicated how religious they were on a 5-point scale from 1 (*not at all*) to 5 (*very*). Participants rated on a 5-point scale from 1 (*never*) to 5 (*very regularly, usually once a week*) how often they attended religious services. Participants indicated how often they prayed on a 5-point scale from 1 (*never*) to 5 (*very regularly; at least once a day*). Mean scores produced across these items indicate that participants, on average, were moderately religious ($M=2.87$, $SD=1.18$).

Results

Preliminary Analyses

Overall, the sample reported moderate levels of dating and sexual experience and minimal endorsement of gendered stereotypical attitudes about sex. Using a ten-point scale, college students' ratings of their dating and sexual experiences fell near the mid-point, which translated to "1-2 sexual relationships." Men ($M=4.82$, $SD=2.70$), however, reported significantly higher levels of dating and sexual experience than did women ($M=4.09$, $SD=2.36$), $F(1, 500)=10.46$, $p<.01$. Women, on average, neither agreed nor disagreed with the Heterosexual Script ($M=3.25$, $SD=0.72$), but they disagreed with traditional masculinity ($M=1.86$, $SD=0.54$). Men's endorsement of the Heterosexual Script was significantly higher than their female counterparts', $F(1, 504)=36.26$, $p<.001$, and men's endorsement of traditional masculinity was also significantly higher than women's, $F(1, 505)=205.60$, $p<.001$. Still, men, on average, neither agreed nor disagreed with the Heterosexual Script ($M=3.62$, $SD=0.65$), and disagreed a little with the expectations of traditional masculinity ($M=2.62$, $SD=0.66$).

There were two sets of preliminary analyses. For each set, all analyses for women and men were conducted separately because of the study's focus on gender. First, we ran zero-order correlations between the three dependent variables and the following demographic variables: raised outside the U.S., maternal and paternal education, age, religiosity, Greek affiliation, and race (with 0/1 dummy codes representing membership in specific ethnic groups). Previous research has demonstrated that each of these demographic characteristics is frequently correlated with sexual attitudes and experiences (e.g., Ahrold & Meston, 2010; Berntson et al., 2014; Zimmer-Gembeck & Helfand, 2008). Results for women and men are provided in Table 1.

Almost all demographic characteristics emerged as significant correlates to women's and men's sexual attitudes and level of dating and sexual experience. Women and men shared several similarities. For example, being religious was correlated with more endorsement of both masculine ideology and the Heterosexual Script, and less sexual experience for women and men. Belonging to a fraternity or a sorority was associated with stronger endorsement of the Heterosexual Script and higher levels of sexual experience. For women and men, being older was associated with being more sexually experienced. Identifying as Asian was only associated with less sexual experience, and identifying as Black was associated with stronger endorsement of traditional masculinity. There were also some gender differences. For example, having a highly educated mother was associated with a weaker endorsement of masculine ideology among women and higher levels of sexual experience among men. The significant demographic correlates were controlled for in all analyses predicting sexual attitudes and behaviors.

For the second set of preliminary analyses, we conducted inter-correlations between reports of peer communications across scripts to determine if multicollinearity exists. For women and men, correlations between different discourses from male and female peers did not exceed .77. The majority of the inter-correlations for women (82%) and men (79%) were below .60. For women and men, reports of each discourse from female peers highly

correlated with reports of the same discourse from male peers ($r=.39$ to $r=.77$). In general, greater exposure to any given discourse was associated with greater exposure to another discourse. There were a few exceptions. For example, men's reports of male peers' procreational script messages were not linked to reports of female peers' and male peers' Heterosexual Script messages.

Finally, we looked at overall peer sexual communications by collapsing across reports of male and female peer communications. Overall means for peer communications are presented in Table 2. Women and men, on average, reported that the most frequently and least frequently discussed sexual scripts were recreational sex and procreation, respectively. Only one significant gender difference emerged; women reported receiving significantly more messages regarding the relational script than did men.

Hypotheses Testing

Because we expected that communications would vary according to who spoke to whom, we ran linear mixed models, which are presented in Table 3. We did not find support for hypothesis 1 that undergraduate women – regardless of the gender(s) of their peers – would report receiving more restrictive messages (i.e., relational, procreational, and Heterosexual Scripts) than undergraduate men. Instead, women reported receiving significantly *more* messages regarding each sexual script than men. Yet, these significant main effects are qualified by the significant peer gender and recipient gender interactions that emerged for each script. Estimated marginal means for male and female peer communications are presented in Table 4. We found some evidence for Hypothesis 2, which states that undergraduate women would receive more messages from their same-sex peers about relational and procreational scripts than men, who would receive more messages from their same-sex friends about the Heterosexual and recreational scripts than women. Hypothesis 2 also stated that other-sex friends would convey more recreational script messages to undergraduate women and more relational script messages to undergraduate men. As expected, undergraduate women reported more messages from *their* same-sex peers about relational and procreational scripts than did men, who received more messages from their same-sex peers about recreational sex than did women. Other-sex friends conveyed more recreational script messages to undergraduate women and more relational script messages to undergraduate men. Contrary to our prediction, undergraduate women received more same-sex peer communications regarding the Heterosexual Script than did men.

Two sets of three hierarchical regressions were conducted to answer the question (RQ1) regarding the unique contributions of male peers' and female peers' sexual communications to college students' sexual attitudes and levels of dating and sexual experience. Significant demographic correlates were entered in step 1, and peer communications of each sexual script from male and female peers were entered in step 2. Refer to Table 5 for women's results. Nothing predicted women's endorsement of masculine ideology and level of dating and sexual experience. However, significant discourse predictors emerged for endorsement of the Heterosexual Script. After controlling for several demographic characteristics, female peers' communication of the Heterosexual Script and male peers' communication of the procreational script each predicted greater endorsement of the Heterosexual Script. Also,

male peers' communications of the relational script predicted weaker endorsement of the Heterosexual Script. Peer sexual communications accounted for an additional 3.8% to 19.2% of the variance in undergraduate women's sexual attitudes and levels of sexual experience. Results for men are provided in Table 6. Only female peers' communications of the recreational script predicted higher levels of men's endorsement of masculine ideology. Additionally, only female peers' communications of the recreational script predicted more sexual experience. Only male peers' communications of the Heterosexual Script predicted higher endorsement of the Heterosexual Script. Peer sexual communications accounted for an additional 6.1% to 30.1% of the variance in undergraduate men's sexual attitudes and level of sexual experience.

Discussion

Although sexual experimentation is normative for many college students during this period, these experiences are not universal. Variations across college students' sexual attitudes and experiences negate the idea of a single peer culture let alone a unified sexual script. Indeed, sexual norms and ideals vary, depending on the sexual script(s) endorsed. Communication patterns of these sexual scripts also vary, such that women are far more likely to report receiving messages promoting relational and procreational scripts than men (Fletcher et al., in press; Manago et al., in press; Trinh et al., 2014). The main implication of these gender differences is that women's sexuality remains taboo and their sexual experimentation remains restricted by social mores. What is unclear is who communicates these expectations to whom, and how do these communications contribute to sexual attitudes and levels of sexual experience? The current study addressed these questions by looking at patterns of communications according to the gender of the source and recipient.

Peer Gender Differentiation Reveals Gendered Patterns of Sexual Communications

Our findings reveal that specifying the gender of peers adds greater nuance to our understanding of peer sexual socialization. Only one significant gender difference emerged across comparisons of participants' reports of *overall* peer communications; women reported more frequent peer communications of the relational script than men. Yet, when communications were disaggregated into reports of male and female peer communications, significant interactions between participant gender and peer gender emerged for each sexual script. For example, female peers conveyed more messages about the relational script to women than men, but male peers conveyed messages about the relational script equally to women and men. The complexities of who communicates to whom and about what are glossed over when peer gender remains undifferentiated.

Our findings suggest that gender differences are driven by same-sex peers' targeted communications that uphold traditional sex roles. For instance, in these data, men received more messages from their male friends promoting the Heterosexual and recreational scripts than messages regarding the relational and procreational scripts. The prominence of sex-positive messages in men's communications with their male peers is consistent with research on the role of men's friendships on gender attitudes. Indeed, homosocial networks of men – friendship groups, fraternities, and armed forces – are sites where hegemonic masculinity is

performed and reinforced (Bird, 1996; Hunt & Gonsalkorale, 2014; Kalof & Cargill, 1991; Knight et al., 2012). For young men, sharing their hookup experiences with their peers is an effective way to gain status and affirm their heterosexual and masculine identities (Flood, 2008; Jonason, 2007).

Conversely, women's conversations with their same-sex peers are conservative albeit complex. Young women may convey restrictive messages about sex because they may judge their same-sex peers more harshly for sexual permissiveness than do men (Baumeister & Twenge, 2002; Vrangalova, Bukberg, & Rieger, 2014). Young women may also communicate more conservative messages to their female peers as a measure of protection against sexual dangers and stigma (Menegatos, Lederman, & Hess, 2010). At the same time, it is worth noting that female peers conveyed more recreational script messages to women than to men. It may be easier for women to talk about hookups with women than men because disclosure and intimacy levels are higher in friendships among women than among men (Bowman, 2009; Holmstrom, 2009). At the same time, ambivalence surrounding women's hookups likely makes it difficult for women to feel safe talking about hookups. Indeed, in one study, undergraduate women believed that women enforced the sexual double standard more than men (Milhausen & Herold, 1999). As "insiders" who know the "rules," same-sex peers are simultaneously sympathetic and critical as educators and enforcers.

Other-sex Peers: Less Gendered Communication

Communicating with other-sex peers may provide a reprieve from learning gender-specific "rules." Our findings suggest that messages from other-sex peers are less gendered, which may be unsurprising given that young people report learning more and gaining a "different perspective" from their other-sex friends than from their same-sex friends (Hand & Furman, 2008). Other-sex peers' less gendered communications may assist young people's development of sexual agency, which is often curtailed by dominant gendered sexual expectations. According to traditional sex roles, men feel more pressure to initiate sex than to refuse sex, whereas the reverse is true for women. Greater exposure to less gendered sexual communications may facilitate sexual agency, whereby young women and men may feel motivated to fulfill a greater range of emotional and sexual needs and desires. The implications of our findings suggest that sex education programs may facilitate youth's understanding and development of sexual agency by facilitating co-ed discussions regarding sexual scripts. More research, however, is needed to understand the role of other-sex peers in sexual socialization.

Communications with other-sex peers may be more comfortable, especially for men. Because men (and women) expect their female friends to be more nurturing and communicative than their male friends (Holmstrom, 2009), men may feel more at ease exploring and/or conveying opposition to masculine ideology with women. Women are also less likely to endorse restrictive sex roles than men (Peterson & Hyde, 2010; Rudman, Fetterolf, & Sanchez, 2013); in fact, women in the current study, on average, disagreed with hegemonic masculinity. For men, communicating with female friends may also provide a reprieve from the hierarchical, status-sensitive structure of male peers groups. Despite the fact that women report disclosing more personal information to their same-sex friends than

do men, speaking to male peers may yield new insights and a “fresher” perspective from a more “objective” person(s). It is important to note, however, that discussing sexual experiences that are outside the realm of respectability (i.e., hookups) may still be difficult for women, regardless of the peer's gender. Women are judged not just for what they do but also for what others *think* they do.

Contributions of Peer Sexual Communications to Sexual Attitudes and Behaviors

Reports of peer sexual communications were linked to college students' sexual attitudes and behaviors, and these associations varied depending on who spoke to whom. Other-sex peers' communications were linked more to college students' sexual attitudes and behaviors than were same-sex peers' communications. For example, the more exposure men reported to messages from *female* peers' that men should be sex-driven (i.e., Heterosexual Script), the more they believed that men should be dominant in their romantic relationships; further, these men reported higher levels of sexual and dating experience. Undergraduate women who received frequent messages from their male peers about the procreational script were more likely to believe that men are sexual initiators and women are sexual gatekeepers. Yet, when women received frequent messages about the relational script from their male peers, they were less likely to believe in traditional sexual roles for women and men. These findings suggest that the impact of peer discussions about sex and relationships may vary by gender.

Frequent other-sex peer communications may serve as a proxy for heterosocial competence, “the ability to effectively negotiate social situations that involve the other sex, including acquaintanceships, friendships, romantic, and sexual relationships” (Grover, Nangle, Serwik, & Zeff, 2010, p. 491). It is possible that a bidirectional association exists between heterosocial competence and friendships with other-sex peers. Other-sex friendships are also a developmental precursor for dating and sexual relationships; young people's romantic relationships are preceded by an influx of other-sex peer members into their networks (Feiring, 1999). Dating and sexual experiences likely serve as a context for additional other-sex peer sexual communications and may help explain why other-sex peer communications played a larger role on sexual attitude and experience level. Ultimately, other-sex communications may provide heterosexual youth a cumulative advantage in exploring and pursuing romantic and sexual opportunities.

With the exception of the Heterosexual Script, young people may not give much weight to same-sex peer sexual communications, which may explain why such communications are rarely linked to sexual attitudes and experiences. For example, young men may attribute their male peers' messages promoting the Heterosexual Script and the recreational script as bravado. In fact, interviews with adolescent boys and emerging adult men reveal that many question the veracity of their male peers' stories about sex (Kimmel, 2008; Smiler, 2012). Another possible explanation for null same-sex peer findings is pluralistic ignorance, whereby young people think others believe in norms that they themselves do not believe. For undergraduate women, the null findings regarding endorsement of masculine ideology may stem from the fact that the items assessed in the sexual scripts measures do not completely align with the AMIRS. Whereas the AMIRS focused on the expectations for

men to show stoicism and restraint, the sexual scripts measures entailed expectations for men to have a high libido and an aversion to commitment. Therefore, some of the current study's findings may reflect underestimations of the contributions of peer communications to young people's sexual attitudes and level of dating and sexual experiences.

Limitations and Future Directions

The current study's findings should be interpreted with some caution for there were several limitations that must be acknowledged. First, it is not known when and exactly how often college students received the messages that they reported receiving. If the messages were recent, then they may have contributed more to their sexual attitudes than if they were conveyed in early adolescence. Similarly, any given message about sex may be salient, regardless of the number of times it was conveyed (e.g., a memorable message that was conveyed just once). Second, the sample was predominantly White. The study demonstrated that sexual messages varied depending on the gender of the recipient and messenger, but sexual messages likely vary depending on race and class. Indeed, members of ethnic and racial groups may communicate concerns to their peers about handling various sexual stereotypes. A third limitation is that only four discourses were assessed; other discourses, such as ones about risks, were not included. Further, sexual scripts are not discrete discourses. In fact, Masters and colleagues (2013) interviewed young adults between the ages of 18 and 25 and found three distinct ways of interacting with sexual scripts: "wholesale" conformity, partial conformity (i.e., endorsing sexual scripts but making caveats and exceptions for oneself), and transformation (i.e., changing sexual scripts). A fourth limitation is the inclusion of only one index of sexual experience. This measure of sexual experience was holistic yet it failed to capture details about the types of sexual relationships people can have, such as friends with benefits. Finally, directionality could not be discerned given that the data were cross-sectional. Do young people befriend peers that are already similar to them or do young people become similar to their friends because they influence one another over time? Longitudinal data are needed to answer these questions.

Future directions should consider looking at peer sexual communications over time and across transitions. Whereas sex is considered normative in emerging adulthood, sex in early adolescence is considered more taboo. Therefore, young people's conversations likely change as young people age. For example, college students' acceptance of casual sex was found to increase over a one-year span while their belief in the value of sex occurring exclusively in relationships decreased over time (Morgan & Zurbriggen, 2012). With time, adolescents and emerging adults are also more likely to accumulate more sexual experiences and partners. Future research should consider how levels of sexual experience could potentially moderate the influence of peer sexual communications on sexual socialization. Do peer sexual communications influence sexually inexperienced youth more than sexually experienced youth? In addition, the influence of peers may fluctuate across adolescence and emerging adulthood. For example, peers may be more influential during transitions, including attending a new school and joining a Greek organization (e.g., fraternities, sororities). Indeed, transitions may represent times when young people are particularly attentive to new norms and expectations.

Understanding which sexual values, norms, and expectations adolescents and emerging adults endorse and enact necessitates more nuanced investigations into sexual socialization. One approach to gaining valuable insights is considering the roles of peers in sexual socialization. As advisers, informants, and referees, peers' influences are multifaceted and salient. Investigating peer influences may help explain how young people's sexual explorations defy simple descriptions because multiple sexual scripts co-exist and interpretations of such scripts are numerous.

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Table 1
Zero-Order Correlations between Demographic Variables and Dependent Variables for Women and Men

	AMIRS		Heterosexual Script		Sexual experience	
	Women	Men	Women	Men	Women	Men
Raised outside of U.S.	.21***	-.01	.17***	.01	-.12**	-.12*
Maternal education	-.10*	-.09	-.01	.01	.01	.10*
Paternal education	-.07	.05	.07	.14**	-.06	.30***
Age	.08	.03	-.02	.07	.09*	.14**
Religiosity	.10*	.12*	.14*	.02	-.13**	-.16**
Greek affiliation	.03	.05	.22**	.14**	.17***	.30***
Asian	.08	.02	.07	-.05	-.20***	-.24***
Latino	-.06	.05	-.03	.01	.06	.08
Black	.10*	.17***	.06	.04	-.03	.08
Means (standard deviation)						

* p<.05
 ** p<.01
 *** p<.001

Raised outside of U.S. (0=no, 1=yes)
 Greek affiliation (0=no, 1=yes)
 Self-identified as White (0=no, 1=yes)
 Self-identified as Asian (0=no, 1=yes)
 Self-identified as Latino (0=no, 1=yes)
 Self-identified as Black (0=no, 1=yes)
 Self-identified as multiracial (0=no, 1=yes)
 Self-identified as sexual minority (0=no, 1=yes)
 Single-parent household (0=no, 1=yes)

Table 2

Overall Means and Differences across Participant Gender

Script	Participant Gender	Mean	Standard Error	F	p
Hookup	Women	1.610	.041	.014	.906
	Men	1.617	.046		
Relational	Women	1.491	.039	16.038	<.001
	Men	1.260	.043		
Heterosexual	Women	1.601	.043	1.358	.244
	Men	1.526	.047		
Procreational	Women	0.398	.031	.663	.416
	Men	0.361	.034		

Table 3
Linear Mixed Model Predicting the Effects of Gender on Communications

Variable	Coefficient	SE	t ratio	df	p
Hookup Script					
Intercept	1.51	0.04	34.17	650.19	<.001
Participant gender	-0.15	0.07	-2.32	650.19	.021
Peer gender	0.19	0.03	6.101	508.00	<.001
Participant gender × peer gender	0.32	0.05	6.87	508.00	<.001
Relational Script					
Intercept	1.85	0.04	43.95	693.09	<.001
Participant gender	-0.35	0.06	-5.56	693.09	<.001
Peer gender	-0.72	0.03	-21.49	509.00	<.001
Participant gender × peer gender	0.24	0.05	4.76	509.00	<.001
Heterosexual Script					
Intercept	1.66	0.05	36.40	641.09	<.001
Participant gender	-0.22	0.07	-3.24	641.09	.001
Peer gender	-0.11	0.03	-3.62	507.91	<.001
Participant gender × peer gender	0.29	0.05	6.27	508.16	<.001
Procreational Script					
Intercept	0.53	0.03	15.93	692.68	<.001
Participant gender	-0.11	0.05	-2.18	692.68	.030
Peer gender	-0.26	0.03	-9.96	509.00	<.001
Participant gender × peer gender	0.14	0.04	3.60	509.00	<.001

Note. Participant gender and peer gender were dichotomized variables (0=female, 1=male).

Table 4
Estimated Marginal Means for Peer Communications

Participant Gender	Peer Gender	Estimated Marginal Means	Standard Error	Significance
Hookup Script				
Female	Female	1.51	.044	
Male		1.36	.049	.021
Female	Male	1.71	.044	
Male		1.87	.049	.011
Relational Script				
Female	Female	1.85	.042	
Male		1.50	.047	<.001
Female	Male	1.13	.042	
Male		1.02	.047	.074
Heterosexual Script				
Female	Female	1.66	.046	
Male		1.44	.050	.001
Female	Male	1.54	.046	
Male		1.62	.050	.294
Procreational Script				
Female	Female	0.53	.033	
Male		0.42	.037	.030
Female	Male	0.27	.033	
Male		0.30	.037	.496

Table 5
Regression Analyses Testing Which Discourses Best Predict Sexual Attitudes and Sexual Experience among Undergraduate Women

	Masculine Ideology	Heterosexual Script	Sexual Experience
<i>Step 1. Demographics</i>			
Raised outside the U.S.	.21**	.21**	-.08
Maternal education	-.07	-.02	-.03
Age	.02	-.06	.18**
Religiosity	.09	.15**	-.11
Greek affiliation	.09	.28***	.31***
Asian	-.01	.05	-.16*
Black/African American	.10	.11	.06
<i>Step 1 adjusted R²</i>	.050	.113	.149
<i>Source: Female Peers</i>			
Hookup	-.01	-.04	.13
Relational	-.06	-.05	-.01
Heterosexual	.19	.39***	.02
Procreational	-.05	-.09	-.01
<i>Source: Male Peers</i>			
Hookup	.11	.08	.03
Relational	-.14	-.18*	-.08
Heterosexual	.02	.06	.13
Procreational	.11	.22**	-.10
<i>Step 2 adjusted R²</i>	.099	.309	.189
<i>Change in adjusted R²</i>	+.049	+.196	+.040
<i>Final equation F</i>	2.993***	9.211***	5.221***

Table 6
Regression Analyses Testing Which Discourses Best Predict Sexual Attitudes and Sexual Experience among Undergraduate Men

	Masculine Ideology (AMIRS)	Heterosexual Script	Sexual Experience
Step 1. Demographics			
Raised outside of the U.S.	-.04	.02	.02
Maternal education	-.08	-.01	.07
Paternal education	.01	.01	.04
Age	.01	.09	.15*
Religiosity	.10	.03	-.12
Greek affiliation	.07	.14*	.27***
Asian	.06	-.02	-.20**
Black	.16*	.04	.12
<i>Step 1 adjusted R²</i>	.016	-.007	.157
Step 2. Peer Communications			
<i>Source: Female Peers</i>			
Hookup	.22*	.01	.21*
Relational	-.15	-.12	.08
Heterosexual	.13	.01	.19
Procreational	.10	-.16	-.06
<i>Source: Male Peers</i>			
Hookup	-.11	.05	.05
Relational	-.07	-.08	-.12
Heterosexual	.19	.58***	-.02
Procreational	-.07	.08	-.01
<i>Step 2 adjusted R²</i>	.077	.282	.260
<i>Change in adjusted R²</i>	+.061	+.289**	+.103
<i>Final equation F</i>	2.151**	6.333***	5.776***