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The Double Standard at Sexual Debut: Gender, Sexual Behavior and Adolescent Peer Acceptance

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Abstract

A sexual double standard in adolescence has important implications for sexual development and gender inequality. The present study uses longitudinal social network data ($N = 914$; 11–16 years of age) to test if gender moderates associations between adolescents' sexual behaviors and peer acceptance. Consistent with a traditional sexual double standard, female adolescents who reported having sex had significant decreases in peer acceptance over time, whereas male adolescents reporting the same behavior had significant increases in peer acceptance. This pattern was observed net of respondents' own perceived friendships, further suggesting that the social responses to sex vary by gender of the sexual actor. However, findings for “making out” showed a reverse double standard, such that female adolescents reporting this behavior had increases in peer acceptance and male adolescents reporting the same behavior had decreases in peer acceptance over time. Results thus suggest that peers enforce traditional sexual scripts for both “heavy” and “light” sexual behaviors during adolescence. These findings have important implications for sexual health education, encouraging educators to develop curricula that emphasize the gendered social construction of sexuality and to combat inequitable and stigmatizing peer responses to real or perceived deviations from traditional sexual scripts.

Keywords

Sexual double standard; Gender norms; Adolescence; Social networks; Sexual activity

Although its meaning has changed, the belief that women and men are held to different standards of sexual conduct (i.e., the sexual double standard) remains pervasive in contemporary U.S. society (Bordini and Sperb 2013; Crawford and Popp 2003; Marks and Fraley 2006). When Reiss (1956) began researching the double standard over a half-century ago, premarital sex and the stigma attached to women who engaged in it were primary concerns. In the ensuing decades, the sexual revolution largely destigmatized female premarital sex per se (Risman and Schwartz 2002), shifting double standard research to the gendered consequences of sexual permissiveness (i.e., number of sexual partners) and casual sexual encounters (e.g., “hook ups”; Manning, Giordano, and Longmore 2006). Today, studies of gendered sexual scripts and the sexual double standard continue at a rapid pace, both because empirical evidence of a double standard has been mixed (Crawford and Popp 2003; Marks and Fraley 2005) and its implications for identity development and gender inequality remain profound (Armstrong, Hamilton, and England 2010).

An area that has received relatively little investigation is the sexual double standard in the context of adolescent development. This omission is particularly striking given that most youth have reached sexual maturity by early adolescence and more than 30% begin engaging in sexual behaviors by 9th grade (Centers for Disease Control 2012; Walvoord 2010). Although the well-studied topic of sexual permissiveness is less relevant at this age (Carver, Joyner, and Udry 2003), peer evaluations of emergent sexual behaviors and perceived sexual precociousness are likely to have large and lasting impacts on adolescents’ adjustment (Carpenter 2005). Moreover, the emergence of sexual behavior in adolescence occurs in the context of increasing psychological investment in peer relations for companionship, self-concept, and a sense of belonging (Giordano 2003). Thus, the manner in which the peer ecology reacts to sexual debut is particularly important both for the adolescents who initiate sexual activity and for the development of attitudes and norms among those who do not.

In our study, we draw on sexual script theory (Simon and Gagnon 1984, 1986, 2003) and longitudinal social network data to document sexual double standards in adolescence in the United States. We take advantage of yearly longitudinal data from 921 youth to measure within-person changes in adolescents’ friendships and sexual behavior from 6th to 9th grades. Such analyses help to elucidate the proposed mechanism underlying the double standard: that peer *responses* to individual sexual behaviors differ by gender. We also move beyond a unitary conception of sexual behavior by examining changes in peer acceptance following two sexual behaviors: having sex and “making out.” Distinguishing these behaviors is theoretically important because “light” sexual activities—such as holding hands, kissing, and making out—may be consistent with female adolescents’ traditional sexual scripts (i.e., they fit into a romance narrative and are considered relatively safe behaviors for girls, leaving virginity “intact”) and associated with increased peer acceptance (Tolman 2002; Wiederman 2005). Alternatively, male adolescents engaging in similar behaviors, particularly if these behaviors do not lead to sex, may be viewed as losing their independence and agency (central facets of hegemonic or heteronormative masculinity) and see decreases in peer acceptance (Eder, Evans, and Parker 1995; Miller 2008). To our knowledge, no study has yet tested this reverse double standard hypothesis for romantic non-coital behaviors.

Sexual Script Theory and Empirical Research

Sexual scripts are socially constructed cognitive schema that define normative sexual behaviors and inform individual actions in sexual situations (Simon and Gagnon 1984, 1986, 2003). At the cultural level, traditional sexual scripts are gendered prescriptions for appropriate sexual conduct, which scholars commonly measure through qualitative and survey analyses (Bowleg, Lucas, and Tschann 2004; Masters, Casey, Wells, and Morrison 2013). Studies in this vein generally find opposing sexual scripts by gender. Men and boys are believed to act on innate and strong sex drives to initiate heterosexual contacts for the purpose of sex (rather than romance) and pursue multiple sexual partnerships. In contrast, women and girls are expected to desire romance over sex, value monogamy, and “gatekeep” male sexual advances within committed relationships. A sexual double standard then arises because women and girls who violate traditional sexual scripts and have casual and/or multiple sexual partnerships are socially derogated, whereas men and boys performing similar behaviors are rewarded for achieving masculine ideals.

The existence of a sexual double standard has important implications for gendered sexual development. In particular, the sexual double standard likely socializes male and female adolescents to differing behavioral expectations and sexual risks. Empirical evidence demonstrates that young women who endorse the sexual double standard are less likely to have sex, perceive greater barriers to condom use, and are less likely to use condoms (Crawford and Popp 2003; Lefkowitz, Shearer, Gillen, and Espinosa-Hernandez 2014; Moore and Rosenthal 1992). Moreover, the sexual double standard can lead girls and women to feel shame and guilt if they do engage in sexual behaviors (Tolman 2002). In contrast, young men who more strongly endorse the sexual double standard tend to have more sexual partners (Lefkowitz et al. 2014). Thus, if peer ecology socializes male and female adolescents differently in reaction to their sexual behaviors, and if adolescents incorporate these messages into their sexual schemas, it might translate to future sexual beliefs and behaviors in adolescence and beyond.

Recent research on sexual scripts and the double standard has focused on college-aged populations and “hook up” (i.e., casual physical encounters with no expectations for future commitment) culture (Allison and Risman 2013; Bradshaw, Kahn, and Saville 2010; Conley, Ziegler, and Moors 2013; Glenn and Marquardt 2001). The empirical evidence from these studies remains decidedly mixed (Crawford and Popp 2003; Marks and Fraley 2005). Qualitative studies generally find support for a “strong” double standard, such that interviewed young adults report that men are likely to receive affirmations as “players” or “studs” for casual and/or frequent sexual encounters whereas women are negatively labeled as “sluts” or “hos” for similar activities (Bogle 2008; Glenn and Marquardt 2001; Jackson and Cram 2003; Shoveller, Johnson, Langille, and Mitchell 2004).

Quantitative studies, however, have provided more equivocal results. Although some quantitative research continues to find evidence for the sexual double standard (Bordini and Sperb 2013; Crawford and Popp 2003; England and Bearak 2014), several experimental vignette designs and some attitudinal studies do not document a strong sexual double standard. Instead these latter studies find that young adults are negatively evaluated for

permissive sex regardless of gender (Allison and Risman 2013; Gentry 1998; Marks and Fraley 2005), that is, a “weak” double standard whereby the negative evaluations of young men’s permissiveness are only somewhat less than the negative evaluations of young women’s permissiveness (see Bordini and Sperb, 2013, for a review), or even a reverse double standard whereby young men are evaluated more harshly for their sexual behavior than are young women (Howell, Egan, Giuliano, and Ackley 2011; Zaikman and Marks 2014).

The differences between qualitative and quantitative double standard studies may arise from the level at which sexual scripts are measured. Qualitative studies may be identifying cultural-level scripts of gender-appropriate sexual behavior, whereas quantitative studies may be measuring inter- or intra-personal scripts that are inconsistent with broader traditional beliefs. Alternatively, apparent distinctions between cultural- and individual-level sexual scripts may be due to the gap between ideal beliefs and actual behaviors in social settings. For example, experimental evidence suggests that young adult men and women are more likely to detect social cues that confirm rather than disconfirm cultural-level sexual double standards (Marks and Fraley 2006). Thus, survey and experimental research divorced from the social contexts in which sexual appraisals are actually made will underestimate traditional sexual scripts (Marks and Fraley 2007). Desire to apply a single sexual standard or hold sexually progressive views may not eliminate individuals’ applications of double standards in practice, especially when sexual evaluations emerge in dynamic peer settings (Kreager and Staff 2009). Overcoming this methodological limitation requires data as close as possible to the social contexts in which evaluations of sexuality take place.

Prior research on the sexual double standard suffers from two additional shortcomings. First, studies typically rely on convenience samples of undergraduates, which provide important information about campus sexual cultures, but do not illuminate gendered processes surrounding sexual debut, which occurs prior to high school graduation for the majority of individuals in the United States (Centers for Disease Control 2012). Furthermore, it is estimated that only one-fourth of adolescents have their first sexual experience outside a romantic relationship (Manning, Longmore, and Giordano 2005), and the number of sexual partners in adolescence remains relatively low. Thus, focusing on sexual permissiveness and casual sex, as is typical of most college-based and young adult studies, does not generalize to adolescence. Norms and social reactions to sexual *precocity*, rather than perceived promiscuity, would be of more theoretical interest during adolescence. This shift also places greater emphasis on early transitions from virgin to non-virgin than number of sexual partners or frequency of sex.

Second, double standard research has predominantly focused on sexual intercourse behaviors (e.g., casual sex, sexual permissiveness). Such emphasis is warranted because these behaviors are clearly associated with traditional sexual scripts, with female permissiveness and casual sex expected to be socially sanctioned through gossip and lowered peer acceptance. In contrast, similar male behaviors should generate social rewards and increased peer acceptance. Missing from this research, however, are behaviors consistent with traditional female sexual scripts but inconsistent with traditional male scripts. Female adolescents are expected to “be desirable but not desiring” (Reid, Elliott, and Webber 2011),

meaning that dating and romantic non-coital behaviors (e.g., kissing, holding hands, making out) should be socially rewarded through increased friendships and improved reputations. These behaviors simultaneously demonstrate a girl's other-sex attractiveness and gatekeeping abilities (Wiederman 2005).

For male adolescents, "light" sexual and romantic behaviors that do not progress to sex could symbolize passivity and a sublimation of hegemonic masculinity to feminine control. Participation in non-coital romantic activities may then lower boys' esteem in the eyes of peers because they are inconsistent with group expectations for competitive and aggressive masculinity (Eder, Evans, and Parker 1995; Marks and Fraley 2007). This reverse double standard may be even more dramatic in adolescence, when most couples are transient and peer groups are predominantly same gender. Indeed, early romantic relationships may originate as means of garnering same-gender acceptance or to fulfill group expectations (Brown 1999). Understanding the consequences of both romantic and sexual behaviors in these peer-driven contexts should illuminate the contours of contemporary sexual double standards.

Understanding a sexual double standard in adolescence is also of interest because early socialization to gendered sexual scripts likely has lasting impacts on future sexual attitudes and behavior. Peer influence and the importance of peer acceptance peak during early adolescence (Giordano 2003), sustaining the social fishbowl in which sexual behaviors are monitored and defined. Moreover, the gender segregation typical of child and early adolescent friendship networks adds to the policing and reinforcement of traditional sexual scripts (Eder et al. 1995; Mehta and Strough 2009). Not only does the gender-segregated world of teen peer culture increase the salience of gendered sexual scripts and make it difficult to maintain sexual secrets, but gossip and evaluations of sexual (mis)conduct quickly diffuse through dense peer networks (Brown 1999). As a result, female adolescents' first experiences with sex not only may be less desired and satisfying than male adolescents' first experiences (Guggino and Ponzetti 1997; Sprecher, Barbee, and Schwartz 1995), but also may result in lower peer acceptance as prior friends seek to distance themselves from the sexual transgressor.

Network Approaches to the Adolescent Double Standard

Kreager and Staff (2009) approached the adolescent sexual double standard through an innovative network lens. Using data from the National Longitudinal Study of Adolescent Health (Add Health), they tested associations between the number of self-reported sexual partners and peer-reported friendship nominations (i.e., peer acceptance). They found evidence for a double standard in that the number of self-reported sexual partners was positively associated with peer acceptance for male adolescents and negatively associated for female adolescents. Furthermore, they found that the associations varied by students' socioeconomic status (SES) and by gender of the peers who nominated the student as a friend. The double standard was more likely to occur for high SES females and low SES males. The friendship benefits associated with male permissiveness and the friendship costs associated with female permissiveness were driven by females' friendship nominations. Kreager and Staff (2009) concluded that the double standard not only depends on the gender

of sexual actors, but also their sociodemographic characteristics and the gender of peer evaluators.

Although suggestive, Kreager and Staff's (2009) study has several limitations. Its cross-sectional design is a primary concern because the direction of the reported associations is uncertain. In addition, the associations could be spurious due to unobserved between-person heterogeneity. For example, low-esteem female adolescents may have low peer acceptance and seek approval through sexual relationships, whereas high-esteem male adolescents may have high peer acceptance and greater access to multiple sexual partners. Another study limitation lies in the aging Add Health data. The sexual double standard is subject to cultural shifts (Risman and Schwartz 2002), and thus patterns observed in Add Health's two-decades-old data may not hold in more recent youth cohorts. Finally, similar to other studies in this area, Kreager and Staff (2009) narrowly focused on sexual permissiveness, operationalized as number of self-reported sexual partnerships.

Lyons, Giordano, Manning, and Longmore (2011) also approached the adolescent sexual double standard from a network perspective. They did not find significant associations between sexual partnerships and self-perceived peer popularity, interpreting these findings as "some contradictory evidence regarding the basic notion that violating the sexual double standard is associated with heavy social costs" (p. 447). However, sub-sample interviews suggested that respondents did perceive, and often contribute to, a sexual double standard. To resolve these apparently contradictory findings, Lyons et al. asserted that sexually permissive female adolescents are able to maintain close friendships with peers who share similar behaviors or sexual attitudes even though the larger peer community evaluates such behaviors negatively. The Lyons et al. study benefits from its mixed-methods design, longitudinal assessment, and more recent data collection. However, their sample was not school-based and therefore did not include peer-nominated status measures. Compared to self-reported popularity, peer friendship nominations can provide more variability, and they are less likely caused by psychological constructs like self-esteem and depression. Associating multiple sexual behaviors with a continuous and longitudinal measure of peer acceptance would advance prior tests of the adolescent double standard.

Another advantage of analyzing the sexual double standard with longitudinal friendship network data is that researchers are able to distinguish changes in individuals' self-perceived friendships (i.e., self-reported outgoing friendship nominations) from changes in their received friendships (i.e., peer-reported friendship nominations toward the adolescent) (Holland and Leinhardt 1981; Rulison, Kreager, and Osgood 2014). This distinction between self- and peer-reported friendships is particularly advantageous for isolating social responses to individual behaviors or characteristics (e.g., stigmatization) over time. As Link and Phelan (2001, p. 366) emphasize when reviewing stigma research, a primary challenge to operationalizing the concept is that prior studies commonly take an individualistic focus and measure "the perceptions of individuals and the consequences of such perceptions for the micro-level interactions." Missing from these approaches are the socially constructed consequences of non-normative behavior for the stigmatized individual, which Link and Phelan argue are typically social rejection and status loss. Measuring changes in an adolescent's peer-reported friendships after sex while controlling for his or her self-reported

friendships then locates the source of potential status gains or losses in peer reactions rather than in the adolescent's actions or attributes. Network data then allow us to more accurately measure social exclusion or acceptance processes and attend to Goffman's (1963, p. 3) call to view stigma as "...a language of relationships, not attributes...."

Current Study

In our study, we examine the within-person association between peer acceptance and sexual behaviors in a longitudinal sample of male and female adolescents. We derive two competing hypotheses for whether gender moderates the sexual behavior-peer acceptance association. From sexual script theory, we propose that female adolescents' peer acceptance will decrease following sex, whereas male adolescents' peer acceptance will increase (Hypothesis 1a). The alternative hypothesis, derived from several recent studies of young adults' sexual attitudes and vignette evaluations (Allison and Risman 2013; Gentry 1998; Marks and Fraley 2005; Zaikman, Vogel, Vicary, and Marks in press), asserts that peer acceptance of male and female adolescents will both decrease following sex (Hypothesis 1b). From literature describing "normative" sexual scripts, we generate another hypothesis for non-coital "light" sexual behavior, asserting a reverse sexual double standard whereby female adolescents' peer acceptance will increase and male adolescents' peer acceptance will decrease following reports of making out (Hypothesis 2).

Following findings from Kreager and Staff (2009), we also test if the association among gender, peer acceptance, and sexual behaviors is moderated by student's SES and the gender of peer nominators (Hypothesis 3). Finally, we conduct sensitivity analyses to test (a) if sexual behaviors are associated with out-of-grade friendships (Hypothesis 4a) and (b) if the associations between peer acceptance and sexual behaviors are moderated by adolescents' dating status (Hypothesis 4b). The former test is important for ruling out the possibility that sexually active youth replace their in-grade friends with older or out-of-school friends, whereas the latter test is important because sex may be less stigmatizing for female adolescents involved in a romantic relationship than for female adolescents who have sex outside a romantic relationship (Tolman 2002). In sum, our study represents a comprehensive analysis of the gendered social consequences associated with adolescent sexual activity.

Method

Participants and Procedure

Data came from a sample of adolescent participants in the PROMoting School-community-university Partnerships to Enhance Resilience (PROSPER) longitudinal study (Spoth, Greenberg, Bierman, and Redmond 2004; Spoth et al. 2007). PROSPER is a large-scale prevention effectiveness trial aimed at reducing adolescents' substance use. It follows two successive cohorts of 6th grade students living in 28 rural communities in Iowa and Pennsylvania. Each community was selected because it (a) had a public school district with 1,300–5,200 enrolled students and (b) had at least 15% of students eligible for reduced-cost lunches. One of the Pennsylvania schools did not agree to participate in the network portion

of the study necessary for the current research, resulting in 27 school districts available for analyses.

Students completed confidential pencil-and-paper questionnaires administered during school hours in the Fall of 6th grade, and in the Spring of 6th, 7th, 8th, and 9th grades (totaling approximately 10,000 students per wave and 15,000 students completing at least one survey). The in-school survey included friendship network items used to construct our dependent measures. Across the five waves, participation rates ranged from 86% to 90% of enrolled students, and eligible students completed on average 4.18 of 5 in-school surveys. In addition to the in-school survey, a random sample of 2,267 participating families were invited to complete in-home written questionnaires for the focal adolescent, mother, and if present, father (Lippold, Greenberg, Graham, and Feinberg 2013). Adolescent in-home written questionnaires included self-reported sexual behaviors. Of the invited families, 979 (43%) completed at least one in-home assessment and 914 (93%) of these families included an adolescent who also completed an in-school survey and comprise our analytic sample. Many invited families declined in-home surveys, which may bring into question the generalizability of our results to the PROSPER population. Youth participating in the in-home interview were no different from other PROSPER youth with regard to free-lunch receipt, gender, living with two biological parents, and substance use initiation (Lippold, Greenberg, Graham, and Feinberg 2013). However, they were less likely to be delinquent, had higher grades, and had higher peer acceptance than other PROSPER respondents. Table 1 displays descriptive statistics for all variables by wave and gender. Approximately 33% of girls and 34% of boys attrited from the sample by wave 5.

Measures

Peer acceptance—During the PROSPER in-school survey, all students nominated up to seven best or close friends in the same school grade and reported how many comparably close friends they had outside their grade or school. Friendship nominations were collected using an open name generator where students wrote the first and last names of each friend on the survey form, which were then matched to student rosters. Names were matched 83% of the time.

We operationalized peer acceptance at each wave with the number of incoming friendship ties received (i.e., network indegree) from same-grade peers. Our primary dependent variable is thus a measure of sociometric likeability (Cillessen and Marks 2011). Across all waves, the average female respondent received 4.1 friendship nominations and the average male respondent received 3.3 nominations, which was significantly different (see Table 1). Nominations ranged from 0 to 16 for females and 0 to 15 for males, and the distributions were right skewed. For both girls and boys, the mean number of received friendship nominations peaked in 7th grade (wave 3). We also created measures of same-gender and cross-gender peer acceptance. Because approximately 75% of the sample did not receive any cross-gender nominations in any given wave, we dichotomized the cross-gender peer acceptance measure into “no cross-gender incoming ties” (coded 0) and “one or more cross-gender incoming ties” (1).

Sexual behaviors—We measured students’ self-reported past-year sex with the item, “During the past 12 months, how many times have you had sex?” Numerical responses were dichotomized into “none” (coded 0) and “once or more” (1) for each wave. As indicated in Table 1, the prevalence of sex was extremely rare in the early waves, approaching zero for both 6th grade (wave 1) girls and boys, but rose to 10% for both genders by 9th grade (wave 5). The data therefore capture sexual onset for a minority of respondents. To better identify students who transition from no sex to first sex, we also created a First Sex variable that is coded as “0” for all waves prior to self-reported sex and “1” for all waves after sex is reported one or more times. There is a small chance that respondents who reported no sex at the first wave lost their virginity prior to the 6th grade. The near-zero prevalence of sex in the first two waves makes this possibility unlikely, but data limitations mean that we cannot rule out the possibility. By the 9th grade, 17% of girls and 12% of boys were classified as non-virgins. It is also possible that, given the wording of the question, respondents interpreted “sex” as “heavy” non-coital sexual behaviors other than intercourse (e.g., oral or anal sex). Throughout the text, we therefore refer to this variable using the broader label of “had sex” rather than more specific labels of “intercourse” or “coitus.”

Light sexual behavior was operationalized at each wave from the item, “During the past 12 months, how many times have you made out?” Responses were dichotomized into “none” (coded 0) and “once or more” (1). Although uncommon in the early waves, a majority of the girls and over 40% of boys reported making out at least once by the 9th grade. As one would expect, the overwhelming majority (over 95% at every wave) of adolescents who reported sex also reported making out and between 10–25% of those who reported making out also reported sex at each wave.

Control variables—We include several time-varying control variables that prior literature suggests are correlated with peer acceptance and/or sexual behaviors and thus may make our hypothesized associations spurious (Boislard, Dussault, Brendgen, and Vitaro 2013; Kapungu, Holmbeck, and Paikoff 2006; Rostosky, Wilcox, Wright, and Randall 2004; Schvaneveldt, Miller, Berry, and Lee 2001). These variables were measured in the in-school survey.

Outdegree is the number of friendship nominations (ranging from 0 to 7) that respondents make at each survey wave. For models predicting peer acceptance from same-gender and other-gender peers, we include measures of same-gender and cross-gender outdegree and dichotomized the cross-gender measure into “no cross-gender outgoing ties” (coded 0) and “one or more cross-gender outgoing ties” (1). *Family Relations* at each wave is the grand mean of five subscales ($\alpha=.81$), standardized to wave 4 means and standard deviations to provide a common metric, assessing child-parent affective quality (12 items, e.g. “During the past month, when you and your [mom/dad] have spent time talking or doing things together, how often did [she/he] let you know [she/he] really cares about you?”), joint activities (6 items, e.g. “During the past month, how often did you work on homework or a school project with your mom or dad?”), parental monitoring (5 items, e.g. “During the day, my parents know where I am.”), inductive reasoning (3 items, e.g. “My parents give me reasons for their decisions.”), and family cohesion (7 items, e.g. “Family members really help and support each other.”).

Grades at each wave are operationalized from the question “What grades do you generally get in school?” Responses ranged from “Mostly lower than D’s” (coded 1) to “Mostly A’s” (5). *Religious Attendance* at each wave is derived from the question, “How often do you go to church or religious services?” Responses ranged from “Never” (1) to “More than once a week” (8). *Delinquency* at each wave is operationalized through self-reports of 12 delinquent behaviors in the past 12 months. A graded-response IRT model was used to score this measure, with item parameters coming from the middle wave of data collection. IRT differentially weights items according to their seriousness (i.e., lower frequency items are given more weight) and provides scores that are approximately normally distributed (see Osgood, McMorris, and Potenza 2002). *Drinking* at each wave is derived from the item, “During the past month, how many times have you had beer, wine, wine coolers, or other liquor?” Responses ranged from “Not at all” (coded 1) to “More than once a week” (5). *School change* indicates that a respondent changed schools between survey waves, a transition likely associated with changing peer and sexual contexts (South, Haynie, and Bose 2005). Finally, we account for *grade and age trends* in our outcome with measures for Wave and Wave².

Analyses

A major advantage of the longitudinal network data in PROSPER is that it allows us to examine how within-person changes in peer acceptance are associated with within-person changes in making out and having engaged in sex. In such analyses, individuals are compared to themselves across measurement occasions, thus these models statistically control for all time-stable factors that might be related to both peer acceptance and sexual behavior. For instance, at least some of the effect of sexual behavior on peer acceptance may be driven by relatively stable between-person differences in attractiveness, athleticism, race, or socioeconomic family background. An added advantage of our within-person analytical design is that it correctly specifies the temporal ordering of primary concepts. The dependent measures, friendship nominations, are measured concurrent with survey administration and therefore chronologically follow the primary independent variables measuring sexual behavior occurring in the year prior to each survey wave. This temporal specification reduces potential reverse causal ordering (i.e., that changes in friendships increase or decrease the likelihood of sexual behavior over time).

In fixed effects estimation, mean values are calculated for each youth over time for each outcome (i.e., overall-, same- and cross-gender peer acceptance) and predictor variable (i.e. making out, sex, family attachment, grades, etc.). These person-specific mean values are then subtracted from observed values at each time point. Within-person deviations in outcomes are then regressed on within-person deviations in predictors, controlling for time (i.e., Wave and Wave²). Formally, the model appears as follows:

$$\left(y_{it} - \bar{y}_i \right) = \left(\mathbf{x}_{it} - \bar{\mathbf{x}}_i \right) \beta + (\epsilon_{it} - \epsilon_i)$$

where i identifies each person, t indicates wave, y is one of the peer acceptance dependent variables, \mathbf{x} is a vector of time-varying independent variables (including sex, making out,

and wave), β is a vector of estimated coefficients, and ϵ are person and person-wave error terms. An additional advantage of fixed-effects models is that estimated coefficients remain unbiased if sample attrition is correlated with the individual error term, ϵ_i , and in unbalanced panel designs (i.e., t varies over individuals).

We estimated these models with the “xtreg, fe” command in STATA. This command yields coefficients that capture within-person changes in peer acceptance as a function of changes in sexual activity and wave. We added a small constant to the peer acceptance measure and then logged it to account for the right skew. We estimate robust standard errors to correct for potentially heteroscedastic and dependent error terms, and logistic models were estimated for binary outcomes. In addition, we used chained multiple imputation (using the “mi” command in STATA) to impute missing data on our control variables. The amount of missing data was relatively modest, ranging from 0% for school change between waves 1 and 2 to 14% for religious attendance at wave 1.

Results

Overall Sexual Activity and Peer Acceptance

We first examine if yearly changes in sex and making out are associated with changes in peer acceptance from grades 6 to 9 in the pooled sample. Table 2 presents estimates from a series of linear fixed effects models of peer acceptance. In Model 1, estimates for the total sample (i.e., pooled female and male adolescents) show that, net of time-varying control variables, year, and time-stable factors, no statistically significant associations appear between having sex or making out and peer acceptance in the total sample. That is, averaging across females and males, there is no evidence that having had sex or making out are associated with changes in incoming friendship nominations.

Looking at other covariates in Model 1, we also see little evidence that our individual-level time-varying covariates predict changes in peer acceptance over the observed waves. The significant positive coefficient for Wave and significant negative coefficient for Wave² suggest an inverted U-shaped peer acceptance pattern over time consistent with the observed peak in peer acceptance in 7th grade (see Table 1).

Sexual Activity and Peer Acceptance by Gender

Null associations between the two sexual behaviors and peer acceptance in the pooled gender model may mask opposing patterns for females and males. To test Hypotheses 1a and 1b, we thus split the sample by gender and estimate similarly-specified models for females and males. Consistent with a “strong” double standard (Marks and Fraley 2005) and in support of Hypothesis 1a, the coefficients for having sex are in opposite directions for female and male adolescents, where females see an approximate 45% decline [i.e., $\exp(-.58)$] in peer acceptance in waves where they report having sex and males see an 88% increase [i.e., $\exp(.63)$] in peer acceptance in waves where they report having sex. Moreover, this gender difference is large in magnitude and is statistically significant. A z -test of the equality of coefficients across independent samples (Paternoster, Brame, Mazerolle, and Piquero 1998) demonstrates that the females’ coefficient for having sex is significantly

smaller than the males' coefficient ($z = -3.31, p < .001$). The significant positive coefficient for having sex in Model 1 for male adolescents also contradicts Hypothesis 1b, drawn from several studies of young adult sexual attitudes, that both male and female adolescents are penalized for sexually permissive behaviors (in this case operationalized as adolescent sex).

Results from Model 1 for females and males also show that, net of reported sex, females' peer acceptance increases by approximately 25% [i.e., $\exp(.22)$] in waves in which they report making out, and males' peer acceptance declines by about 29% [i.e., $\exp(-.34)$] in waves in which they report the same behavior. As with having engaged in sex, this gender difference is statistically significant ($z = 3.09, p = .002$). We thus find support for Hypothesis 2 that light sexual behavior is consistent with female sexual scripts and inconsistent with male sexual scripts. The pattern of results suggests that participating in light sexual activity creates a sexual double standard opposite of that found for having had sex.

Model 2 adds an outdegree covariate to Model 1, which captures the number of outgoing friendship nominations sent by each adolescent respondent. The coefficient for this variable is positive and significant, meaning that adolescents who send more friendship nominations are also likely to receive more incoming friendship nominations from peers. This result is not surprising and is consistent with ideas of social exchange (i.e., friendship investments are likely to be reciprocal; Laursen and Hartup 2002). More important for the current study was that including outdegree did little to affect the gendered associations between sexual behaviors and peer acceptance. For example, the reduction in females' peer acceptance but increase in males' peer acceptance following sex do not appear to be accounted for by changes in the number of adolescents' outgoing friendship ties. This finding suggests that the friendship consequences of having sex are not solely due to self-selection processes (e.g., female adolescents narrowing their friendship circles to be with a new sexual partner) and have a solid basis in peer responses to the sexual behaviors themselves.

In unlisted analyses (available upon request), we also examined socioeconomic disadvantage (operationalized as receiving free or reduced lunch) as a potential moderator of sexual behavior and peer acceptance. We created interactions between reduced-cost lunch receipt at 6th grade (a stable indicator of socioeconomic disadvantage) and our sexual behavior measures in Model 2 for females and males. Because the free-lunch variable did not vary over time, it did not have a main effect in the fixed-effects model. None of the interactions reached statistical significance, suggesting that, in contrast to Hypothesis 3, the observed patterns did not vary by respondents' level of disadvantage.

To help visualize the gendered patterns, Figure 1 plots predicted peer acceptance values over wave for hypothetical females and males who begin with similar sexual behaviors but then diverge from one another beginning at wave 3 (all other covariates held at their gendered means). We plotted predicted values for three hypothetical male and female adolescents: a respondent who (a) does not report having sex or making out at the observed waves (solid line), (b) reports making out at waves 3 through 5 but never reports having sex (dashed line), and (c) reports making out and having sex at waves 3 through 5 (dotted line). Note that we did not include a category for having sex without making out because this group never exceeded 5% of the sample at any wave. As can be seen in Figure 1a, female adolescents

who report making out without having sex beginning in the 7th grade are expected to have approximately 0.5 more friendships by 9th grade than are female adolescents reporting no sexual behaviors. Because the penalty for having sex is larger than the benefit of making out, females who report both behaviors are expected to have approximately 0.5 fewer friendships by 9th grade than are females who report neither behavior. The opposite pattern is observed for male adolescents: Males who make out without having sex beginning in 7th grade are expected to lose a little less than 0.5 friendships by 9th grade compared to males without reported sexual behaviors. Male adolescents reporting both behaviors beginning in 7th grade are expected to have about 0.4 more friendships by 9th grade than are males who report neither behavior.

The sex measure reported in Table 2 is operationalized as a time-varying covariate, meaning that sex reported in waves following initiation are assumed to continue to influence the association between having sex and peer acceptance. Alternatively, we can operationalize sex as the transition from virgin to non-virgin (i.e., code the measure as “0” at all waves prior to first reported sex and “1” for the wave when sex is first reported and at all following waves). This operationalization allows us to examine if changes in peer acceptance are primarily associated with the transition to first sex or with sex that continues to occur throughout the observed period. Model 1, Table 3, replaces the time-varying sex variable with a variable capturing the transition to first sex. For both female and male adolescents, the coefficient for first sex varies little compared to the sex coefficients in Model 1, Table 2. The double standard appears to occur at both first sex and in time periods following sexual initiation.

It may also be that the association between having sex and peer acceptance is conditional on making out, or vice versa. In Model 2, Table 3, we examine potential moderation between sex and making out by comparing dummy indicators for (a) person-waves where respondents report having sex (with or without making out) and (b) person-waves where respondents report making out without having sex—to the reference category of person-waves where respondents do not report either behavior. We combine waves where respondents report having sex without making out with waves where respondents report having sex and making out because of the low proportion of waves where sex was reported without making out.

For female adolescents, waves in which they only make out without having sex are associated with significantly greater peer acceptance than waves where they did not make out or have sex. For male adolescents, we observe the opposite pattern, such that waves where they make out without having sex result in significantly less peer acceptance compared to waves where they report neither sexual behavior. Although the coefficients for having sex (with or without making out) are not significantly different than the reference category of not having sex or making out for both genders, when the reference category is changed to making out, these associations achieve statistical significance ($p = .003$ for females, $p = .012$ for males). Again, the opposing patterns across gender are consistent with differential sexual scripts and a sexual double standard.

To this point, we have predicted peer acceptance originating from all peers, whether male or female. In Table 4, we disaggregate incoming friendship nominations by gender to examine if sexual behaviors result in greater changes in same-gender versus cross-gender friendships. Because the frequency of cross-gender peers is low at our observed ages, we dichotomize these into “no cross-gender nominations” and “one or more cross-gender nominations,” which are then modeled with logistic fixed-effects regressions. Looking first at the same-gender peer acceptance models (Model 1 for girls and boys), we see strong similarities in estimated coefficients to Model 2 of Table 2. This result is not surprising because the majority of incoming nominations modeled in Table 2 come from same-gender peers. More interesting are the cross-gender models (Model 2). Here, we observe that, similar to same-gender nominations, female adolescents who report having sex are significantly likely to lose male friends and female adolescents who report making out are significantly likely to gain male friends. However, for male adolescents, coefficients from the models of same-gender peer acceptance differ from those of other-gender peer acceptance. In particular, males who report making out are likely to see significant declines in friendship nominations from other males but the coefficient for other-gender peer acceptance is not statistically significant and close to zero. Any social penalty associated with boys making out appears to come solely from other male adolescents.

It is possible that sexually-active adolescents replace same-grade friendships with older or younger peer relationships. This possibility may be particularly likely for female adolescents, who are more likely than male adolescents to date older heterosexual partners (Halpern, Kaestle, and Hallfors 2007). We were able to gain leverage on this idea using items collected in PROSPER waves 4 and 5. During those interviews (8th and 9th grade), students were asked how many friends they had outside their school-grade, ranging from 0 to 10. In unlisted analyses, we used within-person change analyses to predict this measure with the same model specification of Table 2, Model 2, for males and females. We observed no significant associations between sexual behaviors and changes in female or male adolescents’ out-of-grade friendships over the two waves. We thus found no evidence supportive of Hypothesis 4a, that sexual activity coincided with increased out-of-grade friendship ties.

It may also be that the association between sexual behaviors and peer acceptance is moderated by romantic involvement with the sexual partner. Female adolescents, in particular, may be at greater risk of stigmatization for engaging in sexual activities with a non-romantic partner (Crawford and Popp 2003; Tolman 2002). Unfortunately, PROSPER did not begin collecting dating status items until wave 4, and nominated partners are not connected to reported sexual behaviors (i.e., the sexual data are not dyadic). We were therefore unable to accurately test the romantic relationship moderation hypothesis. However in unlisted analyses (available upon request), we did include past year dating status and interactions between this variable and our sexual behaviors in a within-person change model of peer acceptance similar to Table 2, Model 2, for females and males. Dating had a significant positive association with peer acceptance (i.e., dating respondents had more friends than those who did not), but the interactions between dating and our sexual behaviors never approached significance, so there was not support for Hypothesis 4b.

Discussion

Gender scripts perpetuating a sexual double standard remain a central concern among gender and sexual behavior scholars. During adolescence, a widespread sexual double standard promotes gender inequality, suppresses female adolescents' healthy sexual desires, and motivates peers to stigmatize male and female adolescents perceived as gender non-conformists (Bordini and Sperb 2013; Crawford and Popp 2003; Tolman 2002). Although the internalization and deployment of distinct and potentially harmful gender scripts occurs in childhood (Martin and Ruble 2010; Tolman 2002), the application of differential gender expectations around sexuality begins in adolescence with the emergence of romantic and sexual strivings.

In our study, we addressed a significant gap in our understanding of the sexual double standard with an adolescent grade cohort. Building on recent research in this area (Kreager and Staff 2009; Lyons et al. 2011), we operationalized peer acceptance using a network measure of received friendship nominations. We then examined within-person changes in peer acceptance following self-reported sexual behaviors (i.e., having sex and making out) to estimate the peer acceptance of the two sexual behaviors and look for potential gender differences in this association. Our approach extends prior research by (a) focusing on sexual onset occurring in adolescence, (b) specifying the temporal ordering between sexual behaviors and gendered social responses from peers, (c) controlling for adolescents' outgoing friendship nominations to better isolate the social reactions to sexual behaviors, and (d) accounting for time-stable between-person differences that potentially create spurious associations between sexual behaviors and peer relations.

Our results were consistent with sexual script theory (Simon and Gagnon 1984, 1986, 2003) and a strong sexual double standard. Female adolescents who reported having sex had significant decreases in same-grade friends, whereas male adolescents who reported having sex had significant friendship increases. These patterns suggest that females and males receive very different social feedback during a critical period of sexual development. Even sexually abstinent adolescents would observe the social costs associated with sex for female youth and the social benefits of sex for male youth. For females, abstinence in adolescence may be a strategy for maintaining social acceptance, whereas for males, precocious virginity loss may be a strategy for social success.

Our analyses of "light" sexual behaviors (e.g., making out) add nuance to the traditional sexual double standard. Net of having sex, female adolescents who reported making out saw significant increases in peer acceptance, whereas male adolescents who reported the same behavior saw significant declines in peer acceptance. We argue that this reverse double standard is consistent with gender scripts promoting romance for females and discouraging romance for males. Accordingly, "light" sexual behaviors may serve as markers of sexual desirability and maturity for female adolescents, but may signify dependence and submission for male adolescents. Moreover, because making out almost always precedes sex, female youth will tend to benefit more than will male youth early in romantic relationships. This pattern would be consistent with Giordano, Longmore, and Manning's (2006) mixed-methods study, which found that early adolescent boys involved in romantic

relationships tend to have less confidence and perceived relationship power than their girlfriends. The authors argued that female adolescents have more experience than male adolescents with emotional and dyadic interactions resulting from their prior same-gender peer relationships, and they therefore adapt more easily to the new terrain of heterosexual romantic relationships. Our study adds to this narrative the idea that same-gender peers provide cross-pressures for sexual behaviors that affect romantic relationship dynamics. That female adolescents appear to be rewarded more than their male peers for making out, and that making out almost always precedes having sex, likely contributes to female adolescents' greater control over male adolescents early in romantic relationships. In this view, adolescent females' will continue to receive social rewards prior to having sex, but peer pressure and anticipated rewards contribute to adolescent males' attempts to move relationships toward sex. Differential peer reinforcement thus helps to sustain female sexual "gatekeeping" in adolescent romantic relationships (Baumeister and Vohs 2004).

Although we found that female adolescents' reports of having sex and making out behaviors resulted in similar associations with being chosen as a friend by males and females (i.e., sex was associated with reduced friendships from both male and female peers and making out was associated with increased friendships from both male and female peers), the same was not true for males. In particular, making out was not associated with significant changes in male adolescents being chosen as a friend by female adolescents. This finding suggests that, for adolescent males, the social costs of light sexual activity are primarily associated with responses from male peers.

An advantage of our analytical strategy was that we were able to predict changes in peer-reported friendships net of changes in self-reported (i.e., outgoing) friendships. In this way, we come closer to measuring the gendered social reactions associated with adolescent sexual behaviors. Even though adolescents who reported more friendships were also more likely to receive more friendship nominations, the gendered differences in the associations between sexual behaviors and peer acceptance remained significant when controlling for the former. It is thus more valid to claim that sex creates a negative peer response for girls and a positive social response for male adolescents. Our distinguishing incoming and outgoing social ties therefore permits traction on the often-elusive stigmatization process.

Limitations and Future Research Directions

Although our study represents a contribution to gender and double standard research, it is not without limitations. Perhaps the most significant limitation concerns the unknown generalizability of results beyond PROSPER's rural Iowa and Pennsylvania schools. It may be that rural America holds more traditional sexual values and is more gender-segregated than non-rural settings. Supporting the former hypothesis, the prevalence of sexual initiation by 9th grade in our study's sample is less than half that found in recent nationally representative surveys (Centers for Disease Control 2012; Walvoord 2010). This difference makes it essential that future researchers test if our results generalize to other regional and cultural contexts.

Another study limitation pertains to the unknown social visibility of respondents' reported sexual behaviors. It is likely that adolescents attempt to manage if, when, and what their

peers know about their sexual activities, particularly given perceptions of the social consequences of such behaviors. Moreover, sex only occurs in private settings, so knowledge of its existence beyond the sexual actors themselves should only occur via self-disclosure or gossip. PROSPER did not ask respondents about their awareness of peer sexual behaviors so it remains unclear if changes in peer acceptance following self-reported sexual behaviors are the direct results of peer evaluations of those behaviors. However, recent research suggests that adolescents communicate openly and often with friends about sexual behaviors and risks and that this communication typically exceeds that with parents (Busse, Fishbein, Bleakley, and Hennessy 2010; Ragsdale et al. 2014). The likelihood that sexual information circulates in peer networks is heightened by our findings that at least one sexual partner (i.e., male adolescents for sex and female adolescents for making out) benefit from such disclosures. Although our results are suggestive that sexual behaviors become public knowledge, future research would benefit from asking adolescents their perceptions of the sexual behaviors of nominated peers.

Another fruitful avenue for future research would be examining if a sexual partner's social status conditions the association between sexual behaviors and peer acceptance. For example, a female adolescent who makes out with a low status male adolescent may drop in social status compared to a female who makes out with a high status male. PROSPER did not collect dyadic data on sexual behavior so we were unable to connect self-reported sex with the respective partner's characteristics. Longitudinal data of both friendship and sexual networks would be ideal for better understanding the sex-status association. Longitudinal friendship and sexual data for a global network (e.g., school or community) would also allow more sophisticated network analyses (e.g., stochastic actor-based models for network dynamics such as SIENA) that estimate a wider set of network structural properties and are specifically designed to distinguish peer selection from peer influence processes (Snijders, Van de Bunt, and Steglich 2010).

It should also be noted that PROSPER's friendship nomination data allow us to operationalize peer acceptance (i.e., the number of received friendship nominations) but not peer-perceived popularity (i.e., the number of received "popular" nominations; see Cillessen and Marks, 2011, for a review). Our study therefore focuses on the association between sexual behaviors and peer likeability rather than the association between sexual behaviors and peer reputation. We are careful to confine our results to peer acceptance, likeability, or social preference, but similar processes should occur with a peer-perceived popularity outcome and we encourage future research to undertake such a study.

The survey limits our ability to understand social processes surrounding the sexual debut of sexual minority youth. PROSPER did not ask respondents the gender of their sexual partners or their sexual orientation more broadly, making it impossible to distinguish other-sex and same-sex sexual behaviors. Given the low prevalence of same-sex intercourse during adolescence, we assume that the observed patterns apply only to heterosexual relationships. We thus urge future research, using an oversample of sexual minority adolescents, to evaluate peer responses to same-sex sexual debut and public displays of affection.

Finally, future research should examine if the dynamics of sex and peer status vary from early adolescence to late adolescence and young adulthood. PROSPER friendship nominations have only been coded for grades 6–9, providing limited variation to examine age as a potential moderator of the sexual double standard. Future research that includes friendships during late adolescence will be able to gain greater leverage on this issue, which is particularly interesting because later adolescence coincides with a higher prevalence of sex and the prioritization of romantic and cross-gender relationships over same-gender friendships for both young women and men (Connolly and McIsaac 2011). Permissive and casual sex would also increase during this age range, further complicating peer applications of traditional gender scripts (Manning, Longmore, and Giordano 2005). Additionally, the association between precocious sexual behaviors and peer acceptance may vary in the short-term versus the long-term. For example, Allen, Schad, Oudekerk, and Chango (2014) recently found that making out was associated with increased peer status during early adolescence, but that the correlation weakened over age. Moreover, they also found that precocious sexual and minor delinquent behaviors were associated with long-term romantic relationship difficulties and increased substance use and criminal involvement. Examining such long-term consequences of sexual behaviors is beyond the scope of current project, but should be the focus of a future study.

Practice Implications

Despite these limitations, our findings have important implications for educators and prevention scientists who work with adolescents in school or other settings. Sexual health educators should recognize that the sexual double standard not only continues to exist, but also shapes the structure of adolescents' peer networks and individual adolescents' friendship experiences. Sexuality education should include messages about men's and women's roles in romantic and sexual relationships, as already recommended by SIECUS's comprehensive sexuality education curriculum beginning in pre-adolescence with coverage of gender roles in general and continuing in adolescence with discussions of gendered messages around perceptions and evaluations of peer dating and sexuality (National Guidelines Task Force 2004). Such lessons should include messages about gender equality, but also should discourage boys from choosing to engage in sexual behaviors because they believe it is expected of them or would enhance their reputation. In an age of social media, sexual education should also emphasize the negative consequences of gossip and public dialogue that conform to the sexual double standard and stigmatize male and female adolescents for real or perceived deviations from traditional gender scripts. In sum, our results suggest that sexuality education should continue to consider gender dynamics within adolescent dating relationships given the differential reputation outcomes of sexual behavior and extend such education to cover gendered responses to sexuality within the broader milieu of adolescent peer society.

Conclusion

Our study provides a significant contribution to sexual double standard research. With longitudinal peer network nomination data, we found evidence of a strong double standard during the period of sexual onset, such that female adolescents tend to lose peer acceptance after reporting having engaged in sex and gain acceptance after reporting making out,

whereas male adolescents tend to gain acceptance after sex and lose acceptance after making out. Far from disappearing, our results suggest that the sexual double standard and the gender scripts that underlie it remain alive and well during the developmental period when youth begin shaping their sexual identities and peer influence peaks.

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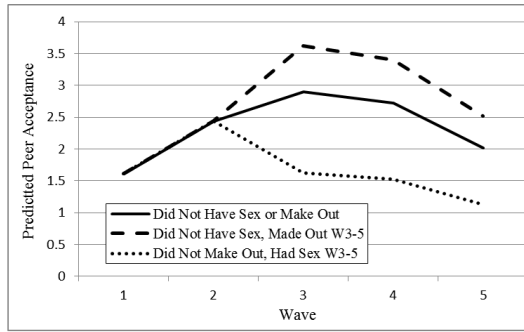
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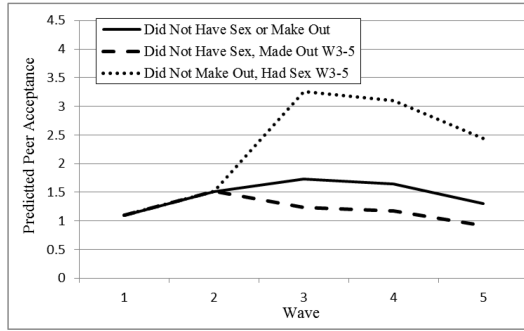
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a) Female Adolescents



b) Male Adolescents

Figure 1.
Predicted peer acceptance over waves by gender and sexual behavior

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Table 1

Descriptive Statistics by Wave and Gender

Variable	Female Adolescents (N=478)					Male Adolescents (N=436)				
	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5
<i>Peer Acceptance</i>										
Indegree	3.45	4.40	4.60	4.41	3.82	2.91	3.52	3.60	3.40	3.03
Same-Gender Indegree	3.27	4.17	4.28	3.96	3.44	2.75	3.22	3.26	3.02	2.65
Opposite-Gender Indegree (Any)	13.9%	17.5%	22.1%	27.8%	26.8%	13.0%	19.7%	20.8%	23.8%	26.7%
Outdegree	3.55	4.58	4.76	4.57	3.98	3.01	3.53	3.81	3.62	3.29
Same-Gender Outdegree	3.34	4.31	4.41	4.17	3.68	2.89	3.32	3.56	3.26	2.89
Opposite-Gender Outdegree (Any)	14.3%	20.1%	24.0%	29.0%	27.1%	10.7%	14.7%	16.9%	20.3%	25.3%
Out-of-Grade Friends	na	na	na	9.17	9.21	na	na	na	7.74	7.90
<i>Time-Varying Sexual Behavior</i>										
Had Sex	0.0%	1.0%	1.4%	4.6%	15.6%	0.5%	0.3%	1.2%	2.9%	9.5%
Made Out	4.0%	10.0%	22.1%	38.6%	54.5%	5.1%	8.0%	20.2%	29.9%	41.4%
<i>Time-Varying Controls</i>										
Family Attachment	.20	.16	.06	.00	-.11	.19	.14	.07	.03	-.10
Grades	4.33	4.28	4.24	4.27	4.11	4.27	4.21	4.10	4.09	4.01
Religious Attendance	5.58	5.67	5.45	5.21	4.73	5.05	5.25	5.23	5.15	4.73
Delinquency (IRT)	-.11	-.12	-.05	.00	.05	.05	.04	.03	.14	.11
Drinking	1.08	1.09	1.16	1.34	1.45	1.08	1.10	1.13	1.29	1.40
Changed Schools	0.0%	0.3%	36.6%	1.5%	83.5%	0.0%	0.0%	34.4%	2.5%	89.9%
Mean Age	11.40	12.43	13.42	14.42	15.42	11.46	12.47	13.45	14.47	15.47

Table 2

Linear Fixed-Effects Models of Peer Acceptance (i.e. Indegree)^{ab}

<i>Time-Varying Sexual Behavior</i>	Both Genders		Female Adolescents		Male Adolescents	
	β	Robust SE	Model 1 β	Model 2 Robust SE	Model 1 β	Model 2 Robust SE
Had Sex	-.106	(.172)	-.581 **	(.197)	-.563 **	(.195)
Made Out	.007	(.088)	.222 *	(.095)	.239 *	(.094)
<i>Time-Varying Controls</i>						
Family Attachment	-.063	(.109)	-.090	(.131)	-.105	(.132)
Grades	-.049	(.070)	-.067	(.081)	-.064	(.080)
Religious Attendance	.046	(.023)	.060 *	(.029)	.058 *	(.029)
Delinquency (IRT)	-.043	(.080)	-.140	(.099)	-.120	(.098)
Drinking	.016	(.071)	.020	(.079)	.015	(.080)
Changed Schools	-.118	(.073)	-.019	(.083)	-.011	(.082)
Outdegree ^d			.064 **	(.021)		(.021)
<i>Time</i>						
Wave	.685 ***	(.086)	.771 ***	(.107)	.695 ***	(.105)
Wave ²	-.106 ***	(.015)	-.119 ***	(.018)	-.109 ***	(.017)
Intercept	-.305	(.359)	-.217	(.414)	-.152	(.409)
<i>Variance Components</i>						
Within-Person	1.556		1.400		1.368	
Between-Person	1.435		1.243		1.238	
ICC	.540		.559		.550	
Person N	914		478		478	
Person-Waves N	3628		1892		1892	
			1714		1714	
					1.580	
					1.588	
					.498	
					436	
					1714	
					1.580	
					1.588	
					.498	
					436	
					1714	
					1.580	
					1.588	
					.498	
					436	
					1714	

^a Indegree and Outdegree transformed to reduce skew to ln(indegree+01) and ln(outdegree+01), respectively

^b Multiple imputation analysis (10 datasets)

* p<.05,

** p<.01,

100%

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Table 3

Linear Fixed-Effects Models of Peer Acceptance (i.e., Indegree) ^{a,b}

	Female Adolescents		Male Adolescents	
	Model 1	Model 2	Model 1	Model 2
<i>Time-Varying Sexual Behavior</i>	β	Robust SE	β	Robust SE
First Sex	-.516 *	(.200)	.704 *	(.281)
Made Out	.235 *	(.094)	-.306 *	(.154)
Had Sex (w or w/o Made Out)			.395	(.325)
Only Made Out	.254 **	(.097)	-.357 *	(.153)
<i>Time-Varying Controls</i>				
Family Attachment	-.100	(.132)	-.088	(.168)
Grades	-.065	(.081)	-.054	(.109)
Religious Attendance	.058 *	(.029)	.021	(.038)
Delinquency (IRT)	-.118	(.098)	.008	(.115)
Drinking	.013	(.080)	.056	(.114)
Changed Schools	-.016	(.082)	-.206	(.126)
Outdegree ^a	.064 **	(.021)	.140 ***	(.027)
<i>Time</i>				
Wave	.699 ***	(.105)	.493 ***	(.138)
Wave ²	-.109 ***	(.017)	-.079 ***	(.024)
Intercept	-.148	(.412)	-.169	(.582)
<i>Variance Components</i>				
Within-Person	1.368	1.367	1.580	1.583
Between-Person	1.238	1.237	1.588	1.587
ICC	.550	.550	.498	.499
Person N	478	478	436	436
Person-Waves N	1892	1892	1714	1714

^aIndegree and Outdegree transformed to reduce skew to ln(indegree+.01) and ln(outdegree+.01), respectively

^bMultiple imputation analysis (10 datasets)

p<.05,
**
p<.01,

p<.001

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Table 4

Fixed-Effects Models of Peer Acceptance (i.e., Indegree) by Peer Gender^{a,d}

	Female Adolescents			Male Adolescents		
	Same-Gender Indegree ^b	Opposite-Gender Indegree ^c	Robust SE	Same-Gender Indegree ^b	Opposite-Gender Indegree ^c	Robust SE
<i>Time-Varying Sexual Behavior</i>						
Had Sex	-.504 **	-.862 *	(.182)	.626	.873	(.341)
Made Out	.213 *	.524 *	(.095)	-.367 *	.037	(.148)
<i>Time-Varying Controls</i>						
Family Attachment	-.134	-.452	(.136)	-.119	.116	(.175)
Grades	.004	.038	(.078)	-.069	.338 *	(.110)
Religious Attendance	.045	.133	(.028)	.016	.019	(.037)
Delinquency (IRT)	-.168	.116	(.094)	.004	-.166	(.120)
Drinking	.034	.004	(.081)	.064	.119	(.119)
Changed Schools	.059	-.315	(.082)	-.226	-.200	(.132)
Same-Gender Outdegree	.073 ***		(.022)	.125 ***		(.027)
Opposite-Gender Outdegree (any)		1.055 ***	(.208)		1.188 ***	(.238)
<i>Time</i>						
Wave	.699 ***	.223 **	(.109)	.477 ***	.276 ***	(.146)
Wave ²	-.113 ***		(.018)	-.080 **		(.025)
Intercept	-.454		(.401)	-.123		(.590)
Person N	478	192		436	177	
Person-Waves N	1889	879		1707	780	

^aIndegree and outdegree from same sex peers transformed to ln(indegree+.01) and ln(outdegree+.01) to reduce skew

^bLinear FE Model

^cLogistic FE Model (1=more than 1 opposite-gender friend, 0=no opposite-gender friends)

^dMultiple imputation analyses (10 Imputations)

* p<.05.

100>d

'10<d
**

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