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Popular Peer Norms and Adolescent Sexting Behavior

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Abstract

Introduction—Adolescents misperceive and are heavily influenced by the behavior of their popular peers, yet research has not yet investigated this phenomenon for a relatively new and potentially risky behavior: adolescent sexting. The present study investigates rates of sexting among popular and non-popular adolescents and the association between adolescents' perceptions of popular peers' sexting behavior and their own sexting behavior.

Methods—A school-based sample of 626 adolescents from a rural high school in the Southeastern U.S. ($M_{age} = 17.4$, 53.5% female) completed surveys indicating whether they had sent a sext in the past year. Participants also reported on perceptions of popular peers' sexting behavior and completed sociometric nominations of peer status.

Results—While 87.4% of adolescents believed the typical popular boy or girl in their class had sent a sext in the past year, only 62.5% of popular adolescents had actually sent a sext. There was no significant difference between rates of sexting among popular and non-popular (54.8%) adolescents. After adjusting for gender and sexual activity status, adolescents who believed that the typical popular peer sent a sext were over ten times more likely to have also sexted in the past year. Among adolescents who believed their popular peers had not sexted, girls were more likely than boys to have sexted themselves; however, this gender difference disappeared among adolescents who believed their popular peers had sexted.

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Conclusions—These results underscore the importance of peer status and perceptions of peer norms in adolescents' sexting.

Keywords

Teen sexting; Adolescents; Peer status; Peer relations; Social influences

The prevalence of adolescent sexting has increased over the past decade (Madigan et al., 2018). Sexting is defined broadly as the sending of any sexually explicit, self-made digital content (Van Ouytsel et al., 2018). Depending on the breadth of the definition, prevalence estimates of sexting behavior in adolescence range from 15–60% (Van Ouytsel et al., 2018). Sexting may represent a natural means of sexual exploration among adolescents (Lippman & Campbell, 2014), yet also poses risks. Sexting can lead to decreased emotional well-being, especially when messages are distributed to people other than the intended recipient (Alonso & Romero, 2019; Van Ouytsel et al., 2019). Moreover, adolescent sexting, including the sending of photographs or messages, has been associated with increased risky sexual behavior (e.g., casual sex, unprotected intercourse; Houck et al., 2014; Rice et al., 2012). No prior research has investigated the influence of perceptions of popular peer norms on sexting behavior.

Adolescents are more likely to engage in behaviors they believe are common among their peers (Brechwald & Prinstein, 2011). Popular adolescents, who are dominant and highly visible in the peer group, disproportionately influence peer norms (Brechwald & Prinstein, 2011). Adolescents are more likely to conform to popular peers' behaviors, including sexual behavior, than those of average or unpopular peers (Cohen & Prinstein, 2006; Choukas-Bradley et al., 2014), perhaps as a means of emulating popular peer prototypes to which they aspire (Gibbons et al., 2003).

It is unclear if popular adolescents actually engage in more sexual behaviors, whether risky or normative, than their peers. Popular adolescents may be more likely to engage broadly in sexual activity (Prinstein et al., 2003; Mayeux et al., 2008), yet, compared to girls, only popular boys report more sexual intercourse partners than their non-popular peers (Prinstein et al., 2011). Other studies find that popular adolescents report similar numbers of intercourse and oral sex partners relative to their peers, though non-popular adolescents frequently overestimate their popular peers' sexual behavior (Helms et al., 2014). Furthermore, adolescents overestimate their popular peers' engagement in a range of risk behaviors, and these misperceptions are associated with their own increased risk behavior (Helms et al., 2014).

Sexting behaviors may be similarly affected by popular peer norms. Perceptions of peer acceptance of sexting behavior (Hudson & Fetro, 2015), especially among friends and romantic partners (Van Ouytsel et al., 2017), are associated with increased sexting behavior, though no prior study has examined how perceptions of popular peers' behavior is related to adolescents' own sexting behavior. Only one study has examined sexting among popular adolescents, finding that Belgian adolescents who reported higher self-perceived popularity among their other-gender peers were more likely to send nude photos, though higher self-perceived popularity among same-gender peers was associated with reduced sexting for girls

(Vanden Abeele et al., 2014). Peer- and self-perceptions of popularity are related but distinct constructs (Mayeux & Cillessen, 2008), with peer-perceived popularity reflecting those adolescents considered popular by their peers. However, it remains unclear if adolescents high in peer-perceived popularity will report higher rates of sexting, whether adolescents' perceptions of popular peers' sexting are related to their own behavior, and whether these processes differ by gender.

Methods

Students in grades 11 and 12 ($n = 626$, $M_{\text{age}} = 17.4$, $SD_{\text{age}} = 0.66$, 53.5% female) in the southeastern U.S. completed in-class surveys in April 2016 during the fifth time-point of a larger longitudinal study. Parents provided informed consent and students provided assent. The sample was ethnically diverse: 47.0% White, 23.1% Hispanic/Latinx, 22.3% Black, 7.4% other/mixed race. The majority of students (65.3%) reported some sexual activity in the past year. See prior work for details on recruitment methods (Nesi & Prinstein, 2018, Widman et al., 2014). The university's institutional review board approved the study.

Measures

Sexual activity status.—Participants reported the number of partners with whom they had engaged in sexual activity, including making out or sexual touching, during the past year. Responses were dichotomized to indicate any sexual activity (0 = no sexual activity in past year, 1 = sexual activity in past year).

Sexting behavior and perceptions of popular peer sexting.—Participants responded to the following question: “In the past year, how often have the following people SENT a ‘sexy message’? By ‘sexy message,’ we mean a sexually suggestive message through text, IM, Snapchat, or other social media (also called a ‘sext’ or ‘sexting’)?” Similar wording has been used previously (Beckmeyer et al., 2019; Houck et al., 2014) and reflects a comprehensive definition of sexting (Van Ouytsel et al., 2018). Response options were “Never,” “1–2 times,” and “A few or many times.” Participants first reported their own sexting behavior, then indicated their perceptions of how often the “typical ‘popular’ girl” and the “typical ‘popular’ boy” in their grade had sent a sext. Responses were dichotomized (0 = never sent a sext in the past year; 1 = sent sext(s) in the past year).

Peer-perceived popularity.—Participants were given class rosters to nominate “most popular” and “least popular” grade-mates. Sociometric nominations of popularity are highly stable in high school (r s up to .80 for consecutive years; Cillessen & Borch, 2006), and therefore were not assessed at every time-point. Nominations for this sample were obtained one year prior. Popularity scores were computed by standardizing the difference between number of most and least popular nominations. Participants who scored one standard deviation or more above the mean were considered “popular” ($n = 72$; Parkhurst & Hopmeyer, 1998).

Analysis Plan

Chi-square tests of independence were conducted to compare rates of sexting between popular and non-popular adolescents and between girls and boys. A multivariate binary logistic regression was conducted to determine if perceptions of popular peer sexting were associated with one's own likelihood of sexting, and if this association was moderated by gender (i.e., inclusion of gender interaction term), controlling for sexual activity status. Analyses were conducted in SPSS version 26.0.

Results

Descriptive statistics for study variables, are presented in Table 1. A slight majority of adolescents (55.6%) reported having sent a sext in the past year. Girls were more likely to have sexted than boys. The vast majority (87.4%) believed that the typical popular girl and/or boy in their grade had sent a sext. There was no significant difference between popular and non-popular adolescents in rates of sexting within the full sample and within gender groups.

Controlling for gender and sexual activity status, adolescents who perceived that the typical popular peer had sent a sext were over ten times more likely to have sent a sext themselves (see Table 2). The interaction between perceptions of popular peers' sexting and gender was significant. Among adolescents who believed their popular peers had *not* sexted, girls were more likely than boys to have sexted themselves; however, this gender difference disappeared among adolescents who believed their popular peers had sexted (see Figure 1).

Discussion

This brief report contributes to the limited literature on popular peer norms surrounding adolescent sexting behavior. Although rates of sexting were high in this sample, previous studies using a broad definition have found similarly high rates (e.g., Beckmeyer et al., 2019). The percentage of adolescents who reported sexting in the past year did not differ significantly between popular and non-popular adolescents, yet the percentage of adolescents who believed their popular peers sexted was far higher than the percentage of popular adolescents who self-reported having sexted. These results are in contrast to a prior study finding that adolescents high in self-perceived popularity among the other gender reported more sexting, while girls high in self-perceived popularity with same-gender peers reported less sexting (Vanden Abeele et al., 2014). Different measurements of popularity, including the use of self-reported (vs. peer-perceived) popularity, and separation by opposite- and same-gender peers, may explain these different results. The current results are consistent with literature suggesting that adolescents overestimate popular peers' sexual behavior (Helms et al., 2014). Adolescents may have an inaccurate understanding of popular peers' sexting behavior, which may be related to their own more frequent sexting behavior.

Adolescents were over ten times more likely to sext if they believed their popular peers had done so. These results are consistent with work on peer norms and sexting, which has found that the following are associated with increased sexting among adolescents: perceptions of peers' positive attitudes towards sexting (Hudson & Fetro, 2015; Walrave et al., 2014),

sexualized online presentation (van Oosten & Vandebosch, 2017), and sexual behaviors broadly (Houck et al., 2014); perceptions of peers' sexting behavior (Van Ouytsel et al., 2017); positive attitudes towards peers who sext (Walrave et al., 2015); and direct peer pressure to sext (Lee et al., 2016; Lippman & Campbell, 2014). The present study contributes to this literature by highlighting the role of popular peer norms, which may be especially influential, in adolescent sexting behavior.

Importantly, these results also highlight the role of popular peer norms in abstaining from sexting. The belief that one's popular peers did *not* send a sext in the past year was associated with never having sent a sext oneself. Given that only a slight majority of popular adolescents reported having sent a sext, adolescents who believe their popular peers have never sent a sext may not necessarily be incorrect, or at least may be protected by these beliefs.

Gender moderated associations between perceptions of popular peer sexting behavior and one's own sexting. Among those who believed their popular peers had *not* sexted in the past year, girls were significantly more likely to have sexted. Although a previous meta-analysis has found no differences in sexting by gender (Madigan et al., 2018), some research suggests that girls feel more pressure to send sexts than boys (Lippman & Campbell, 2014; Ringrose et al., 2012), perhaps regardless of their perceptions of popular peers' behavior. Other factors may explain this gender difference, such as exposure to peers' sexualized self-presentation on social media (van Oosten & Vandebosch, 2017). It may also be that popular peer norms more strongly impact boys', compared to girls', sexting behavior. Further research will be needed to clarify these findings and identify other factors that may be contributing to adolescent girls' and boys' sexting behavior.

Future work should build on limitations of this study. Adolescents in this study were from a single school district in the southeastern U.S.; thus, generalizability may be limited. In addition, future studies should use longitudinal designs to determine if adolescents' perceptions of popular peers' behavior precede their own sexting behavior. Also, sexual activity status was defined broadly as any sexual experience. Previous work has shown that sexting is associated with a range of sexual behaviors (Houck et al., 2014); future work should investigate how popular peer norms influence sexting behavior for individuals with a range of sexual experience. Additionally, sexting behavior was operationalized broadly in this study to account for the numerous ways adolescents use technology to explore their sexuality (Van Ouytsel et al., 2018). Both text- and photo-based sexting have been associated with increased risky sexual behaviors (Houck et al., 2014), but no forms of sexting have previously been investigated in the context of popular peer norms. Future studies should investigate how effects may differ across various sexting behaviors (e.g., sending a nude photo vs. a sexually suggestive message).

Sexting may represent a normative exploration of sexuality, but still poses risks for adolescents. Interventions to reduce sexting behavior may consider perceptions of peer norms as a modifiable belief and expose adolescents to popular peers abstaining from sexting as a means of changing beliefs (as demonstrated in re-norming interventions for alcohol use; e.g., Teunissen et al., 2014). Peer status is a central component of adolescents'

social worlds. This study highlights the role of popular peer norms in adolescents' sexting behavior. Given the pervasiveness of sexting and the potential risks associated with sexting, it is critical to examine peer- and individual-level factors that influence this behavior.

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Figure 1.

Adolescents' probability of having sent a sext in the past year, by gender and perceptions of popular peer sexting in past year.

Table 1.

Descriptive statistics for study variables with comparisons by gender and popularity

	Full Sample (<i>N</i> = 626) <i>n</i> (%)	Gender		χ^2	Popularity		χ^2
		Girls (<i>n</i> = 335) <i>n</i> (%)	Boys (<i>n</i> = 288) <i>n</i> (%)		Popular (<i>n</i> = 72) <i>n</i> (%)	Non-Popular (<i>n</i> = 554) <i>n</i> (%)	
Sexually active	409 (65.3)	232 (69.2)	175 (60.8)	4.56 [*]	60 (83.3)	349 (63.0)	10.75 ^{**}
Perception that popular girls had sexted	545 (87.1)	304 (90.1)	239 (83.0)	7.65 ^{**}	65 (90.3)	480 (86.6)	0.46
Perception that popular boys had sexted	539 (86.1)	306 (91.3)	231 (80.2)	15.21 ^{***}	61 (84.7)	478 (86.3)	0.03
Sent a sext in past year	348 (55.6)	203 (60.6)	143 (49.7)	7.07 ^{**}	45 (62.5)	303 (54.7)	1.23

Note: Full sample includes adolescents who identify as female, male, and transgender (*n* = 3). Sexually active coded as 0 = no sexual activity in past year, 1 = some sexual activity in past year. Sent a sext in past year coded as 0 = did not send a sext, 1 = sent one or more sexts.

^{*} *p* < .05

^{**} *p* < .01

^{***} *p* < .001

Table 2.

Multivariate logistic regression analysis of associations with likelihood to have sent a sext in past year.

Predictors	<i>b</i>	SE	OR	95% CI	Model χ^2 (Nagelkerke pseudo R^2)
<i>Step 1</i>					
Gender	−0.25	0.19	0.78	0.54 – 1.13	182.25*** (.33)
Sexual activity status	1.87***	0.20	6.52	4.43 – 9.70	
Perception of popular peers' sexting	2.32***	0.40	10.22	4.90 – 24.12	
<i>Step 2</i>					
Gender	−2.87*	1.12	0.06	0.003 – 0.37	188.79*** (.34)
Sexual activity status	1.89***	0.20	6.64	4.51 – 9.91	
Perception of popular peers' sexting	1.30**	0.49	3.65	1.46 – 10.10	
Gender × Perception of popular peers' sexting	2.76*	1.14	15.83	2.34 – 318.75	

Note. OR = Odds Ratio; CI = Confidence Interval. Coefficients are unstandardized. Perceptions of popular peers' sexting behavior coded as 0 = believing neither the typical popular girl nor boy had sent a sext in past year, 1 = believing either the typical popular girl or popular boy (or both) had sent a sext in past year. Sexual activity status coded as 0 = no sexual activity in past year, 1 = some sexual activity in past year. Gender coded as 0 = female, 1 = male.

* $p < .05$

** $p < .01$

*** $p < .001$