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Safe Sext: Adolescents' Use of Technology to Communicate about Sexual Health with Dating Partners

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Abstract

Purpose—This study examined adolescents' technology-based sexual communication with dating partners, and evaluated associations between technology-based communication and condom use.

Methods—Participants were 176 high school students who indicated their use of technology to communicate with partners about condoms, birth control, STIs, HIV/AIDS, pregnancy, and sexual limits. Sexually active youth also reported their frequency of condom use.

Results—Many adolescents (49%) used technology to discuss sexual health with partners, with rates varying by topic. Girls were more likely than boys to discuss HIV, pregnancy, and sexual limits. Ethnic minorities were more likely than Whites to discuss condoms, STIs, HIV, pregnancy, and birth control. Importantly, rates of consistent condom use were three-times higher among youth using technology to discuss condoms and birth control.

Conclusions—Results provide novel preliminary evidence about adolescents' use of technology to discuss sexual health, and demonstrate links between technology-based communication and condom use among sexually active youth.

Keywords

adolescent sexual communication; condom use; technology; ehealth

Introduction

With over 9 million adolescents acquiring sexually transmitted infections (STIs) per year [1], ongoing efforts to identify factors that promote youth sexual health are critical. Adolescents' communication with partners about sexual health topics, such as condoms and STIs, is one key factor that may promote safer sexual decisions and consistent condom use [2,3]. However, the literature on adolescent partners' sexual communication—primarily

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focused on in-person discussions of sexual health—has not kept pace with adolescents' communication practices, which have increasingly become mediated through technology [4].

To date, research on youths' technology-based dyadic communication regarding sexuality has primarily emphasized the potential risks of this communication, such as "sexting" [5,6]. However, adolescents' use of electronic tools for communication about sexual health *promotion* has remained largely unexplored. As these tools become a primary means of communication among adolescent romantic partners, an exploration of technology-based sexual communication is both timely and critical to understanding sexual health outcomes in this age group.

The purpose of this novel preliminary investigation was threefold: 1) to examine the extent to which youth use technology to discuss sexual health topics with partners; 2) to investigate the relationship between technology-based sexual communication and condom use among sexually active youth; and 3) to examine gender and ethnicity as moderators. In line with research on in-person sexual communication, we expect a positive association between technology-based communication and condom use [2,3]. We also expect that girls will report more communication than boys [7] and that ethnic minority adolescents will report more communication than White youth [8].

Methods

Participants and Procedure

Participants were 284 high school students enrolled in a longitudinal study of adolescent health risk behaviors. All students in 9th and 10th grades (except those in special education classrooms) were recruited using parental consent and adolescent assent. From the initial 284 participants, 194 completed the Time 3 assessment – the only time with the technology-based items for this investigation. Attrition was due to students' withdrawal from the study (n=46), withdrawal/transfer/graduation from school (n=33), or scheduling conflicts (n=11). Of these 194 individuals, 18 did not complete the Time 3 technology questionnaire. Thus, the current sample included 176 youth (92 boys/84 girls) in 11th and 12th grades (M_{age}=17.4, SD=0.69, range=16–19). The majority were heterosexual (85.9%) and White (62.5%). The sample also included African American (15.9%), Hispanic (8.0%), and other/not-reported ethnicities (13.6%). Most youth (92.0%) used interactive forms of technology (e.g., texting, Facebook) on a daily basis. There were no differences in age or ethnicity between participants in the current study and those in the original sample (ps>.10); however, current participants were more likely to be male (χ^2=7.14, p=.01). The University IRB approved all study procedures.

Measures

Technology-Based Sexual Communication—Participants indicated if they had ever used private technology (i.e., "electronically interacting with someone in a way that is not visible to the public, such as texting, Snapchat, or private Facebook messaging") to communicate with dating partners about six topics: using condoms, using other forms of

birth control, STIs, HIV/AIDS, risk of pregnancy, and sexual limits (α=0.93). Dating partners were defined broadly as a boyfriend/girlfriend or someone with whom participants had a romantic or sexual relationship.

Condom Use—Sexually active participants indicated how often they used condoms in the past 6 months (0=not every time; 1=every time).

Results

Rates of Technology-Based Sexual Communication

Nearly half of adolescents (49%) used technology to discuss at least one sexual health topic with a dating partner, and 17% discussed all 6 topics (Table 1). Rates of communication varied by topic, with the highest number of students using technology to discuss sexual limits (42%) and condoms (39%), and the fewest discussing HIV/AIDS (20%). Analyses by gender revealed that girls were more likely than boys to use technology to discuss HIV (χ^2=5.01, *p*=.03), pregnancy (χ^2=5.25, *p*=.02), and limits (χ^2=4.73, *p*=.03). Further, ethnic minorities were more likely than Whites to use technology to discuss condoms (χ^2=4.54, *p*=.03), STIs (χ^2=5.24, *p*=.02), HIV (χ^2=6.05, *p*=.01), pregnancy (χ^2=6.85, *p*=.01), and birth control (χ^2=6.14, *p*=.02). Additionally, adolescents who had sex in the past 6 months were more likely than other youth to use technology to discuss all six sexual health topics (χ^2 range=6.49–25.70; *p*s<01).

Technology-Based Communication and Condom Use

Among adolescents who had sex in the past 6 months (*n*=64), approximately half (51.6%) did not consistently use condoms. The odds of consistent condom use increased nearly three-fold among those youth who used technology to discuss condoms (*OR*=3.89, *95% CI* [1.31, 11.57], *p*=.02), birth control (*OR*=3.90, *95% CI* [1.35, 11.26], *p*=.01), pregnancy (*OR*=2.60, *95% CI* [0.92, 7.30], *p*=.07), or sexual limits (*OR*=2.67, *95% CI* [0.89, 7.96], *p*=.08). Discussing HIV and STIs was not associated with condom consistency. The strength of these relationships did not vary by gender or ethnicity (*p*s>.10).

Discussion

This study adds to a growing body of literature on adolescent sexual communication [2,3] by providing novel preliminary evidence that many youth use technology as a platform to discuss sexual health with dating partners. Nearly half of adolescents used technology to discuss at least one sexual health topic, and almost 20 percent discussed all six sexual health topics – with girls and ethnic minority youth most likely to communicate through technology. These findings suggest that future investigations into adolescent sexual communication practices cannot only consider in-person communication, but also must account for technology-based discussions.

This study also uniquely demonstrates that technology-based communication has implications for adolescents' safer sexual decision-making. Although almost half of sexually active youth used condoms inconsistently, heightening their risk of STIs [1], rates of consistent condom use were over three-times higher among youth who used technology to

discuss condoms and birth control than youth who did not discuss these topics with partners. The relationship between communication and condom use was not moderated by gender or ethnicity, indicating that technology-based discussions may be an equally important correlate of condom use for all youth. Building on the current findings, follow-up research should examine technology-based sexual communication in more detail, particularly to determine whether technology-based discussions are uniquely associated with safer sex beyond the predictive effects of face-to-face communication.

Results are preliminary, and future work should draw on larger samples with longitudinal designs to examine the generalizability of these findings across time and relationships. This work should address aspects of the communication process, such as the timing and quality of these discussions [9], as well as the potential for unique patterns of technology-based communication to emerge across relationships of varied length and commitment. Albeit preliminary, the current findings highlight the potential importance of this communication for adolescent sexual behavior and suggest that integrating technology-based communication into sexual health intervention efforts may prove beneficial to adolescent health [10].

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Implications and conclusions

This study provides novel preliminary evidence that nearly half of youth use technology as a platform to discuss sexual health with partners. Importantly, technology-based sexual communication was strongly linked to more consistent condom use for sexually active youth, suggesting this is a critical area for future research and intervention efforts.

Table 1

Adolescents' Technology-Based Sexual Communication with Dating Partners

	Full Sample	Boys	Girls	Whites	Non-Whites	Between Group Comparisons	
		(A)	(B)	(C)	(D)	(A-B)	(C-D)
	n (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)	χ^2	χ^2
Individual Communication Topics							
Using Condoms	68 (39%)	34 (37%)	34 (41%)	36 (33%)	26 (51%)	0.31	4.54*
Using Other Forms of Birth Control	60 (34%)	28 (30%)	32 (38%)	30 (27%)	25 (47%)	0.94	6.14*
STIs	43 (24%)	17 (19%)	26 (31%)	21 (19%)	19 (36%)	3.40+	5.42*
HIV/AIDS	35 (20%)	12 (13%)	23 (27%)	16 (15%)	16 (30%)	5.01*	6.05*
Risk of Pregnancy	62 (35%)	25 (27%)	37 (44%)	31 (28%)	26 (49%)	5.25*	6.85*
Sexual Limits	74 (42%)	31 (34%)	43 (51%)	40 (36%)	28 (53%)	4.73*	3.64+
Across Communication Topics							
Discussed At Least One Topic	86 (49%)	40 (44%)	46 (55%)	48 (44%)	32 (60%)	2.04	4.01*
Discussed All Six Topics	30 (17%)	10 (11%)	20 (24%)	14 (13%)	14 (26%)	5.06*	4.71*

Note. *n* (%) = number and percentage of youth who have used private electronic communication to discuss each sexual topic with a dating partner. Sample size for each group: Full Sample *n*=176, Boys *n*=92, Girls *n*=84, Whites *n*=110, Non-Whites *n*=53.

+ $p < .10$;

* $p < .05$