

Online, off-line and over the line: Coercive sexting among adolescent dating partners

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Abstract

This study examines the incidence and correlates of coercive sexting by dating partners among middle and high school students, including sex-based differences and associations with other forms of sexual coercion. Survey data from a study of protective factors for teen dating violence in middle and high school students were examined ($N=1,236$). Of youth who reported at least one dating or sexual partner in the past twelve months, 12% percent reported coercive sexting victimization and 8% acknowledged pressuring a partner to sext. Other forms of sexual coercion including the use of threats and insistence on sex without a condom were significantly associated with perpetration and victimization of coercive sexting. Coercive sexting was notably more prevalent in the high school cohort, with boys significantly more likely to pressure a partner than girls. The strong association with other forms of sexual coercion suggests a potential link to broader patterns of teen dating violence.

Keywords: dating violence; intimate relationships; sexual behavior/risk; technology; victimization

Sexting, particularly among adolescents, has garnered significant attention in both the popular media and the academic literature (Klettke, Hallford & Mellor, 2014). Estimates of lifetime sexting incidence among youth depend heavily on how sexting is defined and range from a low of 1.3% for those ages 10-17 inclusive (Mitchell, Finkelhor, Jones & Wolak, 2012) to between 17% and 21% among high school-age students (Strassberg, McKinnon, Sustaíta & Rullo, 2013; Fleschler Peskin et al., 2013). A study of Midwestern middle and high school students found lifetime incidence rates for sexting at 3% among sixth grade students, 19% for ninth grade students and 28% among those in 12th grade (Dake, Price, Maziarz & Ward, 2012).

A primary focus in the sexting literature is the potential legal implications related to producing, distributing and possessing sexually explicit images or videos of minors (Wolak, Finkelhor & Mitchell, 2012). In particular, the conviction of youth for sexting behavior under child pornography laws creates a criminal predicament in which youth are convicted by the same laws designed to protect them (Richards & Calvert, 2009). In addition, sexting is associated with health outcomes such as high rates of substance use and sexual activity (Temple, Le, van den Berg, Ling, Paul & Temple, 2014). While acknowledging the legitimacy of legal and health concerns, other scholars have emphasized that sexting must first be contextualized within the course of adolescent development as it is often a normal expression of sexual exploration (Ybarra & Mitchell, 2014).

The relationship between sender and recipient of sext messages is also of interest. Existing research suggests that the exchange of sext messages most often occurs within the context of either a dating or sexual relationship (Temple et al., 2014; Crimmins &

Seigfried-Spellar, 2014). For example, a nationally representative survey in the United States found that among youth who sexted, over half did so with a romantic partner (Mitchell et al., 2012). Among youth who reported never sexting, entering into a romantic relationship was endorsed as increasing the likelihood of engaging in sexting behavior (Hudson, Fetro & Ogletree, 2014).

While most sexting is thought to be voluntary, recent studies explore issues of consent in young adult dating and sexual relationships (Englander, 2015). Just as in other forms of sexual interaction, capacity to consent to a partner's request for sext messages is diminished or eliminated when a partner elects to use pressure and coercion to obtain the desired sext messages (Döring, 2014; Drouin & Tobin, 2014).

Incidence of non-consensual or coercive sexting in young adult dating relationships has been estimated empirically, although to date these estimates have been restricted to heterosexual samples. Operationalized as the strategic use of tactics to pressure a partner into sending sexually explicit images or videos, 480 U.S. college undergraduates in heterosexual relationships were queried by Drouin, Ross, and Tobin (2015); 17% of men and 21% of women reported experiencing coercive sexting by their current or most recent romantic partner. Given the reported disregard for consent in sexual communication with a dating partner, these researchers questioned whether coercive sexting was linked to broader patterns of dating violence among young adults.

Study Aims

The current study extends the work by Drouin et al. (2015) by exploring the incidence and correlates of coercive sexting in dating relationships among cohort samples of sixth and ninth grade students. The first aim was to determine the incidence of both

victimization and perpetration of coercive sexting within teen dating relationships assessing for differences in age and sex. The second aim was to examine the correlates of coercive sexting victimization and perpetration including the association with other forms of sexual coercion.

Methods

Participants

Self-administered, written questionnaires were completed by 1,236 adolescents from six school districts in 2013. Paper and pencil surveys took approximately 45 to 60 minutes to complete. School districts were selected based upon publically available census and crime data, property and violent crime rates, percent below poverty threshold, single parent households, rental housing, and unemployment that resulted in a stratified sample representing low, medium, and high concentrated disadvantage. Middle and high schools from each school district participated in the research and youth were randomly selected to comprise an approximate equal distribution by sex and grade within each strata. Data garnered from the sixth and ninth grade cohorts were analyzed to establish point estimates for incidence and correlates in two distinct developmental stages; early and middle adolescence respectively. Of the total sample, 883 students (71.4%) reported having at least one dating or sexual partner in the past year. Data gleaned from these youth were analyzed. See Table 1 for demographic information.

Procedure

Passive consent procedures were employed in accordance with recommended ethical guidelines. Parents had the opportunity to refuse consent for their child's participation by returning a written form via the United States Postal Service, dropping

the form to a labeled box left in each school office or by contacting the researchers by phone or e-mail. Prior to survey administration, all students provided written or oral assent, dependent on age, and were informed of their right to not answer any question that made them uncomfortable as well as their right to withdraw from the study at any time. The Institutional Review Board for the two collaborating universities and the funding agency approved the data collection protocols. These data represent the first year of a four-year longitudinal study of risk and protective factors for teen dating violence perpetration, funded by the Centers for Disease Control and Prevention.

Measures

Coercive sexting. The Safe Dates Dating Violence perpetration and victimization scales (Foshee et al., 1996) were modified to include measures of electronic dating violence perpetration. Adolescents were asked how many times they had committed a number of behaviors against a dating partner, or a partner committed against them, in the past year. Two of the items measured coercive sexting; “pressured to send sexual messages or texts” and “pressured to send nude or sexy photos”. Response options ranged from never (0) to ten or more times (4). Items were summed to create perpetration, $\alpha = .77$, and victimization, $\alpha = .83$, scores. Given the centrality of sex differences to our analyses we also calculated Cronbach’s alphas for boys (perpetration, $\alpha = .82$, and victimization, $\alpha = .83$) and for girls (perpetration, $\alpha = .59$, and victimization, $\alpha = .83$).

Sexual coercion. Sexual coercion was operationalized as pressuring a dating partner to have sex without a condom, insisting on sex when partner did not want to and/or using threats to pressure a partner into having sex. Students answered four items modified from the sexual coercion subscale of the Revised Conflict Tactics Scale (Straus,

Hamby, Boney-McCoy & Sugarman, 1996) and measured using the same format as the Safe Dates Dating Violence scales, described above. Three questions included “made them have sex without a condom,” “insisted on sexual activity when they did not want to (but did not use force),” and “Used threats to make them have any sexual activity.” Response options ranged from never (0) to ten or more times (4). Items were summed to create sexual coercion perpetration, $\alpha = .71$, and victimization, $\alpha = .74$, scores.

Individual characteristics. Individual level risk and protective factors were identified, including access to portable technology, including a smart phone or tablet, and demographics including sex, grade, race and household composition. For analytic purposes, race was dichotomized between white students and students of color. Students of color included those who identified their race as Arab American, Asian/Asian American/Pacific Islander, Black/African American/Caribbean American, Hispanic/Latino/Chicano/Puerto Rican, Native American or some other race. Risk level (concentrated disadvantage), based on an index of community violence and census data created for school selection, was an independent variable in the analysis.

Data Analysis

Initial analysis assessed for demographic differences between youth who reported at least one dating or sexual partner in their lifetime and those who did not. Relative risk ratios were calculated with 95% confidence intervals to determine if the two groups differed significantly on a range of categorical variables. Twelve-month incidence rates for victimization and perpetration of coercive sexting were subsequently analyzed. We then stratified the group of youth who reported a lifetime sexual or dating partner by grade level and by sex to determine 12-month incidence rate for both perpetration and

victimization. To evaluate our second aim, adjusted risk ratios were calculated with a 95% confidence interval to determine significant correlates for coercive sexting victimization and perpetration. These were obtained by converting adjusted odds ratios with the correction put forward by Zhang & Yu (1998) for use with common outcomes in cohort studies. All analyses were conducted in the statistical programming language, R, version 3.2.2 (R Core Team, 2015).

Missing Data

After screening out those youth who reported never having a dating or sexual partner, 837 students remained in the sample. Reported outcome variables -- coercive sexting victimization and perpetration -- were available for 589 of these students (70%). Differences between respondents and non-respondents for these two items are presented in Table 1. Little's missing completely at random test returned a chi-square = 152.83 (df = 110, $p = 0.08$), indicating that missingness among predictor variables was indeed random. Therefore, multivariate imputation by chained equations was utilized to impute five complete data sets (van Buuren & Groothuis-Oudshoorn, 2011). Adjusted odds ratios were subsequently obtained from pooling across these data sets.

Results

Study Population

Of the 1236 students who completed the survey, 837 students (71%) reported having at least one sexual or dating partner in the past year (see Table 1). Youth in this group were significantly more likely to be in a higher grade level (relative risk [RR]=1.22, 95% confidence interval [CI] = 1.13 – 1.31), attend schools in high risk communities (RR = 1.26, 95% CI = 1.15 – 1.37), and have access to a smart phone (RR =

1.17, 95% CI = 1.07 -1.26). Those who reported a dating or sexual partner were less likely to be white (RR = 0.83, 95% CI = 0.86 – 0.99) or live with both biological parents (RR = 0.85, 95% CI = 0.78 – 0.91). Sexting behavior was significantly more prevalent among youth who had a dating or sexual partner (RR = 1.41, 95% CI = 1.34 -1.49).

INSERT TABLE 1 ABOUT HERE

Incidence of Coercive Sexting

Responses to both victimization and perpetration items for coercive sexting were provided by 589 students. Figure 1 details the 12-month incidence rates at the aggregate level and by grade and sex. Overall, the 12-month incidence rate for coercive sexting victimization was 12% (n=73) while perpetration was 8% (n=46). Incidence of coercive sexting perpetration was higher for boys than for girls in both sixth and ninth grade students with rates of 3.7% and 13.4% respectively. The reverse was observed in regard to coercive sexting victimization, with a higher incidence for girls in both grade cohorts. Among sixth grade students, 6.5% of girls reported that a dating partner had pressured them to send a sext message, and 21.3% of girls in ninth grade reported the same.

INSERT FIGURE 1 ABOUT HERE

Correlates of Coercive Sexting

Table 2 presents correlates for coercive sexting victimization and perpetration among students who reported having a dating or sexual partner. When controlling for

sociodemographics and access to web-enabled devices; grade level, sex and victimization/perpetration of other forms of sexual coercion were found to be significantly associated with risk for coercive sexting victimization and perpetration. Those in ninth grade (ARR =2.21, 95% CI = 1.28-3.33) were more than twice as likely as those in sixth grade to experience coercive sexting victimization from a dating or sexual partner, while the risk of coercive sexting victimization was approximately 70% higher for girls than for boys (ARR = 1.69 95% CI = 1.06-2.51). When it came to perpetration of coercive sexting, ninth grade students (ARR = 2.32, 95% CI = 1.11-4.19) were at more than two times greater risk of coercive sexting perpetration, while girls were 40% less likely than boys to coerce a partner to send sext messages (ARR = 0.34, 95% CI = 0.16 – 0.73).

Associations with Sexual Coercion

Given prior research suggesting a potential link between coercive sexting and teen dating violence (Drouin et al., 2015), we also explored associations with other forms of sexual coercion. We constructed two dichotomous variables to indicate whether youth had perpetrated or been the victim of threats against a dating partner to have sex, pressure from a dating partner to have sex when the other did not want to, and insistence on having sex without a condom within the past twelve months. Victims of coercive sexting presented with significantly greater risk for at least one form of sexual coercion by a sexual or dating partner included in this index of sexually coercive behaviors (ARR =1.77, 95% CI = 1.65-1.84). The same held for perpetration. Those who pressured a sexual or dating partner to send them sext messages were significantly more likely to perpetrate at least one form of sexual coercion (ARR = 2.30, 95% CI = 2.02-2.47).

INSERT TABLE 2 ABOUT HERE

Discussion

This research sought to establish the incidence rates and correlates of coercive sexting in the dating and sexual relationships of middle school and high school students. Results delineated relatively low rates of perpetration and victimization in the sixth grade cohort. However, ninth grade students were more than twice as likely as those in sixth grade to both experience coercive sexting victimization and engage in coercive sexting perpetration. The observed 12-month incidence rates therefore suggest that while coercive sexting is observed as early as the start of middle school, this behavior significantly increases in scope by the time students enter high school.

Sex was a significant correlate of both coercive sexting victimization and perpetration. While some girls certainly did pressure a partner to sext, the data reveal a clear sex dynamic within coercive sexting – namely boys pressuring girls to send sexually explicit messages and/or photos. This finding was supported by looking at incidence rates for coercive sexting by grade and sex where boys reported a higher 12-month incidence of perpetration and lower incidence of victimization.

Perhaps of greatest interest and concern are the results that suggest a strong link between coercive sexting and more traditional forms of sexual coercion. Sexual coercion was operationalized as pressure to have sex without a condom, insisting on sex when partner did not want to and/or using threats to pressure a partner into having sex. Of great concern is that a subset of adolescents did not endorse a high level of regard for

consent surrounding sexual activity. The strength of this association might indicate that coercive sexting is linked to a broader pattern of dating violence. Future studies of teen dating violence should consider including measures of coercive sexting in conjunction with more commonly used/recognized abuse items.

The incidence of coercive sexting victimization and perpetration documented in two school-based, adolescent cohorts has practical implications for adolescent service providers. For example, previous guidance to school nurses regarding adolescent sexting focused only on the legal implications and potential negative consequences resulting from distribution of semi-nude or nude images (Diliberto & Matthey, 2009). Incorporating discussions of consent with respect to adolescent sexting may be warranted based on these findings. Given that a recent nationally representative survey of school nurses found that half had responded to an incidence of teen dating violence in the past two years (Khubchandani, Telljohann, Price, Dake & Hendershot, 2013), screening for coercive sexting should also be considered.

This study has several strengths. To our knowledge this is the first study to examine the issue of coercive sexting in both middle school and high school age cohorts. The ability to compare grade levels at the same measurement point was useful in beginning to pinpoint the emergence of this behavior within adolescent developmental trajectory. Additionally, other scholars have called for measures of sexting that rely on youth input (Temple & Choi, 2014). The definition of sexting in this study was developed during a pilot study with students, and reflects a more comprehensive measurement, rather than a legalistic focus on nude images exclusively.

Limitations

There are a number of limitations to the current study. We do not know the sex of respondents' dating partners. While we assume that the vast majority of sexting and coercive sexting in relationships is occurring within boy-girl dyads, we cannot say for certain what percentage of observed coercive sexting took place among same-sex partners.

Additionally, little is known about the context in which sexting occurred. For example, it is not known if sexting occurred within the context of a serious dating relationship, among casual dating or sexual partners, or as a form of flirtation or attention-seeking in pursuit of a relationship. This information would provide a more nuanced understanding of the meaning and context of sexting in dating to better understand how coercion may play a role. Importantly, factors about the partner, such as age, may also provide important information as adult-involved sexting bring a variety of other issues (Wolak & Finkelhor, 2011).

Finally, by utilizing cross-sectional data we are unable to specify if coercive sexting is predictive of future forms of sexual coercion or establish potential health or behavioral consequences. Sexting research would benefit greatly from longitudinal analysis that can better document behavioral trajectory related to sexting and associated behaviors, and shed light on the temporal and developmental ordering of events.

Although each are important limitations of the study, and provide directions for future research, the current research provides insight into the ways in which coercive sexting may be part of a broader context of sexually coercive behavior. The inclusion of young adolescents and comparison between middle and high school age youth allows for

greater understanding of the age in which these behaviors may begin to emerge in order to inform the most critical times for prevention intervention.

Conclusion

This research provides a lens from which to view a set of problematic behaviors that arise in adolescent dating relationships – made accessible through ever evolving technological advances. The calls to avoid a sort of “moral panic” (Cohen, 1972) around the activity of sexting itself is taken seriously by these authors, however, as with all forms of sexual activity, consent is a precondition of healthy engagement. Service providers working with youth in early and middle adolescence should take care to avoid pathologizing sexting behavior while concomitantly monitoring for potential coercion in this emerging means of adolescent sexual communication.

The research speaks to the inclusion of sexting and electronic communication within health education and prevention programming for youth. Education about sexual behavior must incorporate topics such as sexting, including potential social risks and issues of coercion, when discussing other forms of sexual behavior. Technology is an inextricable part of adolescent social behavior. As such, discussion of the multiple ways in which it is used should be infused throughout all adolescent sexual education and dating violence prevention programming.

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Table 1. Characteristics of youth reporting a sexual or dating partner in the past month and available outcome data

Characteristics	Ever had a dating or sexual partner?			For those who reported ever having a dating or sexual partner: Were data available for both coercive sexting perpetration and victimization?		
	No (n=334) n (%)	Yes (n=837) n (%)	Relative Risk URR (95% CI)	No (n=248) n (%)	Yes (n=589) n (%)	Relative Risk URR (95% CI)
Sex						
Boys	156 (47)	405 (48)		139 (56)	266 (45)	
Girls	178 (53)	432 (52)	0.98 (0.91-1.05)	109 (44)	323 (55)	1.14 (1.04-1.24)

Grade						
6 th	195 (58)	344 (41)		128 (52)	216 (37)	
9 th	139 (42)	493 (59)	1.22 (1.13-1.32)	120 (48)	373 (63)	1.20 (1.10-1.33)
Race						
Students of color ¹	112 (34)	332 (41)		101 (42)	231 (40)	
White students	218 (66)	484 (59)	0.92 (0.86-0.99)	140 (58)	344 (60)	1.02 (0.93-1.12)
School risk						
Low	131 (39)	235 (28)		70 (28)	165 (28)	
Medium	115 (34)	236 (28)	1.05 (0.94-1.16)	58 (23)	178 (30)	1.07 (0.96-1.20)
High	88 (26)	366 (44)	1.26 (1.15-1.37)	120 (49)	246 (42)	0.96 (0.86-1.07)
Both biological parents in home						
No	129 (39)	445 (53)		133 (54)	312 (53)	
Yes	205 (61)	391 (47)	0.85 (0.78-0.91)	114 (46)	277 (47)	1.01 (0.93-1.10)
Lifetime incidence of sexting						
No	307 (98)	650 (80)		208 (88)	442 (77)	
Yes	7 (2)	162 (20)	1.41 (1.33-1.48)	28 (12)	134 (23)	1.22 (1.11-1.33)
Access to smart phone						
No						
Yes	155 (50)	289 (37)		103 (45)	186 (33)	
	156 (50)	497 (63)	1.17 (1.07-1.27)	127 (55)	370 (67)	1.15 (1.05-1.28)
Access to tablet						
No	116 (38)	303 (39)		95 (43)	208 (38)	
Yes	192 (62)	467 (61)	0.98 (0.91-1.06)	127 (57)	340 (62)	1.06 (0.97-1.17)

Table 2. Twelve-month incidence and correlates of coercive sexting perpetration and victimization

Characteristics	12-month incidence of coercive sexting victimization			12-month incidence of coercive sexting perpetration		
	No (n=516) n(%)	Yes (n=73) n (%)	ARR (95% CI)	No (n=543) n(%)	Yes (n=46) n (%)	ARR (95% CI)
Sex						
Boys	246 (48)	20 (27)		241 (44)	25 (54)	
Girls	270 (52)	53 (63)	1.69 (1.06-2.51)	302 (56)	21 (46)	0.60 (0.31-1.15)
Grade						
6 th	206 (40)	10 (14)		209 (38)	7 (15)	

¹ Students of color included those who indicated their race as Arab American, Asian/Asian American/Pacific Islander, Black/African American/Caribbean American, Hispanic/Latino/Chicano/Puerto Rican, Native American or some other race.

9 th	310 (60)	63 (86)	2.21 (1.28-3.33)	334 (62)	39 (85)	2.32 (1.11-4.19)
Race						
Students of color ²	194 (39)	37 (51)		212 (40)	19 (43)	
White students	309 (61)	35 (49)	0.75 (0.42-1.32)	319 (60)	25 (57)	0.88 (0.42-1.76)
Community risk level						
Low	146 (28)	19 (26)		150 (28)	15 (33)	
Medium	159 (31)	19 (26)	0.94 (0.46-1.80)	166 (31)	12 (26)	0.96 (0.42-2.14)
High	211 (41)	35 (48)	0.80 (0.41-1.50)	227 (41)	19 (41)	0.71 (0.30-1.60)
Both biological parents in home						
No	270 (52)	42 (58)		289 (53)	23 (50)	
Yes	246 (48)	31 (42)	0.96 (0.57-1.58)	254 (47)	23 (50)	1.09 (0.58-1.98)
Access to smart phone						
No	165 (32)	21 (30)		175 (34)	11 (26)	
Yes	321 (68)	49 (70)	1.02 (0.57-1.75)	338 (66)	32 (74)	1.29 (0.63-2.49)
Access to tablet						
No	178 (37)	30 (43)		192 (38)	16 (38)	
Yes	300 (63)	40 (57)	0.97 (0.57-1.60)	314 (62)	26 (62)	1.24 (0.60-2.40)
Sexual coercion victimization						
No	468 (94)	37 (52)		-	-	-
Yes	32 (6)	34 (48)	1.77 (1.65-1.84)			
Sexual coercion perpetration						
No	-	-	-	499 (94)	25 (57)	
Yes				31 (6)	19 (43)	2.30 (2.02-2.47)

² Students of color included those who indicated their race as Arab American, Asian/Asian American/Pacific Islander, Black/African American/Caribbean American, Hispanic/Latino/Chicano/Puerto Rican, Native American or some other race.