
Peer to peer sexual harassment in early adolescence: A developmental perspective

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Abstract

The goal of this study was to examine sexual harassment in early adolescence. Available data indicate that peer to peer sexual harassment is prevalent in high school and is associated with psychosocial problems for both victims and perpetrators. For the present study, we adopted a developmental contextual model to examine the possibility that this behavior develops during the late elementary and middle school years and is linked to the biological and social changes that occur at this time. Youths from Grades 6–8 ($N = 1,213$) enrolled in seven elementary and middle schools in a large south-central Canadian city were asked to report on their sexual harassment behaviors with same- and cross-gender peers; their pubertal development, and the gender composition of their peer network. The results revealed that cross-gender harassment was distinct from same-gender harassment, increased in frequency from Grade 6 to Grade 8, and was linked to pubertal maturation and participation in mixed-gender peer groups. The implications of a developmental contextual model for understanding the emergence of this problematic behavior in adolescence are discussed.

Peer to peer sexual harassment is a pervasive problem among adolescents. Across the high school grades, 84% of adolescents report that they have experienced sexual harassment at some point in their school lives, and they report that the vast majority of the harassment was perpetrated by peers (American Association of University Women [AAUW], 1993;

The authors wish to thank the students and staff of the participating schools who generously gave their time to this study. Portions of this article were presented at the meetings of the Society for Research in Child Development, Washington, April 1997, and at the meetings of the Canadian Psychological Association, Toronto, June 1997. The research was partially supported by grants from the Ontario Mental Health Foundation awarded to the second, third and fourth authors, and by a Social Science and Humanities Research Council of Canada Studentship awarded to the first author.

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Connecticut Permanent Commission on the Status of Women [PCSW], 1995; Fineran & Bennett, 1997; Ontario Secondary Schools Teacher's Federation, Ontario Women's Directorate, Ministry of Education and Training, 1995; Roscoe, Strouse & Goodwin, 1994). Despite the pervasiveness of sexual harassment among high school students and its negative effects for both victims and perpetrators, little is known about how or when this behavior develops. Adopting a developmental contextual perspective, the goal of the present study was to investigate the perpetration of sexual harassment in the years preceding high school and to examine its links to the pubertal and social transitions of early adolescence.

Sexual harassment is a construct that invites controversy because of the wide variation in how it is defined by researchers in the field. As O'Donohue has recently concluded, "Definitions of sexual harassment agree on only one semantic issue: that sexual harass-

ment is improper behavior that has a sexual dimension" (O'Donohue, Downs, & Yeater, 1999, p. 112). A universally accepted definition of sexual harassment has been difficult to generate because of the diverse legal, socio-logical, feminist, and psychological perspectives from which the issue has been examined. In the current study, we use a behavioral-psychological definition of sexual harassment as *unwanted sexual attention*. This definition is behavioral, in that specific behaviors constituting harassment are defined, and psychological, in that the target's perception or interpretation of behavior is salient. This definition of harassment is a broad one and includes not only severe behaviors such as sexual assault but also what Wise and Stanley (1987) have labeled the "dripping tap" behaviors, such as sexual jokes and comments. These minor harassment behaviors are so common that they are often considered normal and mundane, yet there is reason to believe that even this level of sexual harassment contains an element of risk for youths.

Adolescents who have been victims of peer sexual harassment report that it made them reluctant to go to school, reluctant to talk in class, inattentive at school, academically unmotivated, and led them to achieve lower grades than they expected (AAUW, 1993). Over 50% of female victims report feelings of embarrassment and self-consciousness, and over 35% report feeling afraid or scared (AAUW, 1993). Larkin (1994) has argued that the decline in self-esteem which occurs in early adolescence for girls (AAUW, 1992; Bush & Simmons, 1987) may be attributable, at least in part, to the everyday sexual harassment that they are likely to experience. Perpetration of sexual harassment is also linked to deleterious behaviors. Youths who reveal high rates of dating violence are described by their teachers as frequent perpetrators of sexual harassment (Wolfe, Wekerle, Reitzel-Jaffe, & Lefebvre, 1998). In a similar vein, domestic violence in young couples is often preceded by verbal or psychological insults (Murphy & O'Leary, 1989). These findings suggest that there is some risk that perpetration of sexual harassment will persist for some adolescents beyond the high school

years and may generalize to other relationships.

In contrast to previous studies that have examined victimization and its impact (AAUW, 1993; Lee et al., 1996; PCSW, 1995), the current study focuses on the *perpetration* of peer sexual harassment in early adolescence. We adopt a developmental contextual perspective and examine the occurrence of this problematic behavior within the biological and social transitions of early adolescence (Cairns & Cairns, 1994; Cicchetti & Aber, 1998; Lerner & Simi, 2000). Sexual harassment is neither normal nor socially appropriate, given its impact on victims and its association with other aggressive behaviors. Nonetheless, it is a behavior that may appear normative because its emergence is linked to developmental processes that occur during the early adolescent period. This, in turn, may lead to a minimization of its negative impact on adolescent development. By studying sexual harassment in a developmental context, we hope to establish a baseline framework of harassment in early adolescence and the role of developmental stressors in its occurrence. As with other forms of adolescent misbehavior, examining the developmental context may also lead to a greater understanding of when such harassment is a temporary display of problem activities or, for some adolescents, when it is an expression of persistent behavior problems (Caspi, Lynam, Moffitt, & Silva, 1993).

Pubertal development is a defining biological characteristic of early adolescence and may be related to sexually harassing behavior. Udry and colleagues (Smith, Udry, & Morris, 1985; Udry, 1990) have proposed two routes by which the biological effects of puberty are related to sexual behavior and similar effects can be inferred for sexual harassment. First, the development of secondary sex characteristics may signal to peers and adults that the expression of sexual interest is developmentally appropriate. Second, pubertal increases in sex hormones may directly affect sexual motivation and interest (e.g., Halpern, Udry, Campbell, Suchindran, & Mason, 1994; Halpern, Udry, & Suchindran, 1997; Udry, Talbert, & Morris, 1986) and may also lead to

sexual harassment. We believe that one developmental task of adolescence is learning to express sexual desire in socially acceptable ways and that some sexually harassing behaviors may often be crude or aggressive attempts by some early adolescents to express developmentally appropriate sexual interest. Hence, we propose that sexual harassment emerges in the middle school years, in concert with pubertal maturation that begins for most youth at this time. If this is correct, then sexual harassment should increase in frequency during the middle school years and this increase should be at least partially accounted for by the pubertal changes occurring during this developmental period.

Developmental changes occurring in the social context of early adolescence may also be linked to the emergence of sexual harassment. Dunphy (1963), based on his ethnographic research with peer groups of Australian youth, described a process in which young adolescents form small, same-gender cliques, and then, in midadolescence, these same-gender cliques merge to form larger, mixed-gender peer crowds. During this process, adolescents inevitably interact socially with increasing numbers of cross-gender peers. Consistent with Dunphy's naturalistic observations, early adolescence is marked by a significant increase in the number of cross-gender peers and the amount of contact with them (Blyth, Hill, & Thiel, 1982; Feiring & Lewis, 1991). This transformation of the peer network has obvious implications for the occurrence of sexual harassment. Especially in the early years of adolescence, when youths differ in the rate at which they participate in mixed-gender groups, those adolescents who spend more time in the presence of cross-gender peers will have more opportunities to perpetrate sexual harassment. Transformations in the gender composition of adolescents' peer networks, then, should be linked to increases in the perpetration of sexual harassment.

A second goal of the current study was to explore harassment between adolescents of the same gender as well as harassment occurring across gender. Sexual harassment, defined as unwanted attention of a sexual nature, can occur between both same- and cross-gen-

der peers, and the AAUW study (1993) established that many students' reports of harassment included some from same-gender peers. Currently we know very little about same-gender harassment and how it differs from cross-gender harassment. We propose that same- and cross-gender harassment have distinct motivational, behavioral, and contextual determinants. For the heterosexual majority of adolescents, cross-gender harassment is motivated, at least in part, by sexual interest. In contrast, for these adolescents same-gender peer harassment is more likely to be an expression of verbal aggression. Second, given their distinct motivations, same- and cross-gender harassment are likely to have somewhat different behavioral forms: same-gender harassment is likely to entail homophobic insults, jokes, name-calling, and rumor spreading, as well as physical behavior such as might occur in hazing rituals. Cross-gender harassment, on the other hand, is more likely to entail behaviors which might be construed as sexual advances. Finally, the biological and social changes which create a developmental context for the emergence of sexual harassment in early adolescence should be specific to cross-gender harassment. Among predominantly heterosexual youths, pubertal maturation and mixed-gender peer groups can result in increased motivation and opportunities for cross-gender harassment. In contrast, same-gender harassment is not expected to be associated with pubertal maturation, because we believe that it is not sexually motivated. As well, the early adolescent restructuring of the peer network to include more cross-gender peers should not alter opportunities for same-gender harassment. Given the proposed links to the developmental changes of early adolescence, we expect that cross-gender harassment increases during this time, while same-gender harassment remains stable.

In summary, the hypotheses of the present study were as follows: (a) perpetration of same- and cross-gender harassment are distinct phenomena among early adolescents; (b) cross-gender, but not same-gender, harassment increases in frequency across the early years of adolescence; and (c) the increase observed in cross-gender harassment is linked to

the pubertal and social changes of early adolescence.

Method

Participants

The sample included 1,213 students (636 boys, 577 girls) enrolled in Grades 6–8 who were attending one of seven elementary or middle schools (kindergarten through Grade 8) in a large, south-central Canadian city. There were 296 students in Grade 6 (mean age 11.5 years, $SD = .35$), 411 in Grade 7 (mean age 12.5 years, $SD = .34$), and 506 in Grade 8 (mean age 13.4 years, $SD = .35$). The ethnic composition of the sample was 74% White, 10% Asian, 4% Black, 3% South Asian, 2% of mixed race, and 6% of other ethnic groups. Eighty-two percent of the participants lived with both biological parents, 5% lived in step-families, 11% lived in single-parent families, and 2% lived in other arrangements. The sample was primarily middle class: 66% of the participants' parents were high school graduates, with 53% of the parents completing university as well.

Attrition analysis

Consent to participate in the study was initially obtained from 1,261 students and their parents. Of the 1,261 students who participated in the study, 1,213 provided data on sexual harassment. Participants who provided data on their sexual harassment behaviors were similar to those who did not with respect to gender, race, parents' education, family composition, and use of English in the home. However, a *t* test revealed that nonresponders to sexual harassment questions were significantly younger ($M = 12.08$ years, $SD = .96$) than responders ($M = 12.64$ years, $SD = .84$), $t(1,259) = -4.48$, $p < .001$. It is possible that the students in the younger grades had more difficulty understanding the harassment questions than did the older students.

Of the 1,261 participants, 87% ($n = 1,098$) also provided data on their pubertal development. Those participants who did respond to questions about their pubertal development

were similar to those who did not respond with respect to grade, race, parents' education, family composition, and use of English in the home. However, significantly more boys (93%) than girls (81%) answered these questions, $\chi^2(1, N = 1,261) = 43.65$, $p < .001$. Girls may have found the questions about their pubertal development more intrusive than did boys and on that basis were more likely to refuse. Therefore, results relating to models that include pubertal development must be interpreted somewhat more cautiously for girls than for boys.

Procedure

Trained assistants administered questionnaires during regularly scheduled class periods. Participants were informed that the purpose of the research was to increase our understanding of various aspects of relationships during the transition to adolescence. Participants were assured of confidentiality and reminded of the voluntary nature of the research.

Measures

Sexual harassment. Sexual harassment was measured using a modified version of the AAUW Sexual Harassment Survey (AAUW, 1993), in which students reported how often they had perpetrated a variety of sexual harassment behaviors. The questionnaire instructions explicitly stated that the students were to report on only *unwanted* sexual behaviors. Although this study is focused on perpetration, the questionnaire included identical items about how often the students had *experienced* each behavior, so that the parallels between sexual harassment perpetration and victimization could be examined.

Some modifications were made to the original AAUW survey. First, students were asked to report on harassment involving peers only, not school staff, and they were asked to report on harassment occurring in the last 6 weeks, rather than over their entire school lives. Second, the response rating scale was expanded to 5 points, with the anchors ranging from 0 (*never*) to 4 (*daily*). Third, we removed five behaviors from the original 14 items in the

scale: one that rarely occurs in the elementary school context (i.e., "Spied on someone as they dressed or showered at school"), two that referred to behaviors fully captured by other items in the survey (i.e., "Pulled someone's clothing off or down" and "Blocked someone's way or cornered them in a sexual way"), and two that referred to sexual coercion (i.e., "Forced someone to kiss you" and "Forced someone to do something sexual other than kissing"). The latter behaviors were reported at very low frequency in a high school sample (AAUW, 1993) and were therefore expected to contribute even less variance in this sample. Fourth, upon consultation with the Equity Studies Office of the participating Board of Education we added the following item: "Made comments about or rated the parts of someone's body that make them a boy/girl." The final set of 10 items is shown in Table 1 in the order in which they appear in the survey. Because of our interest in the distinction between same-gender and cross-gender harassment, the students were asked, for each item, how often the behavior involved a peer of the same gender and how often a peer of the other gender. Internal consistency was high for same-gender and cross-gender perpetration (Cronbach's $\alpha = .93$ and $.94$, respectively), and for same-gender and cross-gender victimization (Cronbach's $\alpha = .89$ and $.92$, respectively). Because the item distributions were positively skewed, responses were dichotomized into 0 (*never*) and 1 (*ever*). The reliabilities for the harassment scales based on dichotomous items were also excellent (same-gender perpetration, $\alpha = .93$; cross-gender perpetration, $\alpha = .88$; same-gender victimization, $\alpha = .75$; cross-gender victimization, $\alpha = .84$).

Pubertal maturation. The Pubertal Development Scale was administered to assess pubertal status and maturation of secondary sexual characteristics (Petersen, Crockett, Richards, & Boxer, 1988). On gender-specific versions of the form, girls and boys rate the development of their secondary sex characteristics (ranging from "not yet started" to "completed"), including pubic hair, growth spurt, skin changes, facial hair, voice change, breast

development, and menarchial status. This measure has been shown to have good reliability (Cronbach's α for different samples ranging from $.68$ to $.83$) and to correlate with objective measures of pubertal development (Petersen et al., 1988), including physicians' ratings and age at peak height velocity. In the present study, Cronbach's α was $.79$ for the boys and $.76$ for the girls. Since girls and boys differ in rates of pubertal maturation, for the purposes of analysis pubertal maturation scores were standardized within gender.

Gender composition of peer networks. Participants were asked to fill out the Peer Network Inventory (Connolly & Konarski, 1994), in which they list up to 15 in-school peers in their networks. Test-retest reliabilities for network size (.72) and number of cross-gender peers listed (.76) have been previously reported (Connolly & Konarski, 1994; Maharaj & Connolly, 1994). To control for differences in overall network size, gender composition of adolescents' peer networks was computed by calculating the proportion of listed peers who were cross-gender.

Results

Sexual harassment behaviors in early adolescence

The percentages of participants who reported each type of sexual harassment behavior at least once in the last 6 weeks are shown in Table 1. For both boys and girls, the three behaviors most commonly *perpetrated* were homophobic name-calling; making sexual comments, jokes, gestures, looks; and making comments or rating sexual body parts. For both boys and girls, the three behaviors most commonly *experienced* were homophobic name-calling; sexual comments, jokes, gestures, looks; and being flashed or mooned. Chi-square tests were used to investigate gender differences in each type of behavior. Note that, due to our large sample size, for this and all subsequent analyses we have set our Type I error rate at $p < .001$. As indicated in Table 1, boys were more likely than girls to report perpetrating 5 out of the 10 behaviors, while

Table 1. Percentages of boys and girls reporting sexual harassment behaviors

Behavior	Harassment Perpetration			Harassment Victimization		
	Girls (n = 577)	Boys (n = 636)	χ^2 (1, N = 1,213)	Girls (n = 577)	Boys (n = 636)	χ^2 (1, N = 1,213)
Made sexual comments, jokes, gestures, or looks	7	13	11.95	22	18	3.88
Touched, grabbed, or pinched in a sexual way	2	7	19.23*	8	10	0.45
Brushed up against someone in a sexual way on purpose	3	9	21.14*	9	12	3.77
Spread sexual rumors about someone	3	8	16.88*	8	10	1.36
Pulled at someone's clothing in a sexual way	3	6	9.95	5	9	5.62
Showed, gave, or left someone sexual pictures, photographs, messages, or notes	1	6	22.90*	4	10	20.63*
Wrote sexual messages or graffiti (e.g., on bathroom walls, in locker rooms, in a note or book) about someone	4	4	0.47	3	5	3.24
Called someone "fag," "dyke," "lezzie," or "queer"	11	28	53.85*	11	26	48.53*
Flashed or "mooned" someone	3	8	13.53	14	13	0.51
Made comments about or rated the parts of someone's body that make them a boy or a girl	5	9	8.89	10	9	0.87

* $p < .0001$ required by Bonferroni adjustment.

there were only two behaviors that boys were significantly more likely than girls to report experiencing (with Bonferroni adjustments requiring $p < .0001$).

Following the procedure of AAUW (1993), a dichotomous sexual harassment perpetration variable was computed, with "0" assigned to those who reported no harassment in the last 6 weeks and "1" assigned to those who reported any harassment in the last 6 weeks. An identical variable was computed for victimization. There was a significant overlap between those who reported perpetration and those who reported victimization: 78% of perpetrators were also victims, and 56% of sexual harassment victims were also perpetrators. Boys were significantly more likely to report perpetration (36%) than were girls (21%), $\chi^2(1, N = 1,213) = 30.28, p < .001$, but were equally likely to report victimization (boys, 42%; girls, 38%).

Same-gender and cross-gender sexual harassment

To examine the hypothesis that same and cross-gender harassment are distinct, we conducted a confirmatory factor analysis (CFA) in which we predicted that the same- and cross-gender sexual harassment items would load on separate factors. Because individual harassing behaviors were reported at very low frequencies, the 10 items on the scale were collapsed into three summary variables: a) verbal harassment, b) visual harassment, and c) physical harassment, separately for same- and cross-gender harassment. Since the distributions of these summary variables were positively skewed, they were dichotomized into 0 (*never*) and 1 (*ever*). The PRELIS software program (Jöreskog & Sörbom, 1988) was used to calculate tetrachoric correlations and asymptotic variance and covariance matrices. These matrices were then used as the input in the CFA using the method of weighted least squares (WLS) in LISREL (Jöreskog & Sörbom, 1989) to estimate free elements in the factor loading matrix. The relative fit of two models was then compared: (a) a one-factor model in which same-gender and cross-gender variables were constrained to load on a

single factor, and (b) a two-factor model in which same-gender and cross-gender variables were assigned to two separate factors. Figure 1 depicts the two competing models in path diagram format. The same procedures were applied to the victimization items and CFAs of perpetration and victimization were tested separately.

Table 2 provides three measures of fit for each model tested: the conventional likelihood ratio chi-square ($LR\chi^2$) test, the chi-square to degrees-of-freedom ratio (χ^2/df), and the root mean square error of approximation (RMSEA). A model is considered to have adequate fit when the chi-square to degrees-of-freedom ratio is 5 or less, and when the RMSEA is 0.08 or less (MacCallum, Brown, & Sugawara, 1996). The $LR\chi^2$ test provides an inferential test of the hypothesis that the model fits the data *perfectly*. As indicated in Table 2, both models tested were found to deviate significantly from perfect fit. It is important to note that the $LR\chi^2$ test is not recommended as a statistical test of model fit because it is sensitive to sample size. It is, however, the preferred measure for testing the *relative* fit of two nested models (Hoyle & Panter, 1995). In the current case, the two-factor model is nested in the one-factor model. Although there was a strong association between same-gender and cross-gender harassment for both perpetration ($\beta = .90$) and victimization ($\beta = .80$), the two-factor model fit the data significantly better than the one-factor model for both perpetration, $\Delta\chi^2(1, N = 1,213) = 13.38, p = .0001$, and victimization, $\Delta\chi^2(1, N = 1,213) = 28.07, p < .0001$. These results support the contention that same- and cross-gender harassment are at least partially distinct phenomena and should be analyzed independently.

Grade-related increases in same- and cross-gender harassment

Based on our developmental contextual framework, we expected that cross-gender harassment would increase in frequency across the early adolescent years whereas same-gender harassment would not. Table 3 shows the percentages of adolescents in each grade who

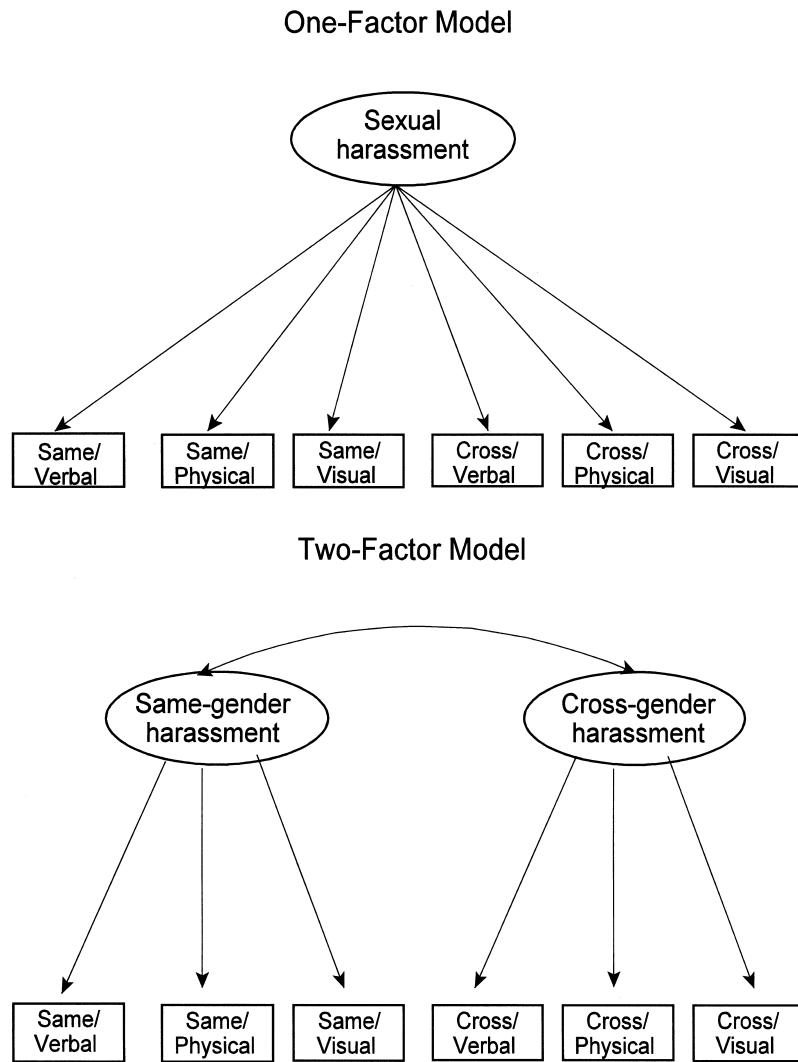


Figure 1. Confirmatory factor analyses of one-factor and two-factor models of same-gender and cross-gender sexual harassment.

reported same-gender and cross-gender harassment. Grade-related increases in cross-but not same-gender harassment were investigated by WLS analysis of marginal frequencies. WLS analysis is conceptually similar to traditional analysis of variance techniques, but rather than analyzing marginal *means* and partitioning variations among means into various sources, WLS analyzes marginal *probabilities* and partitions the variance among these probabilities into various sources. Similar to the procedures used in hierarchical log-linear analysis, backward elimination of higher

order interactions is used to determine the most parsimonious model.

In the present analysis, grade, gender, and the repeated-measures factor specifying same-versus cross-gender harassment (type) were entered into the model predicting probability of harassment. Grade was treated as a continuous variable in order to test for linear trends. Table 4 shows the WLS parameter estimates and chi-square tests of significance for the final model, after nonsignificant higher order interactions were removed. As indicated, the hypothesized Grade \times Type interaction was

Table 2. Confirmatory factor analyses comparing single-factor to two-factor model of sexual harassment ($N = 1,213$)

Models	Likelihood Ratio		
	χ^2	χ^2/df	RMSEA
Harassment perpetration			
1-factor ^a	35.75	3.97	.05
2-factor ^b	22.37	2.80	.04
Harassment victimization			
1-factor ^a	73.29	8.14	.08
2-factor ^b	45.22	5.65	.06

^adf = 9.^bdf = 8.* $p < .001$.**Table 3.** Percentages of boys and girls reporting same-gender and cross-gender sexual harassment in each grade

Gender	Grade	n	Same-Gender Perpetration (%)	Same-Gender Victimization (%)	Cross-Gender Perpetration (%)	Cross-Gender Victimization (%)
Boys	6	143	22	29	10	15
	7	226	31	33	14	16
	8	267	37	43	30	35
Girls	6	153	8	16	10	23
	7	185	9	14	15	30
	8	239	12	15	26	44

Table 4. Weighted-least-squares estimates and chi-square tests of grade and gender in the perpetration of same- and cross-gender sexual harassment

Effect	Weighted-Least-Squares Estimate	SE	χ^2
Intercept	-0.22	0.06	8.26
Type ^a	0.19	0.03	16.06*
Gender ^b	0.05	0.01	32.74*
Grade (linear)	0.06	0.01	27.91*
Gender ^b × Type ^a	0.05	0.01	77.83*
Grade (linear) × Type ^a	-0.03	0.01	14.70*

^a“Type” is the repeated measures comparison of same-gender harassment to cross-gender harassment.^bBoy, 0; girl, 1.* $p < .001$.

significant. The lack of a significant Gender \times Grade \times Type interaction indicates that the hypothesized interaction is similar for boys and girls. Decomposition of the Grade \times Type interaction indicated that, as predicted, there was a positive linear grade trend for cross-

gender perpetration, $\chi^2(1, N = 1,213) = 40.30$, $p < .001$, but not for same-gender perpetration. Decomposition of the Gender \times Type interaction indicated that boys perpetrate more same-gender than cross-gender harassment, $\chi^2(1, N = 636) = 42.76$, $p < .001$, while girls

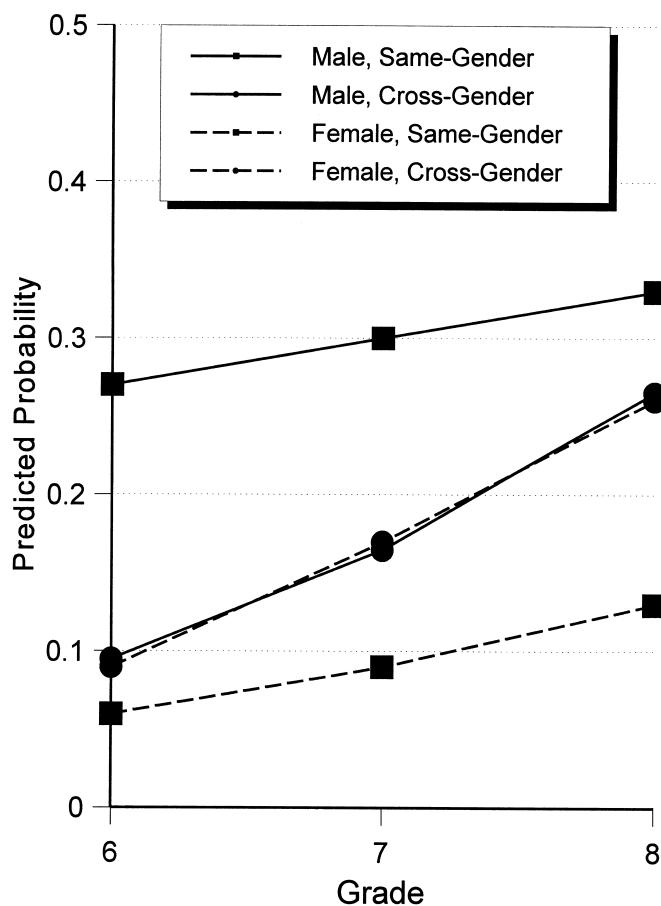


Figure 2. Plot of predicted probabilities for perpetrating cross-gender and same-gender sexual harassment by gender and grade.

perpetrate more cross-gender than same-gender harassment, $\chi^2(1, N = 577) = 29.70, p < .001$. Figure 2 displays a plot of the predicted values for the probability of perpetrating harassment based on the WLS parameter estimates. The pattern of results for a parallel WLS analysis for the probability of sexual harassment *victimization* was identical to that for harassment perpetration.

Biological and social contexts of sexual harassment

Finally, we examined the links between pubertal maturation, peer group gender composition, and sexual harassment of peers. Logistic regression analyses were conducted because of the dichotomous nature of the sexual ha-

rassment variables. These analyses were conducted separately for same-gender and cross-gender harassment because differential patterns of associations were expected. Because harassment increased with grade and was reported more often by boys than the girls, age and gender were also included in the analyses. To assess the biodevelopmental links with each type of sexual harassment, three regression models were tested: a first model with age and gender, a second model in which pubertal maturation was added to the analysis, and a third model in which cross-gender networks was also included. Exploratory analyses indicated that there were no significant two-way interactions in any of the models tested. The results of these analyses are shown in Table 5.

Table 5. Logistic regression analyses of puberty and mixed-gender networks for perpetration of sexual harassment

Criterion	Effect	Parameter Estimates		
		Model 1	Model 2	Model 3
Cross-gender perpetration	Intercept	-8.70*	-6.40*	-6.54*
	Gender ^a	0.03	-0.01	-0.04
	Age	0.57*	0.38*	0.38*
	Z score for puberty	—	0.38*	0.35*
	Mixed-gender network	—	—	1.57*
	Model χ^2	32.29*	49.98*	64.22*
	Degrees of freedom	2	3	4
Same-gender perpetration	Intercept	-4.49*	-3.02	-3.03
	Gender ^a	-1.31*	-1.34*	-1.38*
	Age	0.29	0.18	0.17
	Z score for puberty	—	0.24	0.22
	Mixed-gender network	—	—	0.98
	Model χ^2	77.39*	85.57*	91.14*
	Degrees of freedom	2	3	4

^aBoy, 0; girl, 1; N = 1,013.

*p < .001.

As indicated, the regression analyses for perpetration of same-gender and cross-gender sexual harassment revealed different patterns of association. Pubertal status and the gender composition of the peer network were independently associated with increased likelihood of perpetrating cross-gender harassment, after controlling for age and gender. Conversely, neither pubertal status nor gender composition of the peer network was associated with same-gender harassment. Repeating the analyses for victimization revealed an identical pattern of results.

Discussion

The purpose of this study was to explore the developmental context of sexual harassment among young adolescents in the late elementary and middle school grades. The results indicated that a substantial number of these youths, both boys and girls, are involved in sexual harassment with same-gender and cross-gender peers. Same- and cross-gender sexual harassment are distinct phenomena at this age, and it was only cross-gender harassment which increased with grade. Consistent with our developmental contextual framework, perpetration of sexual harassment was

associated with adolescents' pubertal maturity and with their increased participation in mixed-gender peer groups.

Both boys and girls reported perpetrating sexual harassment, yet consistent with the AAUW study (1993), boys were significantly more likely to report this behavior than were girls. This gender difference was not found for the likelihood of experiencing sexual harassment, as both boys and girls in our study reported comparable levels of victimization. This result stands in contrast to the two previous studies of high school students (AAUW, 1993; PCSW, 1995), which found girls to be significantly more likely to experience sexual harassment than boys. We tested the possibility that the relatively high rate of male victimization in the present study was a function of the frequent homophobic name-calling that boys reported experiencing. Removal of the homophobic name-calling item from the calculation of the summary harassment variables, however, had no effect on the pattern of gender differences in sexual harassment perpetration or victimization. It would appear that boys and girls experience harassment victimization equally in early adolescence and that the gender difference favoring girls' victimization emerges only later on. Possibly,

older adolescent boys are less intimidated by harassment and so become desensitized to its occurrence whereas harassment continues to be a distressing threat for girls. Alternatively, though, harassment of girls may continue to escalate into the high school years.

Same-gender and cross-gender harassment were found to be distinct sets of behaviors. This finding suggests that those youths who sexually harass same-gender peers are not necessarily the same youths who harass cross-gender peers. Similarly, those youths who are harassed by same-gender peers are not necessarily the same youths who are harassed by cross-gender peers. A gender differentiation was also found in that boys perpetrated and experienced more same-gender than cross-gender harassment, while the reverse was found for girls. The greater cross-gender focus of girls' harassment may reflect their earlier onset of pubertal maturation and consequent development of sexual interest in boys (Marshall & Tanner, 1974). The boys' more frequent reporting of same-gender harassment likely reflects a different source and would be consistent with our view of same-gender harassment as a form of verbal aggression. In late childhood and early adolescence, boys and girls differ in their expression of aggression. Whereas boys tend to express aggression in overt and direct forms, girls' aggression tends to be indirect and focused on relationships rather than individuals (Crick et al., 1999). In early adolescence, it would appear that a common way for boys to express verbal hostility to each other is in the form of homophobic insults and comments. In North American cultures, the stigma against gay men is very powerful. As Herek (1987) writes, "To be a man in contemporary American society is to be homophobic—that is, to be hostile toward homosexual persons in general and gay men in particular" (p. 68). The adolescent boys in our study reflect this reality in their use of homophobic harassment of each other. Whether sexual harassment might be used as a form of relational aggression by the girls is an intriguing question. Spreading rumors of a sexual nature and writing sexual messages about someone are two harassment items that would fall into the rubric of relational aggres-

sion, as defined by Crick and colleagues (Crick et al., 1999). In our data girls do not appear to differ from the boys in their rates of relationally based sexual harassment, either perpetration or victimization. It is possible that girls do not use sexual content when they are relationally aggressive, given the "double standard" that exists in North American cultures even today. However, it may also be the case that girls' sexual harassment is used in different situations not tapped into in the current study. Asking about the use of sexual name-calling and sexual innuendo to exclude another girl from the social group or to damage someone's friendships are relational forms of sexual harassment, and it would be useful to explore their frequency among adolescent girls.

Overall, the results are consistent with a developmental contextual model for the emergence of sexual harassment in early adolescence. As predicted, cross-gender harassment but not same-gender harassment increased in frequency across Grades 6–8. Examination of the predictors of cross-gender harassment provided a clearer understanding of the developmental factors that contributed to this increase. First, pubertal status was strongly linked to the likelihood of perpetrating harassment towards cross-gender peers. The hormonal changes associated with pubertal development lead directly to sexual arousal and motivation (e.g., Finkelstein et al., 1998; Halpern et al., 1994, 1997; Udry et al., 1986), and this may be manifested in the higher likelihood of sexual harassment perpetration. However, it is also possible that sexual harassment is only indirectly related to biological processes. For example, with puberty adolescents witness the development of their own secondary sex characteristics, which, in Western culture, are signifiers of sexuality. As they begin the process of integrating their sexuality with their personal identity, they may explore sexuality issues in a variety of ways including, for socially unskilled or aggressive youths, imposing unwanted sexual attention on others.

In addition to pubertal maturation, social network composition was also associated with cross-gender harassment. Adolescents who had a substantial number of cross-gender

friends were more likely to perpetrate cross-gender sexual harassment than adolescents with few cross-gender friends. This association likely reflects the fact that adolescents who have more contact with cross-gender peers in their friendship group therefore have more opportunities to perpetrate sexual harassment. For most young adolescents, participation in mixed-gender groups is an eagerly sought new venture. Yet, at the same time, for some of these adolescents it is a form of social interaction for which they may not be fully prepared. Hence, it may be those adolescents who are most stressed by the developmental challenge of cross-gender interactions who resort to sexually harassing behaviors. There is considerable evidence that boys in particular are less well prepared than girls for effectively managing interactions with cross-gender peers (Buhrmester & Furman, 1987). This relative lack of preparedness may contribute to the greater frequency of harassment among boys than girls.

The developmental contextual model we proposed was specific to cross-gender sexual harassment. Interestingly, identical patterns of association with pubertal maturation and social network composition were found for perpetration and for victimization. These results, combined with the substantial overlap between harassment victimization and perpetration, suggest that it may be appropriate to consider victimization and perpetration as two aspects of a single phenomenon of harassment *involvement*. This would lead one to think that sexual harassment may be occurring between peers *within* the peer network, rather than between unacquainted peers. Consistent with this hypothesis, Fineran and Bennett (1997) found that high school students were more than twice as likely to report harassing known peers than unknown peers. Studies of the development of romantic relationships in adolescence suggest that as youths begin the process of transformation into sexual adults, they begin the exploration of romantic relationships within the friendship group context rather than in a dyadic context (Connolly, Furman, & Konarski, 2000; Dunphy, 1963; Furman & Wehner, 1994). Therefore, it may be in the group context that individuals learn

from peers appropriate ways to approach others sexually. Whether an individual's harassment behaviors continue, escalate, or decline may depend on peer group norms; that is, peer groups will differ in the extent to which they model and reinforce sexual harassment. The process of peer influence on student to student sexual harassment awaits further study.

This study has identified developmental trends in harassing behavior during early adolescence as well as contextual variables which influence its occurrence. As such, there are implications for understanding developmental risks for psychopathology. Sexual harassment is quite pervasive in our culture and begins to manifest itself during the transition from childhood to adulthood. In view of the frequent occurrence of sexual harassment in elementary and middle school, the results of this study would suggest that some of the harassment observed among young teens may be similar to other types of adolescent deviance that are time-limited misbehaviors and a response to the stress of coping with the changes of adolescence. For other adolescents, however, sexual harassment of peers occurs as part of a developmental trajectory of interpersonal aggression that has its origins earlier in development. It is not always simple to distinguish between these two groups of adolescents, especially at that developmental point when harassment is just emerging. When sexually harassing behaviors are a response to the developmental stressors of adolescence, however, they likely occur in isolation and not as part of a pattern of harassing behaviors. On the other hand, adolescents who sexually harass as part of a developmental pattern of interpersonal aggression are also likely to show evidence of a constellation of interpersonally aggressive behaviors, such as bullying or relational aggression. They may also show harassment of peers in numerous other situations such as academic or athletic endeavors. For these adolescents, the developmental stressors of adolescence amplify previous difficulties and the sexually harassing behaviors in which they engage may establish precursors for hostile patterns of interaction with cross-gender friends and dating partners. An important direction for future research is to examine the gener-

ality of harassment across situational contexts and particularly its links to other forms of interpersonally harmful behaviors.

The findings of the study also have implications for intervention. The high rates of sexual harassment in Grades 6–8, and the evidence that sexual harassment increases significantly across these grades, suggest that interventions for sexual harassment need to be in place *prior* to high school, because interventions are more effective when they prevent behavior patterns before they develop, rather than after the patterns have stabilized. Given the evidence that early maturing youths are more likely to become involved in sexual harassment, parents and teachers should be particularly vigilant about the safety of early maturing youth. As well, helping adolescents establish appropriate ways of interacting with cross-gender peers and promoting norms for nonharassing ways of relating to each other are important goals for parents and teachers. Finally, universal programs that deliver primary interventions to all youths would be most valuable given the pervasive nature of sexual harassment and the difficulty of detecting youth for whom such behavior is a precursor for future problems in cross-gender relationships.

As one of the first efforts to examine sexual harassment in the early years of adolescence, this study provides a powerful reminder of how early such behavior can arise as well as the importance of examining its occurrence in the actual ecology of adolescents' lives. In future research, it would be important to further refine the measurement of sexual harassment. In particular, it is unclear to what extent early adolescents are able to accurately

report on unwanted harassment that they themselves perpetrate. Because the measures used in the study are self-report and because sexual harassment is socially undesirable, it is likely that this study underestimates the prevalence of sexual harassment. It is also possible that the self-reporting response bias for sexual harassment may operate differently for boys and girls, as has been shown in the case of dating violence (Browne, 1993; O'Leary, Malone, & Tyree, 1994). Using reports from peers or other observers of behavior would be important in validating the extent of sexual harassment in schools for both boys and girls. Finally, while our study highlights the biosocial context of harassing behavior, it does not address the more immediate situational context in which harassment occurs. Examining the social interactions between peers in which harassing behaviors occur would help to distinguish between behaviors that are aggressively motivated and those that are immature expressions of sexual interest.

In summary, this study suggests that sexual harassment among peers is frequent as children enter adolescence and is associated with the processes of developing sexuality and mixed-gender socialization. Although understandable within a developmental framework, sexual harassment is by no means a necessary or healthy aspect of adolescence. Sexual harassment is a humiliating and distressing experience for victims and can be part of a syndrome of cross-gender intimidation for perpetrators. Only by acknowledging and addressing the pervasiveness of sexual harassment and its emotional impact can we truly claim we are protecting the safety of all students in our schools.

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