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Prevalence and Frequency of Internet Harassment Instigation: Implications for Adolescent Health

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Abstract

Purpose: Youth psychosocial and behavioral characteristics are examined based upon varying frequency of Internet harassment perpetration online.

Methods: Data are from the Second Youth Internet Safety Survey, a national telephone survey of youth between the ages of 10 and 17 years (N = 1,500). Interviews took place between March and June 2005.

Results: In all, 6% of youth reported frequent Internet harassment perpetration, an additional 6% reported occasional perpetration, and 17% reported limited perpetration of Internet harassment in the previous year. In general, behavioral and psychosocial problems increased in prevalence as the intensity of harassing behavior increased. Rule-breaking problems were reported three times more frequently by occasional perpetrators ($p = .002$) and seven times more frequently by frequent perpetrators ($p < .001$) as compared to otherwise similar youth who never harassed others in the previous year. Aggression problems were associated with twofold increased odds of limited perpetration ($p = .03$) and ninefold increased odds of frequent perpetration of Internet harassment ($p < .001$) among otherwise similar youth. Girls were 50% more likely to be limited perpetrators ($p < .02$), whereas boys were three times more likely to be frequent perpetrators of harassment online ($p < .001$).

Conclusions: A categorical definition of Internet harassment behavior reveals differences among youth who perpetrate online harassment at different frequencies. Findings reinforce previous research that youth who harass others online are likely facing concurrent behavioral and psychosocial challenges. Internet harassment perpetration may be a marker for a larger constellation of psychosocial problems. © 2007 Society for Adolescent Medicine. All rights reserved.

Keywords: Harassment; Internet; Behavior problems; Bullying

Research suggests that bullies face multiple mental health problems and represent an important adolescent health issue. Bullies tend to have concurrent psychosocial challenges, including alcohol and other substance use [1–3], depression [1,4–7], and aggressive behavior [8–10], as well as poor caregiver–child relationships [8]. Over the long term, bullies are much more likely than other youth to manifest antisocial behavior [7,9], sometimes culminating in a criminal conviction [8].

Although a relatively new field, research suggests that children and adolescents who harass others online are facing concurrent mental health problems akin to traditional bullying, including a poor emotional bond with their caregiver, substance use, delinquent behavior, and peer victimization online as well as offline [11]. Despite similarities, differences between offline bullying and online harassment have been noted. Males and females are equally likely to report harassing others online [11], whereas most literature on offline bullying suggests that boys are more likely to be bullies than girls [3,5,8,9,12,13]. One study has found that as age increases, the likelihood of being an online harasser increases [11]. In comparison, the likelihood of being a

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bully offline tends to decrease with age and grade [3,8,10,14], suggesting aspects of online harassment such as power dynamics may differ from traditional bullying. With increasing numbers of youth online [15,16] and great advances in Internet technology in the last 5 years [15–19], further investigation of youth perpetration of Internet harassment is warranted.

Frequency of offline bullying

Probably because the common definition of bullying indicates the behavior must be frequent and continue over time [9], little is known about young people who bully others infrequently. Nonetheless, studies suggest that most bullying behavior occurs infrequently rather than frequently [1,10,20]. For example, in a cross-national study, Smith-Khuri et al report that 24% of youth in the United States bully others infrequently (once or twice) during the school term [10]. In contrast, 9% of youth bully others sometimes and 6% bully others frequently (weekly or more often) [10]. Kaltalia-Heino et al also report that among Finnish students, being involved in infrequent bullying (either as the perpetrator or the victim) is much more common (38% of girls and 54% of boys) than being involved in frequent bullying (8% of girls and 17% of boys) during the current school term [1].

It seems that as the frequency of involvement increases, the prevalence of mental health problems also increases. Depressive symptoms, anxiety, excessive psychosomatic symptoms, excessive alcohol consumption, and use of other substances all increased in frequency as the involvement in bullying increased among participants in Kaltalia-Heino et al's study [1]. Similarly, Solberg and Olweus report that social disintegration, negative self-evaluations, and depressive tendencies worsen as the frequency of bullying involvement increases among the 16,410 youth they surveyed [21]. How this pattern may apply to bullies in the online world has yet to be reported. This knowledge is especially pertinent to our understanding of adolescent Internet health issues as Internet use continues to increase among young people [15,16]. It may be that Internet harassment perpetration represents a range of behaviors, on the one hand reflecting minor disagreements between friends typical in adolescence [22], and on the other hand reflecting aggression of a greater frequency that fits our more traditional view of bullying. Identifying where the line may be has important implications for prevention and intervention efforts.

Methods

The Second Youth Internet Safety Survey (YISS-2), conducted between March and June of 2005, was a national survey of 1,500 households of youth between the ages of 10 and 17 years (mean 14.2, SD 2.1) and one caregiver. The University of New Hampshire Institutional Review Board approved and supervised the protocol.

Sampling method

A sample size of 1,500 households across the continental United States was predetermined to ensure a maximum sampling error of 2.5% at the .05 significance level. Households were identified via random digit dialing. Interviewers were conducted by the national survey research firm Schulman, Ronca, and Bucuvals, Inc. (SRBI). Using common calculations [23], the response rate was 45%.

Sample

Youth were required to have used the Internet at least once a month for the past 6 months and to speak English. To promote a diverse sample, Internet access was allowed from anywhere (i.e., home access was not required). Half (51%) of youth respondents were female. Three quarters (76%) self-identified as White, 13% Black, 2.5% Indian, 3% Asian, and 1% "other" (3% declined to provide an answer). Almost one in 10 (9%) self-identified as of Hispanic ethnicity. Twenty-two percent of adults reported a household high school education or less, and 35% reported an annual household income of $50,000 or less. YISS-2 households tended to be more educated, have higher incomes, and more frequently cited White race as compared to the national average, as was expected base upon recent surveys of the current Internet population [15,16]. Further details about YISS-2 methodology are published elsewhere [24].

Measures

Harassment perpetration. Our main outcome for the current investigation was engagement in online harassment perpetration in the previous year. Two types of harassing behavior were queried: (1) the number of times in the last year that youth had used the Internet to harass or embarrass someone they were mad at; and (2) the number of times that youth had made rude or nasty comments to someone else online. Answers were coded as: never, once, twice, three to five times, and six or more times (Table 1). Event characteristics for both types of harassing behavior were similar [25], suggesting that they could be combined into a global indicator of harassment. To do so while also capturing relative frequency of harassment, an algorithm was created:

Table 1
Frequency of harassing behaviors (n = 1,500)

Frequency	Rude or nasty comments	Harassing or embarrassing someone
Never	72.3 (1084)	91.4 (1371)
1 time	9.7 (145)	5.1 (76)
2 times	6.3 (95)	1.9 (29)
3–5 times	6.0 (90)	1.1 (16)
≥6 times	5.7 (86)	0.5 (8)

youth who reported engaging in either harassing behavior one or two times were classified as "limited" perpetrators; youth who reported engaging in either harassing behavior three to five times, or both behaviors two times each were classified as "occasional" perpetrators; those who engaged in one of the two types of behaviors six or more times or in both behaviors three to five times were classified as "frequent" perpetrators. Because only eight individuals reported engaging in both behaviors six or more times, they were included with the "frequent" harassers.

Psychosocial problems. Six questions from the Juvenile Victimization Questionnaire [26] were asked to measure different types of offline victimization. Sexual abuse and physical abuse in the previous year (yes/no) were combined to ensure cell stability (i.e., sufficient numbers of youth within a category to allow statistical comparisons). Being attacked (yes/no), being hit or jumped by a gang (yes/no), being hit by peers (yes/no), and being picked on by peers (yes/no) were combined to reflect any interpersonal victimization (yes/no).

Using a four-point Likert scale (1 = all of the time, 4 = never/rarely), the respondents rated how frequently their caregiver nagged them, yelled at them, and took away their privileges. Based upon exploratory factor analysis suggesting a common latent factor (Eigenvalue 1.69; percent variance 56.2), items were reverse coded and a summation variable was created to measure global parent–child conflict (mean 3.98, SD 1.43). This was dichotomized at 1 SD above the mean because of indications of nonlinearity.

Being a *target* of Internet harassment was indicated if youth responded positively to at least one of the following two questions: (1) Did you ever feel worried or threatened because someone was bothering or harassing you online? and (2) Did anyone ever use the Internet to threaten or embarrass you by posting or sending messages about you for other people to see?

Behavior. The Youth Self-Report (YSR) of the Child Behavior Check List [27] was used to measure behavior problems. It is one of the most recognized instruments used to assess problem behavior from the youth perspective. The current study includes two subscales measuring externalizing problems (rule-breaking behavior and aggressive behavior) and one internalizing subscale (withdrawn/depressed). Subscale scores were categorized according to Achenbach's recommendations and dichotomized to reflect youth in the borderline or clinical range versus nonclinical range.

Internet use. Four different aspects of Internet use were measured: high experience with the Internet, high importance of the Internet to oneself, and typically spending 4 or more days per week or 2 or more hours per day online. A common latent factor was suggested (Eigen value 1.71; percent variance 42.9). A summation score was created using these four variables and was dichotomized at 1 SD

above the mean versus all others to reflect "high Internet use." Activities that reflected interaction with others also were queried and included in the current analysis (i.e., emailing, blogging, instant messaging, and chat room use).

Demographic characteristics. The individual's age and sex were reported by caregivers, as were household education and annual household income. Race and ethnicity were reported by the youth themselves.

Statistical analyses

Using Stata 9 [28], missing and nonresponsive data were coded to the sample mode. In most cases, this affected less than 1% of data; income (8%, n = 123) being the exception. Psychosocial and behavioral attributes were then compared based upon reported frequency of Internet harassing behavior. The Cuzick nonparametric test for trend across the four ordered groups was conducted for each bi-variate comparison [28,29]. This test is an extension of the Wilcoxon rank-sum test and is useful when measuring trends across three or more ordered, independent groups. Next, to compare the estimates generated using the classic definition of harassment (i.e., frequent) versus a graduated definition of harassment perpetration (i.e., limited, occasional, frequent), a logistic regression model was estimated to quantify the odds of engaging in harassment perpetration six or more times in the previous year versus fewer and multinomial logistic regression then was used to estimate the conditional odds of engaging in any of the three frequencies of Internet harassment versus none.

Results

Almost one in three youth (29%, n = 435) reported harassing someone online at least once in the previous year. Of the 416 youth who reported making rude or nasty comments to another person, 82% (n = 343) said that someone else made rude or nasty comments to the respondent first in at least one incident, and 25% (n = 106) said they were the one to make rude or nasty comments first in at least one incident. Similarly, of the 129 youth who reported using the Internet to harass or embarrass someone, 81% (n = 104) said that someone else did it to the respondent first, and 31% (n = 40) acknowledged doing it to someone else first at least once.

Of all youth respondents, 6% (n = 90) reported frequent Internet harassment perpetration, 6% (n = 97) reported occasional perpetration, and 17% (n = 248) reported limited perpetration of Internet harassment. As shown in Table 2, most psychosocial characteristics and behavioral problems increased in prevalence as the frequency of harassment perpetration increased. Internet use also appeared to increase in intensity as

Table 2
Prevalence rate of psychosocial characteristics and behavior problems by harassing behavior online (N = 1,500)

Personal characteristics	Frequency of harassing behavior online				Statistical comparison	
	None (71%, n = 1,065)	Limited (17%, n = 248)	Occasional (6%, n = 97)	Frequent (6%, n = 90)	Test for trend (z)	p
Psychosocial characteristics						
Interpersonal victimization	32.4 (345)	50.4 (125)	59.8 (58)	55.6 (50)	7.2	<.001
High caregiver–child conflict	10.4 (111)	15.7 (39)	27.8 (27)	27.8 (25)	6.3	<.001
Target of Internet harassment	4.9 (52)	14.9 (37)	18.6 (18)	25.6 (23)	8.6	<.001
Physical/sexual victimization	2.1 (22)	5.2 (13)	4.1 (4)	12.2 (11)	5.1	<.001
Behavior problems						
Aggressive	3.4 (36)	7.7 (19)	8.2 (8)	28.9 (26)	9.0	<.001
Rule breaking	3.1 (33)	6.5 (16)	15.5 (15)	32.2 (29)	11.1	<.001
Withdrawn/depressed	3.8 (41)	4.4 (11)	5.2 (5)	8.9 (8)	2.1	.04
Internet use						
High use	20.0 (213)	37.5 (93)	42.3 (41)	66.7 (60)	10.9	<.001
Instant messaging	59.8 (637)	83.1 (206)	90.7 (88)	95.6 (86)	10.1	<.001
E-mail	73.8 (786)	87.1 (216)	95.9 (93)	93.3 (84)	6.9	<.001
Chat rooms	24.6 (262)	38.7 (96)	45.4 (44)	55.6 (50)	7.8	<.001
Blogging	13.6 (145)	22.2 (55)	23.7 (23)	22.2 (20)	3.7	<.001
Youth demographic characteristics						
White race	73.6 (784)	79.4 (197)	84.5 (82)	86.7 (78)	3.8	<.001
Male	49.7 (529)	38.7 (96)	54.6 (53)	66.7 (60)	1.9	0.06
Age, years, mean (SD)	13.9 (2.1)	14.6 (1.8)	15.2 (1.5)	15.8 (1.4)	10.0	<.001
Hispanic ethnicity	8.4 (89)	10.9 (27)	5.2 (5)	13.3 (12)	1.0	0.30
Household characteristics						
Lower income (<$50,000)	37.5 (399)	30.2 (75)	32.0 (31)	25.6 (23)	−2.8	.005
High school education or less	22.8 (243)	23.8 (59)	21.7 (21)	13.3 (12)	−1.6	0.11

harassment perpetration increased in frequency. As frequency of harassing behavior increased, youth age ($p < .001$), and the prevalence of white youth ($p < .001$) increased, whereas household income decreased ($p < .001$).

Comparison of dichotomous versus increasing frequency harassment perpetration

Two regression models were estimated, one using a dichotomous definition of harassment perpetration, and the other using a categorical definition reflecting increasing frequency of perpetration. Each was a saturated model, yielding estimates adjusted for all other variables included in the model. As shown in Table 3, the associations between psychosocial and behavior problems with harassment perpetration for the dichotomous definition ("frequent harassers") were similar to estimates for youth who were "frequent perpetrators" in the categorical definitions.

The likelihood of reporting behavioral problems and some psychosocial problems increased as harassment perpetration increased. For example, rule-breaking problems were reported three times more frequently by occasional perpetrators ($p = .002$) and seven times more frequently by frequent perpetrators compared to otherwise similar, non-harassing youth ($p < .001$). Aggression problems were associated with twofold increased odds of limited perpetration ($p = .03$) and ninefold increased odds of frequent perpetration ($p < .001$) compared to nonharassing youth

after adjusting for all other characteristics. The likelihood of being a target of Internet harassment was elevated for all youth perpetrators of Internet harassment, but especially so for those who were frequent perpetrators among otherwise similar youth. Offline interpersonal victimization was more strongly related to limited and occasional perpetration, whereas physical and sexual victimization was more strongly related to frequent perpetration holding all other characteristics equally.

High Internet use generally and instant messaging specifically were both associated with significantly elevated odds of reporting harassment perpetration and this was especially true for frequent perpetrators after adjusting for all other characteristics. On the other hand, blogging was not significantly associated with harassment perpetration of any frequency among otherwise similar youth.

Differences in demographic characteristics were noted. Increasing age was associated with increasing frequency of harassment perpetration among otherwise similar youth. Girls were significantly more likely to be limited perpetrators (adjusted conditional odds ratio [ACOR] = 1.5, $p = .02$) whereas boys were significantly more likely to be frequent perpetrators of online harassment (ACOR = 3.9, $p < .001$) after adjusting for all other characteristics. White youth (ACOR = 4.3, $p < .001$) and Hispanic youth (ACOR = 4.1, $p = .003$) appeared to be especially likely to be frequent perpetrators of Internet harassment.

Table 3
Comparison of findings for a dichotomous versus categorical definition of harassing behavior

| Personal characteristics | Dichotomous comparison[a] (n = 1,151) | | | Categorical comparisons (compared with nonharassers) (n = 1,500) | | | | | | | | |
| | Frequent harassers: 6+ times (7%, n = 86) | | | Limited (17%, n = 248) | | | Occasional (6%, n = 97) | | | Frequent (6%, n = 90) | | |
	AOR	95% CI	p	ACOR	95% CI	p	ACOR	95% CI	p	ACOR	95% CI	p
Psychosocial characteristics												
Interpersonal victimization	1.7	0.9, 3.1	.13	2.2	1.6, 2.9	<.001	3.0	1.9, 4.8	<.001	1.8	1.0, 3.1	.05
High caregiver–child conflict	2.1	1.0, 4.4	.06	1.2	0.8, 1.8	.50	2.0	1.2, 3.6	.01	1.3	0.7, 2.7	.39
Target of Internet harassment	4.7	2.1, 10.7	<.001	2.4	1.5, 3.9	<.001	2.8	1.5, 5.4	.001	4.6	2.3, 9.5	<.001
Physical/sexual victimization	3.3	0.8, 14.4	.11	1.6	0.7, 3.5	.26	1.0	0.3, 3.4	.97	3.2	1.0, 10.6	.06
Behavior problems												
Aggressive	7.9	2.9, 21.7	<.001	2.1	1.1, 4.1	.03	1.6	0.6, 4.0	.34	9.3	3.9, 21.8	<.001
Rule breaking	5.7	2.2, 14.8	<.001	1.3	0.6, 2.6	.49	3.4	1.5, 7.3	.002	7.1	3.1, 16.1	<.001
Withdrawn/depressed	0.8	0.2, 2.9	.78	0.9	0.4, 1.9	.77	0.8	0.3, 2.2	.62	0.9	0.3, 2.7	.84
Internet use												
High Internet use	5.8	3.0, 11.0	<.001	1.7	1.2, 2.4	.001	1.9	1.2, 3.1	.006	6.4	3.6, 11.6	<.001
Instant messaging	9.9	2.4, 41.2	.002	2.1	1.4, 3.3	.001	3.0	1.4, 6.6	.005	11.3	3.1, 41.9	<.001
E-mail	0.8	0.3, 2.6	.74	1.0	0.6, 1.6	.92	3.0	1.0, 9.1	.05	1.0	0.3, 2.8	.93
Chat rooms	2.6	1.4, 4.8	.002	1.5	1.1, 2.0	.01	1.7	1.1, 2.6	.03	2.3	1.4, 4.0	.002
Blogging	0.8	0.4, 1.7	.53	1.0	0.7, 1.5	1.0	1.0	0.6, 1.7	.98	0.8	0.4, 1.6	.57
Demographic characteristics												
White race	5.2	2.0, 13.6	.001	1.5	1.0, 2.2	.05	2.1	1.1, 3.9	.03	4.3	1.9, 9.9	<.001
Male	3.0	1.5, 5.9	.001	0.7	0.5, 0.9	.02	1.5	1.0, 2.4	.08	3.9	2.1, 7.1	<.001
Age	1.7	1.4, 2.2	<.001	1.1	1.0, 1.2	.008	1.3	1.1, 1.5	.001	1.8	1.5, 2.2	<.001
Hispanic ethnicity	4.4	1.5, 12.6	.006	1.8	1.1, 3.0	.03	0.9	0.3, 2.5	.83	4.1	1.6, 10.4	.003
Household characteristics												
Lower income (<$50,000)	0.7	0.3, 1.5	.35	0.7	0.5, 1.0	.08	1.0	0.6, 1.6	.94	0.8	0.4, 1.5	.52
High school education or less	0.4	0.2, 1.1	.09	1.2	0.9, 1.8	.26	1.1	0.6, 2.0	.75	0.5	0.3, 1.2	.13

Abbreviations: AOR = adjusted odds ratio (estimates are adjusted for all other variables in the model, i.e., all characteristics shown in table; ACOR = adjusted conditional odds ratio (estimates are adjusted for all other variables in the model, i.e., all characteristics shown in table); CI = confidence interval.

[a] n = 1,151 Individuals who reported engaging in either harassment behavior 6 or more times (n = 86) are compared with those who reported never engaging in either behavior (n = 1,065). Youth who reported less frequent harrassing behavior (n = 349) were not included in the model.

Discussion

As predicted [1,10,20], psychosocial and behavior problems increase in frequency as the frequency of online harassment perpetration increases. This is especially true for aggression and rule breaking problems, and being the target of Internet harassment for youth. Importantly, youth who are limited or occasional perpetrators report these psychosocial challenges at significantly higher rates than uninvolved youth. A graduated definition of harassment perpetration reveals psychosocial and behavior problems in less intensively involved youth.

Power dynamics

Consistent with the previous study by Ybarra and Mitchell [11], as age increases so too does the likelihood and frequency of Internet harassment perpetration. Observations suggesting that older youth are more likely to engage in harassment online as compared to studies reporting younger youth engage in bullying offline [3,8,10,14] may indicate that the power dynamics online are different and for some reason(s) more attractive to older youth. Given the important social development that occurs in later adolescence

[30], the fact that older youth are more likely involved as frequent perpetrators may indicate that instead of engaging in normative and important personal development, some older youth are not developing the necessary skills to succeed in adulthood.

As suggested by Ybarra and Mitchell [11], it is possible that some Internet harassers are acting in retaliation to bullying they received in-person or harassment they received online. This is consistent with the finding that harassers in the current survey are significantly more likely also to report offline interpersonal victimization, and is further supported by the report from four in five harassers who say their harassing behavior was in response to an online harassment incident initiated by someone else. This may suggest that one important prevention technique will be to equip youth with effective means of more positive and productive conflict management skills.

In the current investigation boys are significantly more likely than girls to be frequent perpetrators in online harassment whereas girls are significantly more likely to report limited perpetration. This is in contrast to expectations that boys and girls will be equally likely to report harassing

others online [11]. Findings persist even after underlying differences in aggression and rule-breaking problems are taken into account. These sex differences are not explained by behavior problems that are more typical in boys than girls. Perhaps boys are more likely to retaliate than girls to perceived harassment. It may also be that boys experience a stronger power differential between themselves and the target of their harassment, which reinforces the behavior and leads to a greater frequency of perpetration. The power dynamics between girl harassers and their targets may not be as strong, or power may not generally be a goal for girls who harrass. Because this sex difference appears to have emerged since 2000 [31], it also is possible that there are underlying shifts in Internet culture that help to explain the findings as well.

Sex and age differences in online and offline harassment provide intriguing clues about the power dynamics for future research. Examinations of how the expression of harassment may vary for girls versus boys online, with specific attention to potential differences in the way boys and girls express emotional— or mental health—related difficulties, might be of great use to future targeted interventions. For example, it is possible that because girls are more likely than boys to be limited perpetrators, occasional or frequent perpetration for girls denotes greater psychosocial problems overall. Findings should be replicated in future studies.

Normative disagreements between friends, or something more problematic?

Some may argue that youth who are engaging in Internet harassment less frequently (i.e., once or twice) are displaying a normative disagreement with friends, as it is normal for conflict to occur between friends [22]. In addition, with almost one in four youth reporting limited or occasional Internet harassment perpetration in the current investigation, this lesser degree of perpetration is somewhat common. A clear distinction in the amount of behavior and psychosocial problems is observed for those reporting frequent versus less frequent perpetration as well. Nonetheless, youth who report limited and occasional perpetration are significantly more likely to report psychosocial and behavior problems as compared with nonharassing youth. Although peer disagreements are normative, the current findings suggest that the expression of this disagreement through Internet harassment may not be normative given its association with general psychosocial problems.

Psychosocial and behavior problems associated with Internet harassment

As expected, aggressive behavior [8–10], peer victimization online and offline [11], and poor caregiver–child relationships [8,11] are each significantly related to increased odds of varying frequencies of harassing behavior online holding all other characteristics equal. Rule-breaking problems also are observed for youth who are occasional

and frequent perpetrators of Internet harassment in the current investigation. These findings further support the suggestion that youth who harass others online are likely experiencing challenges on multiple fronts. The likelihood of behavioral and psychosocial problems varies as the frequency of harassment perpetration increases. Youth who are limited or occasional perpetrators may represent an opportunity to intervene early with potential improvements in general psychosocial functioning. Those who are frequent perpetrators appear likely to require more intensive follow-up. Current findings also provide further justification that online harassment prevention be integrated into traditional, school-based anti-bullying programs.

Study limitations

Our findings should be interpreted within the study limitations. First, the response rate (45%) is reflective of a general decline in response rates for national telephone surveys [32]. However national telephone surveys continue to obtain representative samples of the public and provide accurate data about the views and experiences of Americans [33]. Second, as a cross-sectional study, we cannot determine temporality. We cannot conclude that aggression problems cause a young person to harass others online, or that alternatively, harassing others causes one to become aggressive. It likely is a bi-directional relationship that continues to reinforce both behaviors. Longitudinal studies are needed to parse this out.

Conclusion

In conclusion, current results support the findings that youth who harass others online are likely facing concurrent behavioral and psychosocial challenges. As frequency of perpetration increases, so too do the odds of psychosocial and behavior problems. Sex differences also are observed. Girls are more likely to be limited perpetrators, whereas boys are more likely to be frequent perpetrators of Internet harassment. Harassment perpetration may be a marker for a larger constellation of psychosocial problems.

Acknowledgment

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