

## Rapid Communication

# Is Talking Online to Unknown People Always Risky? Distinguishing Online Interaction Styles in a National Sample of Youth Internet Users

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### ABSTRACT

We examined the risk of unwanted online sexual solicitations and characteristics associated with four online interaction styles among youth Internet users. The interaction styles took into account the people with whom youth interacted online (people known in person only, unknown people met through face-to-face friends, unknown people met in chatroom, and other places online) and high- and low-risk patterns of online behavior. The aim was to provide a basis for identifying which youth may be most at risk from interacting online with unknown people.

### METHODS

**T**HE DATA WERE GATHERED in a telephone survey of a nationally representative sample of 1,500 youth Internet users ages 10 to 17 years, conducted between March and June 2005. A detailed description of the sample and methodology can be found in other publications.<sup>1,2</sup>

### MEASURES

We asked the youth nine questions about interacting online with others. The first five questions concerned people they knew in person. "People use the Internet to communicate with a lot of different individuals. In the past year, have you communicated online with (1) people your age you see often, like friends from school? (2) people your age you don't see often, like friends who have moved away?

(3) people in your family you see often? (4) people in your family you don't see often, like relatives who live in other places? (5) other people you know personally, like teachers or coaches or neighbors?"

The next four questions concerned unknown people. "People also communicate with individuals they only know from the Internet, whom they don't know in person. In the past year, have you been online with (6) people you don't know in person, but you met online through friends or family—for example, a friend introduced you to someone through email? (7) people you get information from, like when you're working on school projects, but you don't know them in person? (8) people you met through an online dating or romance site? (9) people you don't know in person, whom you know online other ways—for example, people you met chatting or through instant messages?"

Youth who answered yes to any of the first five questions and no to questions 6 through 9 were

coded as *cautious interactors*. Youth who answered yes to question 6 and no to questions 7 through 9 were coded as *friend-mediated interactors*. Youth who answered yes to any of questions 7 through 9 were coded as *unrestricted interactors*.

The measure that distinguished high- versus low-risk unrestricted interactors was based on analyses developed by Ybarra et al.,<sup>3</sup> which found increases in online harassment and unwanted sexual solicitation based on the number of different potentially risky online behaviors youth had engaged in during the past year. The behaviors are listed in Table 1. The number of behaviors was summed, and youth who scored at least 1 SD above the mean ( $M = 2.5, SD = 2.1$ ) by engaging in five or more different behaviors were deemed high risk.

Aggressive online sexual solicitations were unwanted sexual solicitations (e.g., requests to talk about sex, give sexual information, or do something sexual) involving attempts at or actual offline contact by the solicitor. The variables describing demographic, Internet use and psychosocial characteristics are described in detail in other publications.<sup>1,2</sup>

### RESULTS

Of youth Internet users who interacted online with other people, 17% were high-risk unrestricted interactors who engaged in high levels of potentially risky online behaviors (see Table 1). Twenty-

one percent were low-risk unrestricted interactors; 10% were friend-mediated interactors; and 51% were cautious interactors who interacted online only with people they knew in person.

Fifteen percent of high-risk unrestricted interactors had received aggressive solicitations, compared to 6% of the low-risk, 4% of the friend-mediated, and 1% of the cautious groups. The high-risk youth had significantly higher rates of every type of potentially risky online behavior. In particular, 25% had talked online to unknown people about sex, compared to 4% of the low-risk group and 5% of the friend-mediated group.

Bivariate comparisons of high- and low-risk unrestricted, friend-mediated, and cautious interactors showed demographic differences in terms of age, family structure, and race among the four groups, as well as significant differences in many of the Internet use and psychosocial characteristics assessed (see Table 2).

Using multinomial logistic regression comparing high-risk unrestricted interactors to cautious ones, we found that high-risk unrestricted interactors were more likely to be teenagers, have high levels of Internet use, and engage in most types of interactive Internet use (see Table 2). They were more likely to report offline interpersonal victimization such as physical assaults by siblings or being bullied. They were over four times more likely to score in the borderline or clinically significant range on the Child Behavior Checklist (CBCL) subscales for

TABLE 1. AGGRESSIVE SEXUAL SOLICITATIONS AND TYPES OF RISKY ONLINE BEHAVIOR BY INTERACTOR GROUP

Characteristics	High-risk	Low-risk	Friend-	Cautious
	unrestricted interactors (n = 228) %	unrestricted interactors (n = 281) %	mediated interactors (n = 136) %	interactors (n = 682) %
Received aggressive solicitation***	15 <sup>a</sup>	6	4	1
Types of potentially risky online behavior				
Interacted online with unknown people <sup>na</sup>	100	100	100	0
Posted personal information or picture online***	93 <sup>a</sup>	58	75	48
Sent personal info/picture to unknown person***	93 <sup>a</sup>	39	49	0
People on buddy list never met in person***	90 <sup>a</sup>	47	60	15
Made rude or nasty comments online***	79 <sup>a</sup>	22	40	18
Used file sharing software to download images***	47 <sup>a</sup>	8	17	9
Visited X-rated Web site on purpose***	39 <sup>a</sup>	7	14	9
Harassed or embarrassed someone mad at***	27 <sup>a</sup>	3	15	5
Talked about sex to person met online***	25 <sup>a</sup>	4	5	0
High level of risky behaviors (five or more) <sup>na</sup>	100	0	32	1

<sup>a</sup> $p \leq 0.001$ , comparing low- and high-risk unrestricted interactors only.

<sup>na</sup>Significance tests not applicable.

\*\*\* $p \leq 0.001$ ; \*\* $p \leq 0.01$ ; comparing all four categories.

TABLE 2. BIVARIATE AND MULTIVARIATE COMPARISONS OF CHARACTERISTICS OF CAUTIOUS, FRIEND-MEDIATED AND LOW AND HIGH RISK UNRESTRICTED INTERACTORS

Characteristics	High-risk unrestricted interactors (n = 228) %	Low-risk unrestricted interactors (n = 281) %	Friend- mediated interactors (n = 136) %	Cautious interactors (n = 682) %
<i>Demographic characteristics</i>				
Teenager (13–17 years old)***	<b>96<sup>a</sup></b>	79	82	75
Female	47	52	51	55
Household education some college or more	54	<b>48<sup>c</sup></b>	58	59
Household income \$20,000 or less	8	9	5	7
Household income > \$75,000	33	29	38	37
Lives with both biological parents***	61	53	65	66
White race***	79	<b>66<sup>b</sup></b>	87	80
Black race***	13	22	7	9
Hispanic ethnicity	8	11	7	8
<i>Internet use characteristics</i>				
High level of Internet use***	<b>54<sup>a</sup></b>	29	<b>41<sup>b</sup></b>	21
Low level of Internet use***	<b>6<sup>c</sup></b>	19	<b>9<sup>c</sup></b>	23
Had Internet access at home***	97	87	93	94
Used Internet at friends' homes***	86	71	83	68
<i>What youth did online</i>				
Used e-mail***	<b>97<sup>c</sup></b>	85	88	84
Used instant messaging***	<b>95<sup>a</sup></b>	71	<b>84<sup>c</sup></b>	71
Went to chat rooms***	<b>62<sup>a</sup></b>	<b>51<sup>a</sup></b>	<b>33<sup>a</sup></b>	17
Played games***	<b>88<sup>c</sup></b>	<b>87<sup>b</sup></b>	<b>88<sup>c</sup></b>	79
Kept an online journal or blog***	30	18	21	14
<i>Psychosocial characteristics</i>				
High parent-child conflict***	23	18	11	10
Sexual or physical abuse, past year	6	4	5	2
Offline interpersonal victimization, past year ***	<b>56<sup>a</sup></b>	42	<b>47<sup>b</sup></b>	31
<i>CBCL subscales (scored in borderline or clinically significant range)</i>				
Aggressive behavior***	15	7	6	3
Rule-breaking behavior***	<b>18<sup>a</sup></b>	6	7	3
Social problems***	<b>11<sup>b</sup></b>	7	<b>8<sup>c</sup></b>	3
Withdrawn/depressed***	<b>8<sup>a</sup></b>	<b>7<sup>a</sup></b>	4	1

<sup>a</sup> $p \leq 0.001$ , <sup>b</sup> $p \leq 0.01$ ; <sup>c</sup> $p \leq 0.05$ .

Note: **Boldface** denotes variables significant in backward stepwise multinomial logistic regression. Regression controlled for all variables significant in bivariate analyses. Reference category is cautious interactors. Nine cases were dropped from the regression due to missing data on some variables.

–2 log likelihood = 2110.796, Model chi-square (df 39) = 515.151, R2 (Cox & Snell) = .324, R2 (Nagelkerke) = .355.

\*\*\* $p \leq 0.001$ ; \*\* $p \leq 0.01$  in bivariate analyses, comparing all four categories.

rule-breaking behavior (AOR 4.9, 95% CI 2.7–8.5) and depression (AOR 4.7, 95% CI 1.9–11.1) and more than twice as likely to exhibit social problems (AOR 2.7, 95% CI 1.3–5.4). (Odds ratios are adjusted to correct for over-estimation of risk).<sup>4</sup>

## DISCUSSION

Internet safety messages often suggest that interacting online with unknown people in any circumstance is risky for youth Internet users because it

may invite unwanted sexual solicitations that could lead to sexual victimization. Our findings suggest that many youth interact online with unknown people with little such risk. The youth most at risk included those with a diverse range of problems, including rule-breaking behavior, depression, and social problems that may manifest in different respects in interactions with unknown people. Rather than issuing blanket warnings to youth not to converse online with unknown people, more nuanced messages should be developed and targeted at the youth most at risk.

### ACKNOWLEDGMENT

To comply with Section 507 of PL 104-208 (the "Stevens Amendment"), we advise readers that 100% of the funds for this research were derived from federal sources, through Grant No. 2005-MC-CX-K024 from the Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice, and Grant No. HSCEOP-05-P-00346 from the U.S. Secret Service, Department of Homeland Security. The total amount of federal funding is \$348,767. Points of view or opinions in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. De-

partment of Justice or Department of Homeland Security.

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