Original article

Youth Internet Victimization in a Broader Victimization Context

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A B S T R A C T

Purpose: To examine past-year and lifetime rates of online victimization and associations with offline victimizations, trauma symptomatology, and delinquency among adolescents.
Methods: Data were collected through telephone interviews from a nationally representative sample of 2,051 adolescents (ages, 10-17) as part of the National Survey of Children's Exposure to Violence. Data were collected between January and May, 2008.
Results: Six percent of youth reported a past-year online victimization and 9% a lifetime online victimization. Almost all youth reporting a past-year online victimization (96%) reported offline victimization during the same period. The offline victimizations most strongly associated to online victimization were sexual victimizations (e.g., sexual harassment, being flashed, rape) and psychological and emotional abuse. Online victims also reported elevated rates of trauma symptomatology, delinquency, and life adversity.
Conclusions: Prevention and intervention should target a broader range of behaviors and experiences rather than focusing on the Internet component exclusively. Internet safety educators need to appreciate that many online victims may be at risk not because they are naive about the Internet, but because they face complicated problems resulting from more pervasive experiences of victimization and adversity.

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The recent wide-spread media attention to online victimization (e.g., online predators, cyber-bullying) [1-6] may have led to the impression that online risks comprise a large portion of overall youth victimization. However, youth are exposed to many different forms of violence and victimization [7-9], and it is unclear exactly where online victimization is situated in this larger victimization context in terms of relative frequency and effect. Little research has examined the influence online victimization may have on negative symptomatology (e.g., delinquency, trauma symptomatology) after taking into account off-

line victimization and adversity. Indeed, some research suggests that online victimization is associated with concurrent sexual abuse and other interpersonal victimization [10,11]. One study found that 73% of youth, aged 10-17, who reported an online victimization in the past year also reported offline victimization during that period [11]. Online harassment, sexual solicitation, and offline victimization (e.g., sexual assault, simple assault, bullying) were independently related to depressive symptomatology, delinquent behavior, and substance use. Even after adjusting for up to 8 different types of offline victimizations, youth reporting online sexual solicitation were almost two times more likely to report past-year depressive symptomatology and high rates of substance use. Beyond this study, however, research that examines online victimization in the context of other forms of child maltreatment and victimization is scant. The current re-

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search extends the field by examining online victimization in the context of 34 victimization types measured by the Juvenile Victimization Questionnaire (JVQ) [12]. Specifically, this research extends to the following areas:

1. Examines past-year and lifetime rates of online victimization in relation to offline victimizations measured by the JVQ.
2. Determines what forms of offline victimization are most strongly related to online victimization.
3. Examines whether online victimization contributes to trauma symptomatology and delinquency after adjusting for other forms of victimization.

Methods

The National Survey of Children's Exposure to Violence (NatSCEV) conducted telephone interviews to obtain information about victimization in a US national sample of 4,046 children, aged 2-17. The survey was carried out between January and May 2008. The sampling methodology and procedures are described in detail elsewhere [13,14]. The NatSCEV relied on a list-assisted random digit dial (RDD) telephone survey design for sample selection and data collection. A short interview was conducted with an adult caregiver (usually a parent) to obtain family background information. The interviewer then randomly selected one child from all eligible children living in a household, on the basis of the most recent birthday. If the selected child was 10-17 years old, the primary interview was conducted with the child. If the selected child was 2-9 years old, it was conducted with the caregiver who was "most familiar with the child's daily routine and experiences." Interviewers obtained consent from both the caregiver and the child. Because no caregivers reported an online victimization to children aged 2-9 years, we restricted the sample for the current research to youth aged 10-17 (n = 2,051). About half (51%) of the youth were boys; 61% were White non-Hispanic, 15% were Black non-Hispanic, 17% were Hispanic or Latino, of any race; one-quarter were aged 10 to 11 years, 25% were 12 to 13 years, 25% were 14 to 15 years, and 25% were 16 to 17 years; 70% of youth's parents were married; 68% of the youth lived in households where the highest level of education was "some college"; and 16% lived in households with an annual income of less than $20,000. This study was conducted under the guidance and approval of the University of New Hampshire Institutional Review Board.

Measurement

Online victimization

We assessed online victimization using two questions, one concerning online harassment and the other concerning unwanted sexual solicitation. Interviewers asked youth: *"Has anyone ever used the Internet to bother or harass you or to spread mean words or pictures about you?"*; and *"Did anyone on the Internet ever ask you sexual questions about yourself or try to get you to talk online about sex when you did not want to talk about those things?"* Response options were yes/no for both.

Offline victimizations

We assessed offline victimizations using the JVQ. The JVQ is a comprehensive instrument designed to screen for 34 separate types of offline victimization events, including physical assault, property victimization, child maltreatment, peer and sibling vic-

Table 1
Rates of victimization among youth, ages 10 through 17 (n = 2,051)

Victimization	NatSCEV rate past-year % (n)	NatSCEV rate lifetime % (n)
Any online victimization	6 (128)	9 (184)
Online sexual solicitation	3 (68)	5 (111)
Online harassment	4 (84)	6 (116)
Any physical assault	48 (992)	66 (1,354)
Assault with a weapon[a]	6 (117)	14 (278)
Assault without a weapon[a]	18 (362)	33 (679)
Attempted assault[a]	11 (219)	23 (466)
Kidnapped[a]	1 (20)	3 (61)
Bias attack[a]	3 (60)	5 (106)
Any property victimization	26 (537)	47 (961)
Robbery	5 (112)	13 (269)
Theft	17 (340)	34 (691)
Vandalism	13 (256)	30 (622)
Household theft	8 (163)	28 (576)
Any maltreatment	14 (292)	27 (544)
Physical abuse[a]	6 (114)	15 (297)
Psychological or emotional abuse	10 (199)	18 (374)
Neglect	2 (36)	5 (96)
Custody interference or family abduction[b]	2 (40)	7 (141)
Any peer-sibling victimization	50 (1,025)	70 (1,439)
Gang or group assault[a]	4 (76)	7 (145)
Peer or sibling assault[a]	31 (640)	51 (1,040)
Genital assault[a]	9 (177)	15 (299)
Bullying	9 (192)	25 (509)
Emotional bullying	22 (448)	40 (819)
Dating violence[a]	3 (57)	5 (94)
Any sexual victimization	12 (245)	19 (379)
Any sexual assault (SA)	3 (69)	7 (135)
SA by known adult	<1 (6)	2 (40)
SA by unspecified adult	<1 (8)	1 (24)
SA by a peer	1 (19)	3 (52)
Rape (completed or attempted)	2 (50)	5 (95)
Flashed/sexual exposure	5 (101)	9 (175)
Sexual harassment	6 (116)	9 (194)
Statutory rape/sexual misconduct	3 (62)	5 (96)
Any witness family violence	6 (125)	19 (400)
With domestic violence	4 (78)	16 (332)
With physical abuse	3 (51)	7 (153)
Any exposure to community violence	39 (795)	59 (1,200)
Witness assault with a weapon	13 (262)	29 (603)
Witness assault without a weapon	29 (594)	46 (943)
Someone close to you murdered	5 (112)	14 (293)
See a murder	1 (17)	3 (57)
Exposed to shooting, bombs, and/or riots	9 (177)	17 (349)
In a war zone	1 (24)	3 (54)

[a] Screeners used to calculate "Any Physical Assault."
[b] A parent took child, kept child, or hid child to prevent child from being with another parent.

timization, sexual victimization, witnessing violence, and indirect exposure to violence [15]. To facilitate analysis and help clarify trends, the 34 primary victimizations were organized into eight domains with aggregated measures recording whether a child experienced *any* victimization within each domain. The aggregates were physical assault, property victimization, maltreatment, peer-sibling victimization, sexual victimization, sexual assault, witness family violence, and exposure to community violence. (The exact wording of items and details about aggregates are available elsewhere [16]). Table 1 shows additional information about which victimizations comprise each aggregate.

The instrument measured past-year and lifetime exposure to each of the 34 primary victimizations. The JVQ presented each question as "at any time in your life." It then followed with an

additional question designed to isolate past-year episodes from victimizations that might have occurred earlier ("Thinking of [the last time/when] this happened... did it happen in the last year?"). Interviewers provided cues to assist the respondent in setting and applying the past-year time bound. Total score values were created by summing up each of the 34 victimizations; scores ranged from 0 to 19 with a mean of 2.7 (SD = 3.1) for the total number of past-year victimization types and from 0 to 29 with a mean of 5.7 (SD = 5.1) for the total number of lifetime victimization types.

Trauma symptomatology

We measured trauma symptomatology with the anger, depression, and anxiety scales of the Trauma Symptoms Checklist for Children (TSCC) [17], which comprised a total of 28 questions. Youth were asked "In the last month, how often have you [*read item*]...would you say not at all (value of 1), sometimes (value of 2), often (value of 3), or very often (value of 4)." We summed individual item responses for the three scales to create an aggregate *past-month trauma symptom score*. Higher values indicated greater trauma symptomatology. Total score values ranged from 28 to 104, with a mean of 43.2 (SD = 11.6). All components of the TSCC have shown very good reliability and validity in both population-based and clinical samples [17]. In the present study, the TSCC alpha coefficient is .93.

Delinquency

Past-year delinquency was assessed through 15 items including breaking or damaging things on purpose that belonged to others, stealing from home or school, cheating on tests, carrying a weapon, skipping school, and physically hurting other kids or adults. We constructed a *past-year delinquency score* by summing responses to individual items. Higher values indicated greater delinquency involvement. Total score values ranged from 0 to 13, with a mean of 1.1 (SD = 1.9). The alpha coefficient in the current study was .78.

Nonvictimization life adversity

We assessed nonvictimization life adversity, a possible influence on child mental health, with a comprehensive measure that included 16 nonviolent traumatic events and chronic stressors. Items included were serious illnesses, accidents, parental imprisonment, natural disasters, substance abuse by family members, and parental arguing. A *lifetime adversity score* was constructed by summing the total trauma events and stressors endorsed. Higher values indicated greater exposure to different forms of adversity. A *past-year adversity score* was constructed in the same way for events occurring in the past 12 months. Total score values ranged from 0 to 9 with a mean of 1.1 (SD = 1.3) for past-year adversity and from 0 to 14 with a mean of 3.0 (SD = 2.3) for lifetime adversity.

Statistical analysis

Data were weighted using a multistage sequential process to correct for (1) differing probabilities of household selection, including the deliberate oversampling of Black, Hispanic, and low-income respondents, (2) variations in the within-household probability of selection that resulted from different numbers of eligible children across households, and (3) differences in sample proportions according to gender, age, race/ethnicity, and income relative to 2008 Census population projections for each stratum.

First, we reported percentages of youth with past-year and lifetime online and offline victimizations. Next, we conducted three logistic regressions to examine which offline victimizations were most closely related to (1) any past-year online victimization, (2) past-year online sexual solicitation, and (3) past-year online harassment, adjusting for youth demographic characteristics. Next, we conducted an analysis of variance to identify unadjusted mean differences in total trauma symptomatology, delinquency, life adversity, and offline victimization based on report of any past-year online victimization. Finally, we conducted step-wise linear regressions to examine whether online victimization was related to trauma symptomatology and delinquency scores after adjusting for demographic characteristics, adversity, and total number of offline victimizations. This series of analyses was first conducted using the past-year data and then repeated using the lifetime data.

Results

Past-year and lifetime rates of online victimization relative to offline victimization

Online victimization was one of the least common victimizations that youth experienced (Table 1). Six percent of youth reported an online victimization in the past year—3% reported an unwanted sexual solicitation and 4% reported harassment. Six percent of youth also reported witnessing family violence. Sexual victimizations (12%) and maltreatment by caregivers (14%) were more common. Furthermore, nearly half (48%) of all the youth experienced face-to-face physical assaults. Patterns for lifetime victimization were similar.

Past-year online victimization was strongly related to past-year offline victimization

There was considerable overlap between online and offline victimizations. Almost all of the youth reporting an online victimization (96%) also reported at least one offline victimization; only 5 youth had online-only victimization histories.

When taking into account all other forms of offline victimization and youth demographic characteristics, reports of *any online victimization* were related to being sexually harassed (adjusted odds ratio [aOR] = 4.36), experiencing psychological or emotional abuse by a caregiver (aOR = 2.73), being a target of attempted assault (aOR = 2.77) or an assault by a peer or sibling (aOR = 2.04), being flashed (aOR = 2.40), witnessing an assault with a weapon (aOR = 2.59), and being raped (aOR = 2.41) (See Table 2 for more details). Online victimization was negatively associated with being assaulted with a weapon (aOR = .27). *Unwanted online sexual solicitation* on its own was related to being raped (aOR = 7.02), experiencing psychological or emotional abuse by a caregiver (aOR = 5.63), being close to someone who was murdered (aOR = 3.73), and being a target of an attempted assault (aOR = 5.60) or a genital assault (aOR = 3.87). *Online harassment* was related to being sexually harassed (aOR = 7.06), witnessing assault with a weapon (aOR = 3.40), being flashed (aOR = 3.23), experiencing psychological or emotional abuse (aOR = 2.57), and being assaulted without a weapon (aOR = 2.41).

Table 2
Summary of logistic regression analysis for types of past-year offline victimization most closely related to past-year online victimization (n = 2,051)

Offline victimization	Any past-year online victimization			Past-year online sexual solicitation			Past-year online harassment		
	B	SE B	Exp(B) (95% CI)	B	SE B	Exp(B) (95% CI)	B	SE B	Exp(B) (95% CI)
Physical assaults									
Assault with a weapon	−1.32	.47	.27 (.11–.67)**	−1.11	.57	.33 (.11–1.0)*	—	—	—
Assault with no weapon	—	—	—	—	—	—	.88	.29	2.41 (1.37–4.27)**
Attempted assault	1.02	.27	2.77 (1.63–4.72)***	1.72	.33	5.60 (2.93–10.72)***	—	—	—
Kidnapping	—	—	—	−3.70	2.64	.03 (.0–4.39)	—	—	—
Property victimizations									
Theft	.67	.24	1.95 (1.22–3.14)**	.93	.30	2.53 (1.40–4.60)**	—	—	—
Maltreatment									
Psychological or emotional abuse	1.01	.25	2.73 (1.66–4.50)***	1.73	.30	5.63 (3.13–10.14)***	.94	.30	2.57 (1.43–4.62)**
Peer-sibling victimizations									
Peer or sibling assault	.71	.22	2.04 (1.33–3.15)***	—	—	—	.50	.27	1.65 (.97–2.79)
Genital assault	.56	.32	1.76 (.94–3.29)	1.35	.39	3.87 (1.81–8.30)***	—	—	—
Dating violence	.76	.45	2.14 (.89–5.13)	—	—	—	—	—	—
Sexual victimizations									
Rape	.88	.39	2.41 (1.12–5.19)*	1.95	.40	7.02 (3.22–15.31)***	—	—	—
Flashed	.88	.33	2.40 (1.27–4.55)**	—	—	—	1.17	.34	3.23 (1.67–6.24)***
Sexual harassment	1.47	.29	4.36 (2.47–7.69)***	.72	.38	2.05 (.97–4.29)	1.95	.31	7.06 (3.87–12.86)***
Witness family violence									
Witness domestic violence	—	—	—	—	—	—	−1.02	.68	.36 (.09–1.37)
Exposure to community violence									
Witness assault with a weapon	.95	.25	2.59 (1.59–4.24)***	—	—	—	1.22	.28	3.40 (1.96–5.89)***
Someone close to you murdered	.79	.36	2.20 (1.09–4.43)*	1.31	.39	3.73 (1.74-7.99)***	—	—	—
Model summary									
Model Chi-square (df)	277.87 (16)			203.45 (11)			180.57 (11)		
−2 Log likelihood	666.79			391.05			501.12		
Cox and Snell R Square	.13			.09			.09		
Nagelkerke R Square	.34			.37			.30		

Note: All models are adjusted for youth sex, age, race, ethnicity, socio-economic status, and living in a two-parent household.
— = not in final model; B = estimated coefficient.
 * $p \le .05$; ** $p < .01$; *** $p < .001$.

The role of Internet victimization in explaining trauma symptomatology and delinquency

Past-year and lifetime online victimization was associated with higher unadjusted mean scores for past-year trauma and delinquency, higher past-year and lifetime adversity, and greater number of past-year and lifetime offline victimizations compared with youth not reporting online victimization (Table 3).

Trauma Symptomatology

Any past-year online victimization was slightly but significantly related to higher trauma symptomatology scores ($\beta = .05$, $p = .05$), even after adjusting for youth demographic characteristics, past-year life adversity, and total number of past-year offline victimizations (Table 4). However, the total number of past-year offline

victimizations ($\beta = .43$, $p < .001$), past-year adversity ($\beta = .14$, $p < .001$), and being female ($\beta = .10$, $p < .001$) were more influential than online victimization in explaining the variance in trauma symptomatology score. A similar pattern was seen when examining the effect of lifetime victimization and adversity on trauma symptomatology (Table 4).

Delinquency

In contrast to trauma symptomatology, past-year online victimization was more strongly related to past-year delinquency ($\beta = .13$) (Table 5). The number of offline victimizations was similarly associated with delinquency ($\beta = .38$). Age also was associated with increased delinquency score ($\beta = .28$), whereas being female was negatively associated ($\beta =$

Table 3
Unadjusted mean differences on trauma, adversity and number of offline victimizations based on report of past-year and lifetime online victimization (n = 2,051)

	Past-year online victimization			Lifetime online victimization		
	Yes Mean (SD)	No Mean (SD)	F (1, 2,048)	Yes Mean (SD)	No Mean (SD)	F (1, 2,048)
Trauma symptomatology (past year)	54.33 (15.43)	42.46 (10.91)	134.18*	52.43 (14.38)	42.29 (10.88)	136.45*
Delinquency (past year)	3.31 (3.06)	.98 (1.70)	197.66*	2.85 (2.86)	.95 (1.69)	181.94*
Life adversity						
Past year	2.39 (1.97)	1.00 (1.24)	138.49*	2.12 (1.90)	.99 (1.23)	127.98*
Lifetime	5.42 (2.52)	2.82 (2.21)	163.67*	5.16 (2.60)	2.77 (2.17)	196.13*
Number of offline victimizations						
Past year	6.42 (3.93)	2.48 (2.83)	219.56*	5.85 (4.00)	2.42 (2.78)	233.04*
Lifetime	11.69 (5.84)	5.25 (4.80)	210.11*	11.16 (5.87)	5.11 (4.70)	265.28*

 * $p \le .001$.

Table 4
Summary of linear regression analysis for relationship between past-year and lifetime online victimization and trauma symptomatology (n = 2,051)

	Model 1: Online victimization only β	Model 2: Adds demographics β	Model 3: Adds past-year adversity β	Model 4: Adds total number offline victimizations β
Past year				
Analysis 1				
Any past-year online victimization	.25***	.21***	.15***	.05*
Female	—	.07**	.06**	.10***
Age	—	.07***	.06**	.07***
White race	—	.02	.05	.08**
Hispanic ethnicity	—	−.02	−.001	.03
Socioeconomic status	—	−.05	−.02	−.03
Two-parent family	—	−.11*	−.08***	−.05*
Any past-year adversity	—	—	.29***	.14***
Total number of past year offline victimizations	—	—	—	.43***
Lifetime				
Analysis 2				
Any lifetime online victimization	.25***	.22***	.11***	.01
Female	—	.06**	.06**	.11***
Age	—	.07**	.03	−.04*
White race	—	.02	.05*	.07**
Hispanic ethnicity	—	−.02	.02	.04
Socioeconomic status	—	−.04	−.02	−.03
Two-parent family	—	−.11***	−.03	.01
Any lifetime adversity	—	—	.38***	.13***
Total number of lifetime offline victimizations	—	—	—	.52***

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

−.13). A similar pattern was seen when examining the effect of lifetime victimization and adversity on delinquency.

Discussion

Although online victimization has been one of the most publicized forms of youth victimization of late, it actually affects a relatively small segment of the population in comparison with victimizations like face-to-face assaults, child maltreatment, and property crimes. Moreover, it does not occur in isolation. Virtually all youth reporting a past-year online victimization in the current study (96%) reported an offline victimization in the same period. Thus, it is important that awareness of and funding to prevent online perils for youth not eclipse prevention efforts aimed at the broader spectrum of victimizations that they suffer.

The study does support earlier findings that online victimization can contribute independently to psychological distress, even after controlling for other factors. But it does high-

Table 5
Summary of linear regression analysis for relationship between past-year and lifetime online victimization and delinquency (n = 2,051)

	Model 1: Online victimization only β	Model 2: Adds demographics β	Model 3: Adds past-year adversity β	Model 4: Adds total number offline victimizations β
Past year				
Analysis 1				
Any past-year online victimization	.30**	.26**	.22**	.13**
Female	—	−.17**	−.17**	−.13**
Age	—	.28**	.27**	.28**
White race	—	−.02	−.01	.02
Hispanic ethnicity	—	−.04	−.02	.01
Socioeconomic status	—	.004	.02	.01
Two-parent family	—	−.13**	−.10**	−.07**
Any past-year adversity	—	—	.19**	.06**
Total number of past-year offline victimizations	—	—	—	.38**
Lifetime				
Analysis 2				
Any lifetime online victimization	.29**	.25**	.17**	.09**
Female	—	−.17**	−.17**	−.13**
Age	—	.28**	.25**	.19**
White race	—	−.03	.000	.01
Hispanic ethnicity	—	−.04	−.001	.01
Socioeconomic status	—	.004	.02	.01
Two-parent family	—	−.13**	−.06*	−.03
Any lifetime adversity	—	—	.31**	.10**
Total number of lifetime offline victimizations	—	—	—	.43**

* $p \leq .01$; ** $p \leq .001$.

light that other factors play a large role, especially the total number of different kinds of offline victimizations. As other studies have suggested, the real concern should be about youth who experience multiple forms of victimization and adversity—sometimes labeled as poly-victims [7-9]. Online victimization for many of the youth is part of this generalized vulnerability. Prevention and intervention programs should be targeting the larger victimization context rather than focusing on one particular type, like online victimization.

A comparison of rates of online victimization across national studies

Reports of past-year online harassment (4%) and sexual solicitation (3%) in NatSCEV were lower than that found in other national studies. The Growing up with Media (GuwM) Study identified the largest prevalence of online harassment (41%) and sexual solicitation (18%) over a 1-year timeframe among the youth aged 12-17 [18]. In the Second Youth Internet Safety Survey (YISS-2), 9% of youth aged 10-17 reported online harassment in the past year and 15% sexual solicitation [19]. Several methodological differences could account for these discrepancies. First, the youth populations being sampled differed across studies. GuwM conducted an online survey and recruited youth through an online panel. YISS-2 was a RDD telephone survey that screened in youth who had used the Internet at least once a month for the past 6 months. NatSCEV, by contrast, was a general population survey that recruited through RDD and oversampled Black, Hispanic, and low-income youth. All the youth in the population sampled in YISS-2 had some degree of experience with the Internet and the population sampled in GuwM was active online to the extent of volunteering for a survey panel. They would have more Internet experiences of all sorts as compared with the population sampled in NatSCEV. This reminds us of the effect of sample characteristics on prevalence rates [20].

Two other possibilities may account for the differences in estimates among the studies—the number of questions asked and the context of the surveys overall. The NatSCEV used only two questions to identify online victimization (one each for solicitation and harassment), compared with five asked in YISS-2 (3 for solicitation and 2 for harassment), and six asked in GuwM (3 for harassment and 3 for sexual solicitation). Research suggests a relationship between the numbers of questions asked and the likelihood of receiving a positive response [21]. Perhaps, a more comprehensive list of questions would have elicited a higher prevalence rate of online victimization in NatSCEV. In addition, the NatSCEV online victimization questions were asked after the 34 items which comprise the JVQ. By that time, respondents could have already been in a "victimization" mindset. As such, the online victimizations they reported could have been more extreme or upsetting than those reported by youth in YISS-2 and GuwM. Those surveys focused on a broader range of experiences. Indeed, when comparing the prevalence identified in NatSCEV with the prevalence of the most serious solicitations identified in YISS-2 (i.e., aggressive sexual solicitations that threatened to move offline), the rates are practically identical (4% in YISS-2) [19]. In summary, a variety of factors could account for differences in prevalence rates across national studies; factors that should be taken into account when designing surveys and interpreting results.

Relationships between online and offline victimization

A variety of offline victimizations were related to online sexual solicitation victimization (e.g., rape, genital assault, caregiver psychological or emotional abuse) and to online harassment (e.g., sexual harassment, psychological or emotional abuse by caregiver, being flashed, witnessing an assault with a weapon). Several considerations need to be taken into account when interpreting these findings. First, some youth may have reported certain episodes in response to both a JVQ item and to one of the Internet items. For example, an incident of online harassment by a peer could have been reported in response to the JVQ question about emotional bullying. Many youth view the Internet as just another mechanism for interaction and thus may not distinguish an event based on whether it happened on- or offline. (In fact, distinctions between online and offline victimizations could become increasingly irrelevant as time passes and what we now view as online experiences could be classified as simply human interactions in general.) This is not an uncommon occurrence; victimization episodes often have multiple components, for example, youth could be assaulted by peers and also have a bike stolen in the process. However, it is also important to note that such overlap between online and offline victimizations is more probable for certain types of victimization, such as reporting of sexual harassment offline, sharing characteristics (or even double counting) with reports of online harassment; however, for other types of victimization such overlap is less likely (e.g., assault or psychological or emotional abuse by a caregiver). Second, certain victimization episodes may migrate from or to the Internet. For example, a respondent may have been sexually solicited online by an offender who later committed an offline sexual or physical assault, or a bullying episode could have both online and offline elements. Finally, some research suggests that certain offline victimizations place youth at risk for online victimization [22].

Limitations

A few limitations of these data must be noted. First, the NatSCEV data did not include a question about whether youth have access to the Internet, nor how much they use it. Although the great majority of today's teenagers use the Internet (93% of teens, aged 12-17 years) [23], it cannot be assumed that all respondents had equal access. Second, youth exposure to violence may be understated; the survey required caretaker permission and caretakers of some youth exposed to high rates of certain types of violence, like family violence, may have been less accessible or more likely to withhold permission. Third, youth may not recall some exposures to violence, particularly less serious incidents as they may not consider themselves victims, simply dismissed them as unimportant, or may not accurately recall whether exposures occurred in the past year. Fourth, details about online victimizations were not available, so some online and offline victimizations may have been counted twice. Finally, as discussed previously, the two questions which measure Internet victimization likely resulted in an underreporting of these experiences. A more comprehensive assessment would likely result in a higher endorsement of such experiences.

Implications and Conclusions

Since youth reporting any online victimization also had elevated levels of offline victimizations, life adversity, trauma symptomatology, and delinquency, Internet safety prevention, intervention, and screening should not be stand-alone activities. Furthermore, youth who are identified with offline victimizations, delinquency, adversity, and mental health problems should be screened for online victimization and provided with education about Internet safety skills. Conversely, those reporting online victimization should be screened for other risk factors and victimization experiences. This may be an easier and less threatening avenue for beginning conversations with youth about potential abuse and could result in a variety of disclosures that could be more difficult to identify otherwise. In addition, Internet safety educators need to appreciate that many online victims may be at risk not because they are naive about the Internet, but because they face complicated problems resulting from more pervasive experiences of victimization and adversity. Such youth often struggle with dysfunctional coping styles, cognitive and emotional deficits, absence of social support, and patterns of increased risk taking [24]. They may need more intensive assistance than is typically provided in general Internet safety programs, including more comprehensive and multicomponent programs that can be effective in addressing safety among high-risk adolescents.

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