



Original article

Use of Social Networking Sites in Online Sex Crimes Against Minors: An Examination of National Incidence and Means of Utilization

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Abstract

Purpose: To describe the variety of ways social networking sites (SNSs) are used to facilitate the sexual exploitation of youth, as well as identify victim, offender, and case differences between arrests, with and without a SNS nexus.

Methods: Mail surveys were sent to a nationally representative sample of over 2,500 local, state, and federal law enforcement agencies in the United States. Follow-up detailed telephone interviews were conducted for 1,051 individual cases ending in an arrest for Internet-related sex crimes against minors in 2006.

Results: In the United States, an estimated 2,322 arrests (unweighted $n = 291$) for Internet sex crimes against minors involved SNSs in some way, including an estimated 503 arrests (unweighted $n = 93$) in cases involving identified victims and the use of SNSs by offenders (the majority of arrests involved undercover operations undertaken by police). SNSs were used to initiate sexual relationships, to provide a means of communication between victim and offender, to access information about the victim, to disseminate information or pictures about the victim, and to get in touch with victim's friends.

Conclusions: A considerable number of arrests for Internet sex crimes against minors have a SNS nexus to them. The findings support previous claims that prevention messages should target youth behaviors rather than specific online locations where these crimes occur. In targeting behaviors, youth can take this knowledge with them online, regardless of whether they are using SNSs, chat rooms, or instant messaging. © 2010 Society for Adolescent Medicine. All rights reserved.

Keywords:

Social networking sites; children; law enforcement; Internet; sex crimes

Social networking sites (SNSs), such as MySpace and Facebook, are widely popular among youth and adults alike. An estimated 14 million youth, ages 12–17 years, were using SNSs in 2006, a timeframe parallel to the current study.¹ Adults also appear to be increasingly adopt-

ing this technology; 35% of American adult Internet users had a profile on a SNS in 2008, which was 4 times as many 3 years prior [1].

With the extensive popularity of SNSs among youth and adult populations, reports of online predators using SNSs to target youth for sex crimes have permeated the media [2, 3], suggesting that such offenders may be using personal information from such sites to track down, stalk, and abduct youth. In the absence of data, however, such media portrayals can lead to misconceptions concerning the amount of danger SNSs pose to youth. In fact, sex crimes with juvenile victims have declined substantially since the mid-1990s [4, 5], and the proportion of such crimes committed by offenders who use the Internet to meet victims is quite small [6, 7] in comparison to sex crimes against children overall. Indeed, in 2006, there were an estimated 615 arrests for sex crimes involving online

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¹ (This number was calculated by multiplying the percentage of teens using social networking sites [55%] as cited by Lenhart and Madden [2007]; with the number of children in the United States in 2006 [25.5 million] as cited by ChildStats.gov at <http://childstats.gov/americaschildren/tables/pop1.asp>.)

meetings between offenders and teenage victims, compared to 28,226 arrests for all sex crimes against teen victims in the same time frame [7].

In the current article, we use data from a national sample of arrest cases in 2006 for Internet crimes against minors to explore the incidence of such arrests nationally in a 1-year timeframe. We also explore the variety of ways SNSs are used to commit or facilitate sex crimes against minors, as well as to identify victim, offender, and case differences between arrests, with and without a SNS nexus.

Methods

Sample and procedures

The data for this study were drawn from the National Juvenile Online Victimization (N-JOV) Study. This study was conducted with approval from the University of New Hampshire Institutional Review Board.

Phase 1 national mail survey. First, mail surveys were sent to a nationally representative sample of 2,598 state, county, and local law enforcement agencies in the United States. We created a stratified sample, dividing law enforcement agencies into three sampling frames based on their expertise and training in conducting Internet sex crime investigations. We used a stratified sample of agencies because such cases do not occur with equal probability among the more than 15,000 U.S. law enforcement agencies. Overall, 87% of the eligible agencies ($n = 2,028$) responded to the mail surveys. Twenty percent of the agencies ($n = 458$), in addition to two federal agencies that responded electronically, reported 3,322 arrests.

To be eligible, cases had to (1) have victims aged 17 or younger, (2) involve arrests in the year 2006, and (3) be Internet-related. Cases were Internet-related if any of the following criteria were met: (1) an offender-victim relationship was initiated online; (2) an offender who was a family member or acquaintance of a victim used the Internet to communicate with a victim to further sexual victimization, or otherwise exploit the victim; (3) a case involved an Internet-related undercover investigation; (4) child pornography was received or distributed online, or arrangements for receiving or distributing were made online; or (5) child pornography was found on a computer hard drive, removable media, computer printouts, or in a digital format.

Phase 2 case-level telephone interviews. Phase 2 of the study consisted of follow-up telephone interviews with law enforcement investigators to gather information about case, offender, and victim characteristics for arrests reported in the Phase 1 mail survey. Of the 3,322 arrests reported by law enforcement, 8% ($n = 276$) were ineligible and 42% ($n = 1,389$) were not selected for the sample (described in more detail later in the text). Of the 1,657 eligible cases, 64% ($n = 1,063$) of the telephone interviews were completed

by six trained interviewers between June 2007 and August 2008 (our telephone interviewers attended a two-day training session led by the researchers that provided extensive details about the background, purpose, and instrumentation of the study, and they participated in a series of practice and pilot interviews). Of those eligible but not completed, 27% involved investigators who did not respond to requests for interviews, 7% involved respondents who refused to be interviewed, and 2% involved duplicate cases or cases that could not be identified. A total of 12 completed interviews were duplicate cases and thus dropped from the dataset, resulting in 1,051 completed interviews.

We designed a sampling procedure for case-specific interviews that took into account the number of cases reported by an agency, so we would not unduly burden respondents in agencies with many cases. If an agency reported between one and three Internet-related cases, we conducted follow-up interviews for every case. For agencies that reported more than three cases, we conducted interviews for all cases that involved identified victims and sampled other cases. (The term “identified victims” denotes victims that were identified and contacted by law enforcement during the course of the investigation.) More detailed information about the sampling procedures and how the N-JOV Study was conducted can be found online [8].

Instrumentation

Phase 1 national mail survey. The cases described in this article were reported by law enforcement agencies in response to two mail survey questions: the first about arrests for attempted or completed sexual exploitation of a minor and the second about arrests involving the possession, distribution, or production of child pornography. (Exact wording of the questions can be found in the Methodology Report [8] at the link given earlier in the text.) If respondents answered “Yes” to any of these questions, we asked them to list the case number, or other reference, and the name and contact information for the key investigating officer or most knowledgeable person for each case they reported.

Phase 2 case-level telephone interview. The telephone survey instrument was a structured interview developed specifically for the N-JOV Study. Questions were developed through interviews and consultations with law enforcement personnel. Completed surveys were also pilot tested with police before the actual data collection began. These questions covered a number of different aspects of the case, including how the case was initiated, specific case characteristics, offender characteristics, victim characteristics, and case outcomes. (More details about the questions can be found in the tables and also in the N-JOV Methodology Report [8] at the link given earlier in the text.) All case-level telephone interviews were conducted using a computer-assisted interviewing program, where telephone

interviewers read questions and entered responses directly into a software program.

Analyses

Using agency and case-level weights, we first extrapolate estimates of the annual number of arrests involving Internet sex crimes against minors with a SNS nexus within the United States. All weighted estimates are indicated as such and include the unweighted n in parentheses. Data were weighted to correct for variations in probabilities of selection [9–11]. Each case was weighted to account for its probability of selection to both the agency and case samples, with sampling weights adjusted for nonresponse. Then primary sampling weight units were created to account for clustering of cases within the three sampling frames; stratification weights were computed to reflect the differing sampling strategies for each frame, and finite population correction factors accounted for not replacing ineligible cases. Further details about our weighting procedures can be found online [8].

Weighted χ^2 cross-tabulations were conducted to compare youth and offender characteristics for Internet-related crimes involving SNSs to crimes that did not. For cases that involved online meetings between victims and offenders, we examine case characteristics based on whether SNSs were involved, using weighted χ^2 cross-tabulations. All analyses were conducted using Stata Version 11.0 [12] survey design procedures.

Results

Number of arrests involving social networking sites

SNSs played a role in an estimated 2,322 (95% CI: 1,675–2,968) cases of Internet sex crimes against minors, ending in arrests in the year 2006 (unweighted $n = 291$). This represents 33% of the estimated 7,010 total arrests (unweighted $n = 1,051$) for all types of Internet-related sex crimes against minors during the same time frame [13].

How SNSs are used

SNS use in cases with identified victims. An estimated 503 arrests (unweighted $n = 93$) were made in cases involving identified victims (unweighted $n = 316$) and the use of SNSs by offenders. This translates to 7% of the estimated 7,010 arrests for Internet sex crimes against minors identified in the entire study [13] and 22% of all cases involving SNSs. SNSs were used in a variety of ways to facilitate crimes against identified victims, which were not mutually exclusive.

To initiate a relationship. Initial meetings between victims and offenders occurred through both victims' (86%) and offenders' (14%) SNSs, the latter often because of similar interests of a nonsexual nature. An estimated 253 arrests

(unweighted $n = 41$) were made for cases with this feature. The SNS role was to initiate the relationship in 50% of victim-involved SNS cases.

Form of communication with victim. These cases involved the communication between the offender and victim through messages on both the victims' (98%) and offenders' (94%) SNSs. An estimated 360 arrests (unweighted $n = 59$) involved use of SNSs to communicate with the victim or 72% of victim-involved SNS cases.

Dissemination of information or pictures of the victim. These cases involved offenders posting or otherwise distributing pictures or information about the victim through the victims' (26%) or offenders' (77%) SNS. An estimated 48 arrests (unweighted $n = 10$) involved such dissemination in 2006 — or 10% of victim-involved SNS cases.

Accessing information about the victim. These cases involved offenders who were using victims' SNSs to get information about the victims': (a) likes or interests (82% of cases involving offenders using SNSs to access information), (b) home or school (65%), (c) whereabouts at a specific time (26%), as well as, (d) to look at pictures of the victim (81%). This accessing of information may have occurred after a relationship had already been established, not just before making contact. An estimated 346 arrests (unweighted $n = 58$) were made in cases where offenders were using the victim's SNS to access information about them — or 69% of victim-involved SNS cases.

Get in touch with friends of victim. A small number of cases involved offenders who were using victims' SNSs to get in touch (or threaten to get in touch) with the victims' friends — an estimated 40 arrests (unweighted $n = 7$) in 2006. Of all the victim-involved SNS cases, only 8% involved this feature.

SNS use in undercover operations. The largest number of cases involving SNSs was undercover operations in which investigators set up web pages and profiles in the course of portraying minors online. An estimated 1,696 arrests (unweighted $n = 180$) involved use of SNSs by investigators in this capacity. This constitutes 73% of all cases in which SNSs played a role and 24% of all arrests for Internet sex crimes in the same period [13]. Most of these cases were initiated in chat rooms (82%), whereas 7% were initiated through the investigator's SNSs, 1% through the offender's, and the remaining were initiated through other online venues (e.g., instant messaging, online want ads). Investigators typically had web pages or profiles on SNSs that were used by offenders to: (1) get information about the impersonated minors likes and interests (66%), (2) get information about the impersonated minor's whereabouts at a specific time (19%), and (3) look at pictures of the impersonated minor (57%).

SNS use in child pornography cases. A small number of SNS cases involved offenders who were using this technology to distribute child pornography — an estimated 82 arrests (unweighted $n = 12$). This accounts for 3% of the SNS-involved cases.

Evidence gathering via SNSs. In a minority of cases the only SNS involvement was the police using such sites to gather evidence for an investigation (such as collecting information about a victim or offender from their SNSs). An estimated 87 arrests were made in cases having this feature (unweighted $n = 17$). This accounted for 4% of all SNS cases.

Offender and victim's characteristics in identified victim cases based on use of SNSs

Offender demographics. Offenders who used SNSs were younger than those who did not ($p = \leq .001$) (See Table 1). They were also more likely to be single, never married ($p \leq .001$). A significant difference was seen in terms of offender race, although the magnitude was small. No differences were noted in terms of sex, type of community of residence, highest level of education, nor employment status.

We found that offenders who used SNSs were significantly less likely than other online offenders to be registered sex offenders ($p \leq .05$), although this was rare in all cases (4% overall) (See Table 1) and became nonsignificant after adjusting for offender age. Offenders in SNS cases were less likely than those in non-SNS cases to also possess ($p \leq .001$) and produce ($p \leq .001$) child pornography, as well as have problems with drugs or alcohol ($p \leq .001$). These relationships remained even after adjusting for offender age.

Victim demographics. Victims in cases that involved SNSs were older (aged 13–17 years) than those with no SNS involvement ($p \leq .001$) (See Table 2). They were also more likely to live in suburban areas or large towns (as opposed to small towns or rural areas) ($p \leq .05$), tended to live in households with a higher annual income ($p \leq .01$), and they were also more likely to live with both biological parents ($p \leq .01$). Race and sex differences were not noted; overall, 82% of victims were female and 84% were non-Hispanic white.

Case characteristics in online meetings

For cases that involved online meetings between victims and offenders (unweighted $n = 120$), data was collected about their online interactions. A few differences were noted in terms of case characteristics based on whether or not SNSs were involved (See Table 3). Expected differences were seen in terms of whether the victim and offender ever used a SNS to communicate, as this was so closely related to our grouping variable. More offenders and victims who met in SNSs also communicated by text messaging through cell

phone ($p \leq .01$) and email ($p \leq .05$) compared with those who met in other online venues. Cases involving SNSs typically involved more online interactions and were more likely to ultimately result in a face-to-face meeting between victims and offenders after they met online, — 81% of SNS-involved cases and 55% of non-SNS cases ($p \leq .01$). However, as seen in Table 3 more similarities than differences were noted overall.

Discussion

A considerable number of Internet sex crime arrest cases involve SNSs in some way. However, when considered in the context of the entire spectrum of places online where police are arresting people for illegal sexual intentions, SNSs do not appear to present risk in and of themselves or a greater risk than other online sites where people can meet and interact (e.g., chat rooms) [14]. Findings from this article support previous data that suggests the reality about Internet-initiated sex crimes, particularly those in which sex offenders meet juvenile victims online, is different, more complex, and more serious but less archetypically frightening than the publicity about these crimes suggest [6].

There is a lot of diversity in how SNSs are used in Internet crimes against youth

Although the majority of media attention has focused on offenders using SNSs to meet juvenile victims, there are other ways in which such sites are used in the course of sex offenses against youth. These include using SNSs to communicate with the victim, to access information about the victim (such as likes, interests, and pictures), to disseminate information or pictures of the victim, and to get in touch with friends of the victim. The degree of SNS involvement can vary in these situations; in many cases, SNSs were not the sole or even the primary means of communication between victim and offender. Online communications between offenders and victims usually involved several mediums, including chat rooms, instant messaging, video communication, as well as text messaging through cell phones.

By far the largest number of SNS-related arrests (1,696) involved police acting in an undercover capacity. The majority of such cases were initiated in chat rooms (82%); the SNS component being a web site constructed by law enforcement under the guise of a teenager as a place for the suspect to go to see pictures of the “victim” and to further corroborate the undercover agent’s identity. This suggests that SNSs can be useful in terms of their ability to enhance law enforcement’s capacity to detect and catch criminals. Moreover, a law enforcement presence on SNSs may serve as a deterrent to potential criminals.

The number of arrests for SNS-related crimes is small in comparison to the scope of SNS use by youth

A considerable number of arrest cases have a SNS nexus to them, and this is something parents and youth themselves

Table 1
Demographic and other characteristics of offenders arrested in identified victim cases based on SNS involvement (unweighted n = 316)

Characteristic	All offenders (n = 316) %	No SNS involvement (n = 223) %	SNS involvement (n = 93) %	χ^2
Demographic characteristics				
Sex				1.2
Male	95	96	93	
Female	5	4	7	
Age, yr				21.6***
≤25	26	19	40	
26–39	35	35	36	
≥40	38	46	24	
Race/ethnicity				22.4**
Non-Hispanic white	89	88	91	
Hispanic White	3	5	1	
Non-Hispanic Black	5	7	1	
American Indian or Alaskan Native	<1	<1	0	
Asian	1	0	4	
Mixed race	<1	1	0	
Not sure/not ascertainable	1	0	3	
Community of residence				11.9
Small town	23	25	20	
Rural	15	20	7	
Suburban	26	23	31	
Large town	13	11	16	
Urban	23	21	26	
Annual household income				5.6
<\$20,000	13	17	8	
\$20,000–\$50,000	36	36	35	
\$50,001–\$80,000	19	18	22	
>\$80,000	9	9	9	
Not sure/not ascertainable	22	20	25	
Highest level of education				9.3
Did not finish high school	8	9	4	
High school graduate	32	32	32	
Some college/technical training	17	16	18	
College graduate	14	11	19	
Postgraduate degree	2	3	0	
Not sure/not ascertainable	27	28	26	
Marital status				28.1***
Single, never married	52	42	72	
Married	23	27	15	
Living with partner	8	11	1	
Separated/divorced/widowed	17	19	12	
Employed full-time	64	66	60	1.1
Other characteristics				
Registered sex offender at time of crime	4	6	2	2.3*
Prior arrest for a sexual offense	11	12	10	.31
Prior arrest for sex offense against minor	9	10	9	.09
Prior arrest for nonsexual offense	36	37	33	.66
Known to be violent (ever)	18	21	11	4.7
Problem with drugs or alcohol	25	33	11	17.2***
Possessed child pornography	45	53	29	16.6***
Produced child pornography	58	65	43	15.3***
Known to converse with people online who were interested or involved in CP or child abuse	23	26	17	3.7

Note: Numbers that do not add to 100% are due to rounding or missing data.

* $p \leq .05$.

** $p \leq .01$.

*** $p \leq .001$.

need to be aware of and take precautions against. However, this has to be put into the context of the large number of youth and online social activity with some SNS nexus. Approximately 14 million youth had a SNS in 2006. Arrests for the

503 cases that involved juvenile victims constitute an extremely small proportion of young SNS users. This does not mean that we should ignore the potential risks to youth posed by SNSs, but it does mean that the current emphasis

Table 2
Demographic characteristics of victims in cases based on SNS involvement (unweighted n = 316)

Characteristic	All victims (n = 316) %	No SNS involvement (n = 223) %	SNS involvement (n = 93) %	χ^2
Relationship to the offender				
Online meeting	42	20	84	122.3***
Family member	26	37	6	35.5***
Acquaintance	27	36	10	24.2***
Sex				
Male	18	18	16	.17
Female	82	82	84	
Age^a, yr				
≤2	2	3	0	51.4***
3–5	6	8	1	
6–12	21	30	3	
13–17	71	58	97	
Race/ethnicity				
Non-Hispanic White	84	85	83	10.6
Hispanic White	5	4	8	
Non-Hispanic Black	3	4	<1	
American Indian or Alaskan Native	1	1	2	
Asian	1	1	1	
Other/mixed race	4	3	5	
Not sure/not ascertainable	2	3	<1	
Community of residence				
Small town/rural	40	46	28	12.0*
Suburban/large town	42	35	54	
Urban	18	18	18	
Annual household income				
<\$20,000	11	15	5	23.9**
\$20,000–\$50,000	30	30	30	
\$50,001–\$80,000	13	14	12	
>\$80,000	19	11	32	
Not sure	27	30	21	
Who was victim living with				
Both biological parents	42	36	53	7.8**
One biological parent only	29	32	24	2.3
One biological and one step-parent	18	20	14	1.7

Note. Numbers that do not add to 100% are due to rounding or missing data.

^a Questions about use of social networking sites were not asked of victims who were aged ≤9 yr. However, there were 2 cases in the SNS-involved category that involved children, aged 5 and 7 years. The case with the 5-year-old involved the offender posting pictures of the young victim on his SNS. The case with the 7-year-old occurred over a period of time, and the victim was aged 7 years when the crime began but was 16 at the time the sexual abuse came to police attention.

* $p \leq .05$.

** $p \leq .01$.

*** $p \leq .001$.

on these sites to the exclusion of other places youth frequent online is misleading. Concern about the sites can be tempered by the fact that there are still relatively few cases, and they are not the major places for initiation of contact.

There may be riskier places online for youth

At the time of this study, SNSs were not the most common venues for meeting offenders; 61% of victims and offenders met in other places online, with chat rooms being the most common. This is supported by research conducted with national samples of youth that suggests an increased risk of being sexually solicited when using chat rooms [15, 16]. This is interesting in light of the research that reports only a minority of youth were using chat rooms in 2006 (18%) [17]. As such, concerns about and focus on SNSs should

not supersede other online venues, such as chat rooms, from a prevention perspective.

Few differences existed between cases involving SNSs and those that did not in terms of the characteristics of victims, offenders, or the cases themselves. Cases that involved SNSs in some capacity were more likely to result in a face-to-face meeting than cases not involving SNSs. However, this finding could be a result of the older age of victims and younger age of offenders in SNS cases. Indeed, this relationship became nonsignificant after adjusting for offender and victim age. Nevertheless, it is also possible that aspects of SNSs themselves may contribute to this, by providing so much information to both the victim and offender, the victim may feel “safer” in arranging such a meeting, feeling she or he knows the offender on the basis of all the information displayed. Further, research suggests

Table 3
 Characteristics of online meeting cases based on SNS involvement (unweighted n = 120)

Characteristic	All online meeting cases (n = 120) %	No SNS involvement (n = 43) %	SNS involvement (n = 77) %	χ^2
Places communicated online				
Victim's SNS	52	0	75	58.4*
Offender's SNS	49	0	72	52.8*
Chat room	40	49	36	1.7
Instant Messaging	61	53	64	1.3
Email	52	34	60	7.1**
Text message through cell phone	37	21	44	6.0***
Internet video communication	27	36	23	2.4
Some other way	22	21	22	.02
Length of time communicated				
≤7 d	19	19	18	.60
>1 wk–1 mon	61	57	63	
>1–6 mon	10	12	9	
>6 mon	4	4	3	
Not sure/not ascertainable	7	7	7	
Number of online interactions				
1–5	16	32	9	14.5**
6–20	23	19	24	
21–100	28	14	34	
>100	18	14	20	
Not sure / not ascertainable	15	21	13	
Offender deception				
Age	42	34	46	1.4
Said <18 years old	20	15	22	.80
Physical appearance	13	12	13	.03
Sexual motives	15	8	19	2.2
Other aspect, employment/ residence	18	16	19	.13
Something else	3	3	4	.01
Victim deceptive about his/her age	25	26	25	.02
Victim said she or he was ≥18 yr	14	18	13	.62
Offender brought up sex while online	71	76	69	.64
Offender asked victim to masturbate or engage in other sexual act	22	24	21	.14
Offender requested victim take sexual pictures of him/herself or other minors	31	35	29	.55
Offline communication between offender and victim				
Cell phone	73	64	77	2.3
Landline telephone	36	35	36	.04
Text messaged	41	26	47	4.6**
Other sort of offline contact	4	9	2	3.3***
Offender and victim met face to face	73	55	81	8.9***

Note: Numbers that do not add to 100% are due to rounding or missing data.

* $p \leq .05$.

** $p \leq .01$.

*** $p \leq .001$.

that victims of such Internet sex crimes often know that they are meeting the offender for sex and do so repeatedly [6], suggesting that prevention messages may need to focus more on helping adolescents make safe choices about sex and relationships instead of protecting themselves from the potential abduction scenarios so often portrayed by the media [18–21].

Implications

Overall, our findings suggest that youth are not at particular risk when interacting on SNSs. This could certainly

change with increasing popularity of SNSs; one very apparent feature of the new technological environment is the rapidity with which it changes. Yet, the rapidly changing online landscape supports claims that we should be targeting the behaviors rather than the specific online locations where these crimes occur [22]. New communication technologies appear and are integrated into the daily lives of youth in a matter of months. This pace of change poses a tremendous challenge to parents, policymakers, and law enforcement. By the time that authorities fully understand the dynamics of one

particular environment, that environment may have changed so thoroughly that intervention and prevention strategies are obsolete. By teaching youth certain behaviors, such as not talking about sex with people they meet online and not posting sexual images of themselves, they can take this knowledge with them online, regardless whether they are using a SNS, chat rooms, instant messaging, or whatever new technology is next on the horizon.

Limitations

A few limitations of this study must be noted. First, because most sex crimes against minors are never reported to the police [23, 24], and many of those known to law enforcement do not culminate in arrest [25], this sample cannot be said to represent the characteristics of all Internet-related victimizations that occurred during this period, but only those that ended in the arrest of an offender. Second, the data may not be completely representative of all law enforcement agencies in the United States. Weights were constructed, however, to reduce bias resulting from variations in selection probabilities, response propensity, and nonresponse [9]. Third, the information in this study was gathered from law enforcement investigators, so the information about victims is based on their impressions at the time of the crimes.

Conclusion

Findings suggest that a considerable number of Internet sex crime cases in police arrest files have a SNS nexus to them. The findings support previous claims that prevention messages and initiatives should target youth behaviors rather than specific online locations where these crimes occur.

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