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Investigators using the Internet to apprehend sex offenders: findings from the Second National Juvenile Online Victimization Study

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This paper discusses the types of undercover investigations conducted on the Internet. Computer-assisted telephone interviews were conducted with police about 544 undercover cases ending in arrest for an Internet-related sex crime against a minor in 2006. The two most common types of undercover investigations involved police posing online as minors (76%) and undercover police investigations of child pornography (20%). Additionally, a few investigators were posing as adults having access to minors to sell or wanting to purchase sex with a minor (4%). The findings of this paper are a first step in understanding the efficacy of various types of investigations.

Keywords: undercover investigation; Internet; child pornography; arrest; US criminal justice system

The Internet is often described as providing new opportunities for crimes against children. At the same time, however, the Internet has also provided new opportunities for law enforcement combating such crimes. For example, police can impersonate children in the world of cyberspace in a way they could not in a prior era. This has led to an expansion of police undercover operations online (Mitchell, Finkelhor, Jones, & Wolak, 2010; Wolak, Finkelhor, & Mitchell, 2009).

Undercover investigations on the Internet can be conducted in a variety of ways. Perhaps the most publicized are investigators posing online as minors in order to identify and arrest persons seeking sex with a minor. Online undercover investigators may also target offenders who download, trade, or sell child pornography via the Internet. Still others pose online as caretakers of young children who are seeking other adults to 'teach' their children about sex. Undercover investigations also occur when police find out youth have been solicited by adults. These are often called 'reactive' or 'take-over' investigations, since investigators go online either as the youth who was solicited or as another youth, but targeting the original suspect.

Online undercover operations may play a critical role in combating Internet sex crimes against children for a number of reasons. First, they provide law enforcement with the opportunity to identify and arrest potential offenders against children, hopefully before victimization occurs. Second, given the rapidity with which online undercover operations develop (Mitchell, Wolak, & Finkelhor, 2005), they may make a larger dent in the population of online solicitors than after-the-fact police activity. Third, the continual, active, online presence of undercover law enforcement agents may deter others who

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contemplate similar offenses. At the same time, however, such investigations place a large burden on law enforcement. Such crimes are often multi-jurisdictional, so they require collaboration, involve constantly changing technology, and they require specialized investigation methods (Mitchell et al., 2005).

There are some unique aspects of online undercover work as well. First, in online investigations, police target an individual based on the suspects' online interactions; there are many potential suspects. However, police do not necessarily have much information in deciding who to pursue. Second, it is not clear to what extent online criminal behavior correlates with offline criminal behavior. There are many suspects – some more dangerous than others. Most are arrested for similar crimes, but some are more persistent criminals while others may respond to Internet opportunities more impulsively (Quayle & Taylor, 2003). As a group, they may not have the same profile as offline sexual abusers (Seto, Blanchard, & Cantor, 2006). Indeed, it is possible that for some online offenders who had no prior knowledge that child pornography images might be arousing, we do not know whether such 'dormant' interests would ever have found expression without the Internet (Quayle & Taylor, 2003). Third, some online undercover investigations help police catch offenders who are sexually exploiting and potentially sexually abusing actual children – offenders whose crimes might not otherwise be disclosed. The Internet may serve as an additional source of evidence that a crime has been committed – either through chat conversations, images of the sexual abuse, or evidence of contact and communications with other offenders. This additional evidence helps law enforcement identify and make a case for arresting offenders more easily than prior to the advent of the Internet.

Most of the information currently available about online undercover investigations focuses on people using the Internet to seek sex with minors. Because persons arrested for seeking sex with minors have typically not victimized any actual juveniles as part of the crime in mention, questions have been raised concerning the characteristics of suspects arrested in these cases and whether they truly pose a threat to youth. The offenders arrested in undercover operations for seeking sex with a minor (as compared to those arrested for crimes involving identified juvenile victims) tend to be older, come from higher socio-economic levels, are more often employed full time, and exhibit less adult-related deviant behavior, violence, and prior arrests for sexual and non-sexual offending (Mitchell et al., 2005). In such aspects, these cases emerge as involving an offender group that appears somewhat less deviant and dangerous than other sex offenders who use the Internet in crimes against minors.

Little attention has been paid to offenders arrested in other types of online undercover operations and whether they present with similar characteristics as those arrested in undercover operations where police are posing as minors. Offenders arrested in undercover investigations aimed at downloading or distributing child pornography, for example, may be different from those arrested in undercover operations aimed at offenders seeking sex with minors. First, these offenders arrested for seeking sex with a minor could differ from those downloading child pornography because those seeking minors may be likely to target adolescents, rather than pre-pubescent children (Mitchell et al., 2005). Often the child pornography offenders possess involves younger children (Wolak, Finkelhor, & Mitchell, 2005, 2011). As a group, child pornography offenders show greater sexual arousal to children than to adults and possession of child pornography is a strong diagnostic indicator of pedophilia (Seto et al., 2006). In contrast, when offenders seek sex with an adolescent, it may be more situational than preferential, meaning their sexual behavior is often opportunistic and impulsive (Lanning, 2001). This

indicates that these offenders may not necessarily have a true sexual preference for children.

In the current paper, we aim to address a gap in the literature by exploring the different types of undercover investigations conducted through the Internet, as well as how offenders caught in these investigations might differ. Specifically, we aim to address the following questions:

(1) What are the different types of undercover investigations conducted online ending in arrest and which are more prevalent?

(2) Are offenders arrested in online investigations aimed at offenders seeking sex with minors different from those arrested in investigations aimed at child pornography involvement (e.g., downloading, trading, selling)?

(3) Are outcomes (e.g., convictions, guilty pleas, incarceration) more successful for those arrested for attempting to solicit a minor as compared with those who wanted to purchase child pornography?

(4) Do investigative techniques differ by type of undercover operation?

Methods

National Juvenile Online Victimization Study

The data for this study were drawn from the *National Juvenile Online Victimization (N-JOV) Study*. The *N-JOV Study* was undertaken to examine characteristics and monitor the growth of Internet sex crimes against minors and related law enforcement activities in the USA. The *N-JOV Study* agency sample was designed to yield a nationally representative sample of Internet-related child sexual exploitation cases ending in arrest. We used a stratified sample of agencies because such cases do not occur with equal probability among the more than 15,000 US law enforcement agencies. The *N-JOV Study* is the first national research project to systematically collect data about the number and characteristics of arrests for Internet sex crimes against minors at two separate time points (years 2000 and 2006) within the same agencies. The current paper utilizes the 2006 data only. We surveyed a national sample of state, county, and local law enforcement agencies by mail asking if they had made arrests in Internet-related child pornography or sexual exploitation cases in the calendar year 2006. Then detailed telephone interviews were conducted with investigators about specific cases (unweighted $n = 1051$). Interviews were scheduled at the convenience of investigators and we asked them to have case files present for reference when interviews were conducted. This study was conducted with the approval of the University of New Hampshire Institutional Review Board.

Sample and procedures

Phase 1: national mail survey

Mail surveys were sent to a nationally representative sample of 2598 state, county, and local law enforcement agencies. We created a stratified sample, dividing law enforcement agencies into three sampling frames based on their expertise and training in conducting such investigations. Overall, 87% of the eligible agencies ($n = 2028$) responded to the mail surveys. Twenty percent of the agencies ($n = 458$), plus two federal agencies that responded electronically, reported 3322 arrests with 60 first frame agencies (consisting of

Internet Crimes Against Children Task Forces (ICACs),[1] former satellite agencies affiliated with ICACs, agencies working with civilian groups such as Perverted Justice, and two federal agencies) reporting 1981 cases, 239 second frame agencies reporting 1001 cases, and 161 third frame agencies reporting 340 cases.

To be eligible, cases had to (1) have victims younger than 18; (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 proactive 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, on removable media such as floppy disks and compact disks, on 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. Of the 3322 cases reported by law enforcement, 8% ($n = 276$) were ineligible and 42% ($n = 1389$) were not selected for the sample (described in more detail below). Of the 1657 eligible cases, 64% ($n = 1063$) of the telephone interviews were completed by six trained interviewers between June 2007 and August 2008. Of those eligible but not completed, 27% involved investigators that 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 data-set, resulting in 1051 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 in the course of the investigation.) For agencies with between 4 and 15 cases, approximately half of the cases that did not have identified victims were randomly selected for follow-up interviews. In agencies that reported more than 15 cases, approximately one-quarter of the cases with no identified victims were randomly selected. In some agencies, we could not find out which cases had identified victims, so we sampled from all cases, using the sampling procedure described above. More information about how the *N-JOV Study* was conducted can be found online at http://unh.edu/ccrc/pdf/Revised%20NJOV%20Methodology%20Rpt%2001_04_10.pdf

Instrumentation

Phase 1: national mail survey

The cases described in this paper were reported by law enforcement agencies in response to the following mail survey questions:

(1) Between **1 January 2006 and 31 December 2006**, did your agency make any arrests in cases involving the attempted or completed *sexual exploitation of a minor*, and at least one of the following occurred: (a) the offender and the victim first met on the Internet; (b) the offender committed a sexual offense against the victim on the Internet, regardless of whether or not they first met online; and/or (c) the offender was involved in prostitution or other form of commercial sexual exploitation of a minor that involved the Internet in any way.

(2) Between **1 January 2006 and 31 December 2006**, did your agency make any arrests in cases involving the possession, distribution, or production of *child pornography*, and at least one of the following occurred: (a) illegal images were found on the hard drive of a computer or on removable media (e.g., CDs or disks) possessed by the offender; (b) the offender used the Internet to order or sell child pornography; (c) there was other evidence that illegal images were downloaded from the Internet or distributed by the offender over the Internet; and/or (d) money was paid for access to a website that featured child pornography.

If respondents answered 'Yes' to any of these questions, we asked them to list the case number, or other reference, and the name of the key investigating officer or most knowledgeable person for each case they reported. In addition, we emphasized that all agencies should return surveys, even if they had no cases to report.

Phase 2: case-level telephone interviews

The telephone survey instrument was 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. All case-level telephone interviews were conducted using a computer-assisted interviewing program.

Similarly, the offenders in this paper are *primary* offenders – 95% of cases involved only one offender. When more than one offender was involved, the primary offender was chosen based on the following criteria: (a) the offender who directly used the Internet; (b) if more than one, the offender who committed the most serious crime; and (c) if still more than one, the youngest.

Weighting procedures and prevalence estimate

Four variables were constructed to reflect the complex sample design. First, each case was given a weight to account for its probability of selection for both the mail survey and telephone interview samples. The weights were adjusted for agency non-response, case-level non-response, duplication of cases among agencies, and arrests by one federal agency that did not participate in case-level interviews. Second, a primary sampling unit (PSU) ID was created to account for the clustering of cases. Third, a stratum variable was created to reflect the sampling frame from which the agency or case was selected. Finally, overall probabilities of selection were provided in order to calculate finite population correction factors, which accounted for the sample being selected without replacement. Further details about our weighting procedures can be found online at http://unh. edu/ccrc/pdf/Revised%20NJOV%20Methodology%20Rpt%2001_04_10.pdf

Measures and definitions

Variables were based on questions developed for the *N-JOV Study* through interviews, pretesting, and piloting with law enforcement before data collection began. Specific questions identifying undercover investigations are as follows. First, the respondent was asked whether the case involved *'an undercover investigation that involved the Internet.'* Once confirmed, respondents were asked *'Who was being impersonated online in this under-cover investigation?'* Response options were: (1) a minor, (2) an adult providing access to a minor, (3) an adult interested in access to a minor, (4) an adult child pornography consumer or distributor, (5) the identified crime victim in this case, or (6) someone else. A series of follow-up questions were asked about offender characteristics, characteristics of the undercover operation, case outcomes, and investigative techniques (see Tables 1–4 for specific questions).

Analyses

First, we explore the types and frequency of undercover operations conducted by police on the Internet. Then we compare offender characteristics across the two most common types of undercover investigations, using weighted Chi-square cross-tabulations. Finally, we explore outcomes of cases (e.g., guilty pleas, incarceration) between offenders arrested in the two most common types of undercover investigations. All analyses were conducted using Stata Version 11.0 (StataCorp, 2009) survey design procedures. All cases that involved an undercover operation were included in the current analyses (unweighted $n = 544$).

Results

Types of online undercover investigations

There were two broad categories of online undercover investigations – those targeting offenders using the Internet to seek sex with minors and those targeting offenders using the Internet to download and distribute child pornography. The first category, undercover investigations targeting offenders who were seeking sex with minors, represented 76% of the undercover arrests (unweighted $n = 371$). The second category of undercover investigations – those targeting the online downloading and distribution of child pornography – constituted 20% of arrests involving online undercover investigations (unweighted $n = 144$).

The few remaining arrests (4%; unweighted $n = 29$) involved investigations that targeted adults using the Internet to offer or acquire sexual access to children. In most of these cases police posed as adults offering sexual access to minors (often their 'children'), but a few cases targeted prostitution offenses, such as minors being prostituted via Craig's List. These investigations included undercover investigators posing as child pornography sellers or buyers, as well as covert monitoring of child pornography sources such as commercial websites and peer-to-peer file sharing. Given the small number of such investigations, we focus on the two larger categories of undercover investigations in subsequent analyses.

Were there differences between offenders seeking sex with minors and those involved with child pornography?

Both similarities and differences were identified between offenders seeking sex with minors and offenders downloading or distributing child pornography. Demographically, offenders arrested for seeking sex with minors were younger (72% were under the age of 40 vs. 51%

Table 1. Demographic characteristics of offenders arrested in undercover investigations in 2006.

Characteristic	All offenders arrested in UC investigations ($n = 514$) %	Offenders in investigations targeting child pornography ($n = 144$) %	Offenders in investigations targeting sex with minors ($n = 370$) %	X^2
Gender				
Male	100	100	100	0.2
Female	<1	0	<1	
Age				
Younger than 18	2	10	<1	59.1***
18–25	30	19	33	
26–39	35	23	38	
40 or older	33	49	28	
Race/ethnicity				
Non-Hispanic white	85	84	85	6.8
Hispanic white	7	11	6	
Non-Hispanic black	4	3	4	
Asian	2	<1	2	
American Indian or Alaskan Native	<1	<1	0	
Other	2	1	2	
Annual household income				
Less than $20,000	14	11	15	1.2
$20,000–$50,000	37	37	37	
More than $50,000–$80,000	17	19	16	
More than $80,000	12	13	12	
Don't know	20	19	20	
Highest level of education				
Did not finish high school	6	13	4	14.6**
High school graduate	32	33	32	
Some college	20	22	20	
College graduate	14	11	15	
Postgraduate degree	2	2	2	
Don't know	25	19	27	
Community of residence				
Urban	26	24	27	3.7
Suburban	40	38	40	
Large town	10	8	11	
Small town	14	16	13	
Rural	10	14	9	
Marital status				
Single, never married	53	49	54	1.6
Married	24	24	23	
Living with a partner	6	6	6	
Separated, divorced, widowed	17	20	15	
Employed full time	68	56	71	8.4**

***$p \leqslant 0.001$; **$p \leqslant 0.01$.

Table 2.   Characteristics of offenders arrested in undercover investigations.

Characteristic	All offenders arrested in UC investigations ($n = 514$) %	Offenders in investigations targeting child pornography ($n = 144$) %	Offenders in investigations targeting sex with minors ($n = 370$) %	X^2
Access to children				
Lived with minor at time of crime	15	19	15	1.0
Job provided offender with access to youth	13	11	13	0.3
Criminal and related behavior				
Possessed child pornography	35	99	18	247.7***
Produced child pornography	4	7	3	3.8*
Sexually abused an identified victim in current crime	7	13	6	7.5**
Internet-related victim	5	7	5	0.5
Non-Internet-related victim	2	7	1	17.3***
Known violent behavior	5	5	4	0.02
Problems with drugs or alcohol	14	13	14	0.01
Prior arrest for nonsexual offense	19	18	20	0.02
Prior arrest for sexual offense against minor	6	10	4	5.6**
Used the Internet to converse with other offenders	23	64	13	126.4***
Don't know	28	12	32	

***$p \leqslant 0.001$; **$p \leqslant 0.01$; *$p \leqslant 0.05$.

of offenders arrested for attempting to purchase child pornography) (Table 1). Although they were younger overall, these offenders were more likely to be employed full time at the time of the crime (71% vs. 56%). No differences were identified based on race and ethnicity, annual household income, community of residence (e.g., urban, rural), or marital status.

Offenders arrested for downloading or distributing child pornography were more likely to have molested identified victims as part of the current crime, produced child pornography, and have prior arrests for sexual offenses against minors (Table 2). No differences were found in terms of known violent behavior, problems with drugs or alcohol, prior arrests for non-sexual offenses, or access to children.

Case outcomes by offender type

Federal charges were more common in cases targeting child pornography involvement (50% vs. 9%), whereas state charges were more common for offenders who used the Internet to seek sex with minors (93% vs. 47%) (Table 3). Among cases in which outcomes were known, both types of offenders were equally likely to plead guilty – the

Table 3. Case outcomes for offenders arrested in undercover investigations.

Outcome	All offenders arrested in UC investigations ($n = 514$) %	Offenders in investigations targeting child pornography ($n = 144$) %	Offenders in investigations targeting sex with minors ($n = 370$) %	X^2
Outcome known	*75*	*80*	*74*	*1.5*
Any federal charges	18	50	9	75.1***
Any state charges	83	47	93	97.6***
Any guilty plea (federal or state)	92	94	91	0.9
Any conviction	3	2	3	0.1
Any dismissal	6	5	6	0.04
Sentence included incarceration	*61*	*68*	*59*	*2.7*
Short incarceration (1 year or less)	23	14	26	4.0*
Long incarceration (more than 5 years)	24	47	17	25.1***
Sentence included probation	46	55	43	4.8*
Sentence included a fine	13	13	13	0.002
Sentence was suspended or deferred	15	7	18	8.4**
As a result of case offender will (is likely to) be:				
A registered sex offender	86	75	89	12.6***
In a treatment program for sexual offenders	51	49	51	2.0
Not sure	31	29	32	
Prohibited from using the Internet, or limited or monitored use	63	64	63	0.6
Not sure	25	26	24	

***$p \leqslant 0.001$; **$p \leqslant 0.01$; *$p \leqslant 0.05$.

most common outcome for these cases (>90%). Both offender types were equally likely to be sentenced to incarceration (68% of child pornography offenders and 59% of those seeking sex with minors). However, among those who were sentenced to incarceration, child pornography involvement resulted in longer sentences (47% were sentenced to serve more than five years vs. 17%). Investigations targeting offenders seeking sex with minors were more likely to receive suspended or deferred sentences (18% vs. 7%). Finally, offenders seeking sex with minors were more likely to be required to register as sex offenders, although this was a common outcome for both (89% vs. 75%).

Investigation characteristics and agency involvement

Federal agencies were more commonly involved in child pornography cases than those where offenders were targeting minors (64% and 12%, respectively; $X^2 = 128.5$,

$p < 0.001$). This was also true for ICAC Task Forces (29% and 12%, respectively; $X^2 = 17.6$, $p < 0.001$). In contrast, state, local, or county agencies were more commonly involved in online undercover investigations targeting offenders seeking sex with minors (92% vs. 64%, respectively; $X^2 = 59.1$, $p < 0.001$). Overall, multiple agencies were more likely to be involved in the undercover child pornography investigations (62% vs. 44% of undercover investigations where offenders were targeting minors; $X^2 = 10.9$, $p < 0.01$).

A number of different investigative techniques were employed in online undercover investigations based on case type (Table 4). Although common in both types, police were more likely to conduct searches in cases targeting offenders who downloaded and distributed child pornography (96% vs. 88%). Search warrants were more commonly sought in

Table 4. Investigation characteristics for offenders arrested in undercover investigations.

Characteristic	All offenders arrested in UC investigations ($n = 514$) %	Offenders in investigations targeting child pornography ($n = 144$) %	Offenders in investigations targeting sex with minors ($n = 370$) %	X^2
Type of agency investigating case				
ICAC or affiliate	51	35	55	130.6***
Federal	15	51	6	
State, county, or local	33	14	39	
Search conducted by any agency	*90*	*96*	*88*	*6.6**
Search warrant issued	70	89	65	24.2***
Search with consent	23	15	25	5.6**
Vehicle search	55	12	68	105.0***
Any digital evidence collected	*80*	*97*	*76*	*23.1***
Cell phone	9	2	12	10.4***
Desktop	83	89	81	3.6*
Laptop	35	24	39	8.0**
Other hard drives	30	32	30	0.2
Server	6	6	5	0.01
Camera	40	26	45	12.5***
Removable media	48	66	42	19.5***
Something else	4	6	3	1.4
Offender used wireless Internet	28	19	30	5.7**
Offender used a web camera	12	6	14	5.1**
Any forensic exam was conducted	*73*	*94*	*67*	*31.3***
Full forensic exam	59	73	55	12.7**
Partial forensic exam	11	17	9	5.8

***$p \leqslant 0.001$; **$p \leqslant 0.01$; *$p \leqslant 0.05$.

undercover investigations targeting child pornography, whereas consent and vehicle searches were more common in investigations aimed at offenders seeking sex with minors. Similarly, digital evidence was more commonly collected in cases where offenders were caught downloading or distributing child pornography (97% vs. 76%), and digital evidence found on desktop computers and removable media was more common in these cases. Digital evidence was more likely to be found on a cell phone, laptop computer, or camera in undercover investigations targeting offenders seeking sex with minors, and offenders were more likely to use wireless technology and web cameras in these cases. Any forensic exams and full forensic exams in particular were also more common in child pornography investigations.

Discussion

Police were undertaking two main types of online undercover investigations in 2006

This study identified two main ways police are conducting undercover investigations to help stop offenders committing sex offenses on the Internet. Most frequent were undercover investigators posing online as minors catching offenders who were trying to meet with a minor for sex. Second, one-in-five undercover investigations involved police targeting child pornography offenders trying to obtain this material. In addition to these two main types, a much smaller percentage of undercover investigations involved police who were posing as caretakers of children they were willing to provide access to for sex, as well as police posing as adults who wanted to purchase sex with a minor – more stereotypical prostitution cases with a technological nexus.

The intent of such investigations is to capture offenders before they have the opportunity to offend against real children, and the presence of such operations may deter some offenders who might be considering such crimes. Whether these investigations are having such an effect is beyond the scope of this study. Trends show increasing numbers of arrests for Internet sex offending (Mitchell et al., 2010; Wolak et al., 2009), but such a pattern could be the result of increased law enforcement activity in this area and does not provide an indication of patterns of offending behavior.

Are online undercover investigations aimed at child pornography offenders capturing more child sexual abusers than those aimed at offenders using the Internet to seek sex with minors?

Conducting online undercover investigations, regardless of type, requires a great deal of training and police resources. In a world of finite dollars and investigator time, it is useful to try to target the offenders who appear to pose the most danger to youth. Our comparison of offenders arrested in the two main types of undercover investigations is a first step toward helping police to triage such cases. Overall, it appears that it is slightly more effective to target offenders who are involved with child pornography for a variety of reasons. First, these investigations were more likely to detect offenders who had also sexually abused identified victims, so they are 'dual offenders' – child pornography possession and molestation offenders. Second, these child pornography offenders were more likely to have also produced child pornography – so not only are they dual offenders in the sense that they possess sexual images of other children, they are also documenting the sexual abuse they are perpetrating. Third, these offenders were also more likely to have prior arrests for sexual offenses against a minor – so these investigations are more frequently identifying repeat offenders (although prior arrest was still uncommon – occurring in only 10% of

these cases). This relationship remains even after adjusting for 'dual' offender status (i.e., child pornography possession and having an indentified victim). Fourth, these child pornography offenders were much more likely to use the Internet to communicate with other offenders. Such conversations may represent 'networked' offenders and those promoting a more far-reaching range of criminal activity. Taken together, it may not be surprising that offenders initially arrested for attempting to purchase child pornography ended up with much longer sentences than those arrested for attempting to solicit a minor.

The aforementioned differences between child pornography offenders and those attempting to solicit a minor could be a result, however, of the agencies involved and the potential offender population being targeted. Federal agencies were much more likely to be the investigating agency in the child pornography cases discussed here. As such, these cases may have been, to a greater extent, based on prior knowledge – targeting people that were potentially more dangerous. Such cases can involve targeting potential offenders based on credit card numbers used on pay-for-access child pornography websites seized by police. They may also include accessing potential offenders through more explicitly sexual chat rooms and other online venues focused on such sexual interests. On the other hand, we found that the chat rooms where police identified offenders interested in meeting a minor for sex were, for the most part, not explicitly sexual in nature – more likely police were in romance or local area chat rooms where participants are not conventionally targeting children but may do so after time spent in these venues. In other words, police are 'casting a wider net' in such cases as compared to the undercover child pornography cases which could be more directly targeted toward known or suspected offenders. Given this possibility, it is not surprising that offenders caught in child pornography cases appear more deviant. More research is needed to determine whether or not undercover investigations of child pornography offenders are more targeted than those focusing on offenders soliciting minors.

It is also important to keep in mind that the other group of offenders – those arrested for attempting to solicit a minor – were doing just that; they thought they were meeting a minor for sex. This in and of itself is a good reason to conduct these types of investigations and could very well, given their younger age, be capturing offenders before they have the chance to assault a minor. Research suggests offenders caught in this specific type of undercover operation are younger, more naive, and perhaps even less criminal than other online offenders with real victims (Mitchell et al., 2005, 2010). It is also possible that these offenders are earlier in their criminal career and may be more amendable to treatment.

Investigative techniques differ by type of undercover operation

Perhaps not surprisingly, investigative techniques differ depending on the type of undercover investigation being conducted. Although common in both, undercover investigations for child pornography almost always included an official search of possessions conducted by the investigating agency. Differences were seen, however, in terms of the type of search conducted. Undercover investigations for child pornography more commonly involved searches stemming from an official search warrant. On the other hand, undercover investigations for attempting to solicit a minor were more likely to involve searches with the consent of the suspect and also a search of the suspect's vehicle (which typically does not require an official search warrant). This is likely due, in part, to the location of the meeting between offender and police. Undercover investigations for attempting to solicit a minor typically result in some pre-established meeting place where the arrest is made (as opposed to offender's homes) – this occurred in 77% of such cases in the current study. As such,

offenders' vehicles and their contents may more likely be the main source of evidence beyond the chat conversations between the offender and agent. Child pornography would more commonly be found on computer systems in an offender's home (Wolak et al., 2011) and thus search warrants would be efficient and effective. The type of digital evidence gathered also speaks to the more dynamic aspect of undercover investigations for offenders soliciting minors. These cases were more likely to involve digital evidence gathered on cell phones, laptop computers, and cameras – they also were more likely to involve the use of wireless Internet and web cameras. Training to conduct such undercover cases should include information about less traditional means of evidence gathering, as well as ways to acquire permission to search with the consent of the suspect. Indeed, it may be good practice in all cases to inquire about the use of wireless Internet and web cameras, as well as to search a variety of equipment (e.g., cameras, cell phones) which has the potential to carry digital evidence in support of the case.

Overall, it appears child pornography undercover investigations may require a lot more resources. When investigators impersonate minors, they gather the evidence concurrent with conducting the investigation. With child pornography investigations, they have to execute search warrants and conduct costly forensic exams of computers and other implicated technology (e.g., cell phones). This may be one reason that undercover investigations targeting those offenders intent on accessing minors are more common.

Limitations

Several limitations must be noted. First, our data pertains only to undercover cases that ended in arrest. Second, all of the data were gathered from law enforcement investigators. They could provide only limited data about offender behavior, and some of the information they provided could have been biased by training, professional attitudes, or the adversarial nature of their roles in some of these cases. Third, these numbers are estimates based on the sample of cases that were the subject of interviews. Although the study was designed to yield a nationally representative sample of cases, sometimes samples are skewed. The margin of error could be larger than calculated. Fourth, keeping up with rapidly changing technology is a challenge for researchers. Aspects of Internet sex crimes may have changed since our data was collected about 2006 arrests – for example, the emergence in popularity of social networking sites may have changed some of the dynamics of these cases.

Conclusion

The findings of this paper are a first step in understanding the efficacy of various types of online undercover investigations. More comparative research that evaluates the effectiveness and usefulness of various undercover strategies is warranted before we can make suggestions to law enforcement about triaging cases for investigation. Findings highlight the differential need for resources and training based on the type of undercover investigation.

Note

1. The ICAC Task Force Program was created to help state and local law enforcement agencies enhance their investigative response to offenders who use the Internet and other technologies to sexually exploit children. As of 2006, the program consisted of 61 regional Task Force agencies and is funded by the US Department of Justice, Office of Juvenile Justice & Delinquency Prevention.

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