Sexual and Other Axis I Diagnoses of 60 Males Arrested for Crimes Against Children Involving the Internet

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Abstract

Objective: This study was conducted to describe Axis I sexual diagnoses of 60 males arrested for possession of child pornography obtained via the Internet and/or attempting to meet children via the Internet.
Methods: Data was obtained from a chart review of evaluations conducted on 60 males referred for a psychosexual evaluation following an arrest for possession of child pornography and/or attempting to meet children. All crimes involved use of the Internet. Information obtained from the chart review was entered into SAS. All diagnoses were made according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Simple descriptive statistics were computed and cross tabulations were

tested for significance using c2 or Fisher's Exact test.

Results*: Of the total sample, 40% had at least one paraphilia. Thirty-one percent had a diagnosis of pedophilia and 18% of a paraphilia not otherwise specified (NOS). Thirty-three percent had a sexual disorder NOS, characterized by hypersexuality. Seventy percent of the total sample had an Axis I disorder that antedated and was judged to be contributory to the behavior leading to their arrest.*

Conclusions*: This sample of men arrested for committing crimes against children and adolescents via the Internet has a high incidence of lifetime sexual and other psychopathology.*

Focus Points

• Individuals arrested for committing crimes against children over the Internet have high rates of sexual and general psychopathology.
• The newly suggested category of sexual diagnosis, hypersexual disorder, with its subtypes of cybersexual dependence, compulsive masturbation, and pornography dependence, has a significant rate of occurrence in this population.
• Individuals arrested for crimes against children over the Internet appear to differ substantially from those arrested for hands on crime against children and further research is needed.

Introduction

The Internet has increasingly become a vehicle for facilitating sexual crimes against children and adolescents, and has transformed child pornography into a lucrative criminal trade.[1] According to the United States Department of Justice there has been a dramatic increase in federal convictions for crimes involving child pornography. Under one of the federal statutes used to prosecute child pornography (18 U.S.C. 2252), convictions rose from 58 in 1994, to 442 in 2000, to 1295 in 2008.[2] A recent study reported that 19% of youth who used the Internet regularly were the targets of unwanted sexual solicitation[3] and federal convictions for coercion and enticement of children rose from 2 in 1994, to 61 in 2000, to 245 in 2008.[1] Overall, sex offenses involving children are among the fastest growing offenses in the Federal Criminal Caseload, with a 15% average annual increase from 1994 to 2006, with child pornography offenses accounting for 82% of the growth of such offenses.[4] Many of these crimes involve use of the Internet, either to acquire child pornography or to meet minors via the Internet. Penalties in the US are severe for such crimes, with receipt of child pornography carrying a mandatory minimum of 5 years incarceration, and coercion and enticement of children a mandatory minimum of 10 years.

Despite the increasing frequency of these crimes there is a paucity of empirical studies describing psychiatric diagnoses and comorbidity in this population, which are important to consider in order to explain the behavior, provide appropriate treatment, and determine risk of recidivism.[5-7] For example, a diagnosis of pedophilia would offer some explanation for why an individual would use child pornography or try and meet children over the Internet, offer some target for treatment and be an important factor to consider in estimating risk of recidivism.

Most of the studies conducted to date have investigated demographic and psychological features of men arrested for Internet pornography or reported on the relationship between child pornography offenses and

contact sexual offenses, but have not examined psychiatric diagnoses in this population, especially comorbid sexual disorders. Quayle and Taylor[8] reported on interviews of 13 men convicted of downloading child pornography; 4 of whom had also been convicted of assault on children. Although the relationship between contact offenses and child pornography remained unclear, what emerged was the use of child pornography as a means of sexual arousal. Frei and colleagues[9] reviewed the files of 33 offenders convicted of child pornography; only 1 had a prior "relevant" criminal record, suggesting that these offenders had not been previously arrested for contact offenses or for pornography offenses. Alexy and colleagues[10] reviewed 225 cases published in the news media and classified these as involving "traders" (individuals who trafficked and/or collected child pornography online), "travelers" (individuals who engaged in discussion with children online and used their skills at manipulation and coercion to meet a child for sexual purposes) and "trader-travelers" (individuals who both traded in child pornography and traveled to engage in sexual interactions with a child). They found no common profile and suggested that substantial complexities existed in defining and classifying Internet offenders.

A study by Webb and colleagues[11] reported on a group of 90 Internet sex offenders compared with 120 child molesters but did not include information on psychiatric diagnoses. Internet offenders reported more psychological difficulties in adulthood and fewer prior sexual convictions; they were less likely to fail in the community and had fewer antisocial behaviors, such as "acting out" and breaking social rules. Similarly, Elliott and colleagues[12] compared a group of 505 Internet sex offenders and 526 contact sex offenders on a range of psychological measures, and found that Internet offenders could be successfully discriminated from contact offenders on 7 out of 15 measures, with scores on scales of fantasy, underassertiveness, and motor impulsivity associated with Internet offense type. Wolak and colleagues[13] suggested that the current stereotype of the Internet "predator" who preyed on naive children using trickery and violence was largely inaccurate; Internet sex crimes involving juveniles more often fit a model of statutory rape, in which adult offenders meet, develop relationships with, and openly seduce underage teenagers, rather than a model of forcible sexual assault or pedophilic child molesting.

Turning to those studies that report on diagnoses, Galbreath and colleagues[14] wrote a case review of 39 outpatients who entered their program for sexual problems involving the Internet. Of these, 54% had downloaded child pornography and 33% had attempted to meet a minor for sexual purposes. Forty-nine percent received a diagnosis of paraphilia not otherwise specified (NOS) (this diagnosis was not further characterized), 23% pedophilia, 8% voyeurism, 3% exhibitionism, and 18% no paraphilic diagnosis. Sixty-four percent had no known prior criminal history.

Two other studies[15,16] reported on plethysmographic assessment of sexual offenders, including those arrested for possession of child pornography, but did not specify if this pornography or these crimes involved the Internet. Determining the role of the Internet in their sexual offenses would be important because some hypothesize[17] that the population of individuals arrested for such crimes is different from those arrested for crimes that did not involve the Internet. For instance, child pornography is much easier to acquire over the Internet, with only a few clicks of a mouse, compared with printed pornography or DVDs, which would require much more time and effort to obtain. Thus, the intensity of deviant sexual interest is likely to be greater in those who need to expend more effort to acquire pornography from sources other than the Internet.

Seto and colleagues[15] examined 685 men and found that possession of child pornography was an indication of pedophilia, in that it correlated positively with self-reported and phallometrically assessed sexual interests. In this study 61% of child pornography offenders, 35% of offenders with child victims, 13% of offenders with adult victims, and 22% of general sexology patients met the diagnostic criteria for pedophilia used in their laboratory.[18] Conversely, Blanchard and colleagues,[16] drawing from a sample of 832 adult males referred to a specialty clinic for evaluation of their sexual behavior, reported the absence of any relation between output index (a measure of phallometric response to stimuli involving children), and child pornography offenses. They also reported that child pornography offenders were apt to be more intelligent, better educated, and more likely to be referred by their lawyers than others in their sample.

None of the studies examining Internet-related sex offenders have reported on whether the offenders also have a problem with compulsive sexual behavior. Patterns of compulsive sex involving non-paraphilic sexual behavior that is excessive and distressing to the individual, or causes impairment in occupational or social functioning, such as leading to the person being fired from work or divorced, have been associated with the Internet.[19] Such patterns of problematic sexual behaviors have been termed "hypersexual disorder,"[20-22] "paraphilia-related disorder,"[23,24] or "compulsive sexual behavior"(CSB)[25-27] and are diagnosed as sexual disorder NOS in Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. While these terms are roughly synonymous, we prefer the more neutral term "hypersexual disorder"[28] and will use this term henceforth.

Hypersexual disorder is most often manifest in problems such as compulsive masturbation, telephone sex, pornography dependence, compulsive sexual behavior with adults, and cybersex,[22,24,29] defined as online sexual talk for purposes of sexual pleasure. Some of these behaviors, such as cybersex, by definition involve use of the Internet, whereas others, such as pornography dependence, typically involve use of the Internet, but not necessarily.[18] These problems appear to be widespread, with estimates that they occur in 3% to 6% of the US population.[25-27] Individuals with such hypersexual behavior also tend to have significant psychiatric comorbidity,[30,31] as do men convicted of sexual offenses,[32-34] and men with paraphilias and paraphilia related disorders.[35-37]

All of these studies suggest that substantial psychiatric morbidity and comorbidity, including hypersexual disorders and paraphilias, as well as other Axis I disorders are likely to be present in men arrested for crimes against children over the Internet. The purpose of the present study was to examine Axis I psychiatric diagnoses including paraphilias, hypersexual disorders, and non-sexual psychiatric disorders, in a group of men who had been arrested for crimes against children using the Internet. We hypothesized that it was likely that there would be a substantial occurrence of both sexual (including hypersexual disorder) and non-sexual Axis I disorders in this population.

Methods

A chart review was conducted of diagnostic and demographic data obtained from 60 males consecutively referred for a psychiatric assessment during the years 2000–2004 following arrests for crimes involving possession of Internet child pornography and/or trying to meet a child over the Internet. The New York State Psychiatric Institute-Columbia University Institutional Review Board approved this retrospective chart review study. A HIPPA waiver of authorization and waiver of consent to use health data already collected were obtained for 46 individuals evaluated but no longer in treatment and no longer readily accessible. Fifteen subjects in treatment were approached to give their consent to utilize health data that had already been collected from them earlier as part of their evaluations; one refused. No new clinical information was obtained for the purposes of this study.

All subjects had been interviewed by a board-certified psychiatrist who also was certified with additional qualifications in forensic psychiatry and addiction psychiatry; 37% (22 of 60) had an additional interview by a psychologist when a more comprehensive assessment was requested by the referral source. In such cases both authors reviewed all data and came to a consensus regarding the sexual diagnoses. Both authors had credentials in the assessment of sex offenders and paraphilias. Diagnoses were made according to criteria from *DSM-IV-TR*. All subjects had had a comprehensive evaluation utilizing a published paraphilic and sexual history interview.[38]

The possible presence of hypersexual disorder was assessed by inquiring about any history of excessive or compulsive masturbation, compulsive sexual behavior with consenting adults (such as engaging in one-night stands, using prostitutes or escort services, visiting massage parlors, "cruising," or having repeated brief or

protracted sexual affairs), pornography dependence (excessive or compulsive use of pornography), cybersex (compulsive use of sexually oriented chat-rooms or message boards), and telephone sex dependence (such as the excessive use of 900 telephone numbers). A diagnosis of hypersexual disorder was made if these behaviors caused clinically significant distress or impairment, following the criteria suggested by Stein and colleagues.[21] It should be noted that some think that an additional diagnosis of hypersexual disorder in individuals whose sexual interests are paraphilic is redundant and thus should be excluded. Given that a paraphilia diagnosis is based entirely on the deviant nature of the focus of sexual arousal and that compulsivity is not part of the diagnosis, we wanted to determine the presence of compulsive sexual behavior in this population. We therefore made the diagnosis of hypersexual disorder if the person's sexual behavior caused distress and/or impairment apart from the arrest as a result of their sexual behavior. Information from the clinical interview, criminal record, forensic analysis of computers, and collateral informants, when available, was used to make all diagnoses.

Additionally, all subjects had been asked whether or not they had had, as adults, recurrent, intense, sexually arousing fantasies, urges, or behaviors involving sexual activity with adolescents who were not of legal age. According to *DSM-IV-TR* the age range for pedophilia is "generally age 13 years or younger".[39] Given that most victims of Internet crimes against children have been primarily girls 13–15 years of age,[40] it would seem plausible that individuals who have been arrested for coercion and enticement of children might likely have a paraphilic sexual interest in adolescents that has become dysfunctional and resulted in their arrest. Such an interest has been referred to as ephebophilia, which is considered by some to be a paraphilia,[41-43] although the validity of labeling erotic interest in adolescents as deviant has been questioned,[44] especially in a culture in which sexualized media portrayals of adolescents is so common. Nonetheless, for this study we recorded such individuals as having a diagnosis of a paraphilia NOS characterized by an interest in adolescents.

Thirty-five percent (21 of 60) had non-sexual diagnoses made using a Structured Clinical Interview for *DSM-IV* Axis I Disorders (SCID).[45] Ascertainment of whether the criminal behavior occurred during the course of the psychiatric disorder or else was independent of it was made on the basis of an overall global judgment. Finally, each subject was asked if he had ever tried to stop his computer usage at some time in the past in an attempt to control it.

Objective measurements were used to make diagnoses in some of the subjects, with 40% having viewing time assessment, 23% plethysmography, and 18% polygraphy. All subjects were offered these tests; but because only a minority of individuals had agreed to participate in objective testing, none of the measures were included in the statistical analysis. However, objective measurement, when available, had been used clinically in making diagnoses.

Data was entered into SAS. Because only 2 subjects out of the 22 who had tried to meet children on the Internet also did not possess any child pornography, this small group was combined with the group who had both tried to meet children and had child pornography for purposes of analysis. It should be noted that for those individuals arrested for trying to meet children, evidence of child pornography possession was discovered as a result of searches of their computer hard drives seized as evidence after their arrests; none of them were apprehended by authorities based on their possession of child pornography. Demographic and other descriptive statistics were computed, and variables were compared between the two groups by X^2 analyses, incorporating Fisher's Exact test where appropriate.

Results

The mean age of subjects was 39, with a range of 18–60 years of age. Twelve of 60 subjects (20%) were referred by probation officers and 48 (80%) by defense attorneys. Twenty-two (37%) subjects were pre-adjudication (ie, had not yet been convicted); thirty-eight (63%) subjects had been convicted and were

either on probation or awaiting sentencing. Seven (12%) were high school graduates; 17 (28%) had completed some college; 12 (20%) were college graduates and 15 (25%) had graduate degrees. Forty-nine (82%) subjects were Caucasian, 5 (8%) African American, 5 (8%) Hispanic, and 1 (2%) Asian. Regarding sexual orientation, 52 (87%) were heterosexual, 7 (11%) homosexual, and 1 (2%) bisexual. Twenty-two (36%) were married or partnered, 6 (10%) divorced, 2 (3%) separated, and 31 (51%) had never married. A history of childhood physical abuse was reported by 2 (3%) and childhood sexual abuse by 6 (10%). Only 1 subject had a conviction for a prior sexual crime (which involved attempting to meet a minor for sexual purposes), and 2 for prior non-sexual crimes (larceny and theft). Rates of comorbid sexual and other psychiatric diagnoses are presented in Table 1, as well as a comparison of those arrested for charges involving child pornography only (38, 63%) with those arrested for attempts to meet a child (22, 37%).

TABLE 1.
Major Axis I Sexual and Other Psychiatric Diagnoses of 60 Males: A Comparison of Those Arrested for Child Pornography Only with Those Arrested for Attempts to Meet a Child

	Total	Possession Only	Attempts to Meet a Child*	Statistical Significance
	N (%)	N (%)	N (%)	P ≤
DSM-IV or DSM-IV-TR Diagnoses (Lifetime)	60 (100)	38 (63)	22 (37)	
Any Paraphilia or Sexual Disorder NOS	34 (56)	22 (58)	12 (54)	.80
Any Paraphilia	24 (40)	16 (42)	8 (36)	.66
Pedophilia	19 (31)	13 (34)	6 (27)	.57
Paraphilia NOS (interest in adolescents)	11 (18)	5 (13)	6 (27)	.17
Other Paraphilias	1 (2)	0 (0)	1 (4.5)	.97
Any Sexual Disorder NOS (Hypersexual Disorder)	20 (33)	12 (32)	8 (36)	.70
Cybersexual dependence	13 (22)	5 (13)	8 (36)	.04
Compulsive masturbation	5 (6)	4 (11)	1 (5)	.42
Pornography dependence	8 (13)	8 (21)	0 (0)	.02
Other†	5 (8)	3 (8)	2 (9)	.87
Other Diagnoses				
Any Mood Disorders	39 (65)	24 (63)	15 (68)	.70
Any depressive disorder	37 (62)	23 (61)	14 (64)	.81
Major depressive disorder	30 (50)	19 (50)	11 (50)	.99
Other depressive disorder	11 (18)	6 (16)	5 (23)	.50
Any bipolar disorder	1 (2)	1 (1)	0 (0)	-
Any schizophrenic or psychotic disorder	1 (2)	0 (0)	1 (4)	-
Any ADHD	3 (5)	2 (5)	1 (4)	.83
Any Substance Use Disorder	20 (33)	14 (37)	6 (27)	.44
Alcohol use disorder	17 (28)	11 (29)	6 (27)	.89
Other substance use disorder	12 (20)	9 (24)	3 (14)	.35
Both	9 (15)	6 (16)	3 (14)	.82
Any anxiety disorder	10 (17)	7 (18)	3 (14)	.63
Panic disorder +/- agorophobia	4 (7)	3 (8)	1 (4)	.80
Obsessive-compulsive disorder	1 (2)	1 (1)	0 (0)	-
Post-traumatic stress disorder	2 (3)	1 (1)	1 (4)	91
Other anxiety disorder	5 (8)	3 (8)	2 (9)	.79

*20 of 22 (91%) of this group also had concurrent or additional charges involving child pornography
†Other hypersexual disorders: compulsive sexual behavior with adults or telephone sex dependence.

DSM-IV-TR=Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision; NOS=not otherwise specified; ADHD=attention deficit/hyperactivity disorder.

Krueger RB, Kaplan MS, First MB. *CNS Spectr.* Vol 14, No 11. 2009.

Of the entire sample, 24 (40%) had a diagnosis of a paraphilia. Nineteen (31%) had a diagnosis of pedophilia and 11 (18%) had a diagnosis of a paraphilia NOS with a sexual interest in adolescents. Only 1 had a diagnosis of another paraphilia (exhibitionism). Twenty (33%) had a diagnosis of a sexual disorder NOS (hypersexual disorder). Table 2 presents information on the overlap of the diagnoses of hypersexual disorders with the diagnoses of the paraphilias. Eight of 24 subjects (33%) with a paraphilia had a hypersexual disorder and 12 of 36 subjects (33%) who had no paraphilia had a hypersexual disorder. A X^2 analysis produced a value of zero, (with corresponding P-value of 1.0) confirming that hypersexual disorder was unrelated to paraphilic disorders (ie, having one provided no greater risk of having the other).

TABLE 2.
Overlap of Diagnoses of Hypersexual Disorders with Paraphilias

	Any Hypersexual Disorder= NO	Any Hypersexual Disorder = YES
Any Paraphilia = NO	24	12 (33%)
Any Paraphilia = YES	16	8 (33%)

χ^2=0, P=1.0; no association.

Krueger RB, Kaplan MS, First MB. *CNS Spectr.* Vol 14, No 11. 2009.

Individuals arrested for pornography only were significantly more likely to have a diagnosis of hypersexual disorder characterized by pornography dependence ($P<.05$). Those arrested for trying to meet a child via the Internet were significantly more likely to have a diagnosis of hypersexual disorder characterized by cybersexual dependence ($P<.05$). There was no significant difference in the frequency of diagnoses of pedophilia or other paraphilias in the group of those arrested for possession only compared with the group arrested for attempting to meet a child. There was a substantial occurrence of non-sexual lifetime psychiatric disorders in the total sample, with 39 of 60 (65%) having a diagnosis of mood disorder, 20 (33%) a substance use disorder, and 10 (17%) an anxiety disorder.

In Table 3, an association of an Axis 1 disorder with the criminal behavior leading to the arrest was found in 70% of the sample, with 37% having an associated mood disorder at the time of the commission of the crime; 23% a substance use disorder, 2% an anxiety disorder, 40% a paraphilic disorder, and 32% a hypersexual disorder. Of the 22 subjects diagnosed with an associated mood disorder, only 1 had a diagnosis of bipolar disorder. Individuals arrested for possession only were significantly more likely ($P<.05$) to have a diagnosis of a substance use disorder associated with their criminal behavior compared with those who were arrested for attempting to meet a child.

TABLE 3.
Association of Axis I Disorder with Most Recent Criminal Behavior

	Total	Possession Only	Attempts to Meet a Child	Statistical Significance
	N (%)	*N (%)*	*N (%)*	*P ≤*
DSM-IV or DSM-IV-TR Diagnoses (Lifetime)	60 (100)	38 (63)	22 (37)	
Any Axis I Sexual Disorder				
Paraphilic disorder (any)	24 (40)	16 (42)	8 (36)	.66
Sexual disorder NOS (any hypersexual disorder)	19 (32)	11 (29)	8 (36)	.55
Any Axis I Non-Sexual Disorder	42 (70)	28 (74)	14 (64)	.41
Mood disorder (any)	22 (37)	14 (37)	8 (36)	.97
Substance use disorder (any)	14 (23)	12 (32)	2 (9)	.05
Anxiety disorder (any)	1 (2)	1 (3)	0 (0)	.44

DSM-IV-TR=Diagnostic and Statistical Manual of Mental Disorders, Fouth Edition, Text Revision; NOS=not otherwise specified.

Krueger RB, Kaplan MS, First MB. *CNS Spectr.* Vol 14, No 11. 2009.

Eighteen (30%) subjects reported that they had tried to stop their computer usage in an attempt to control it at some point in the past.

Discussion

This study examined 60 adult males who were arrested for child pornography obtained via the Internet or for trying to meet children over the Internet. The diagnosis of pedophilia in 31% of this group was greater than that of 23% in the study by Galbreath and colleagues,[14] but less than 61% in the study by Seto and colleagues.[15] These differences may reflect differences in the legal status of the subjects being assessed, with individuals who were pre-adjudication or pre-sentencing having more of a motive to deny any aberrant sexual interests. It may also reflect differences in the population studied and diagnostic instruments used. Indeed, there are no validated or standardized diagnostic instruments, akin to the SCID, which are available for use for the paraphilias.[46,47] It is also conceivable that if we had been able to use phallometric assessment on all of the individuals we assessed, our ability to detect pedophilia would have been improved and yielded a different rate. Finally, our determination that a diagnosis of hypersexual disorder was present was based on a qualitative clinical judgment, without validated polythetic or quantitative criteria, such as total sexual output in ejaculations per week, for instance. More refined instruments could have yielded different frequencies of diagnoses.

Twenty (33%) of the men in our study had a diagnosis of a hypersexual disorder, with 22% having cybersexual dependence, 6% compulsive masturbation, and 13% pornography dependence. This is markedly less that that reported in a study of 120 outpatient males,[35] where 87% had compulsive masturbation, 57% pornography dependence, and 53% protracted promiscuity. This difference could reflect a difference in the population studied (primarily non-forensic in the Kafka and Hennen study[35]), in diagnostic criteria and in the methods and instruments used to establish such diagnoses (unpublished inventories were utilized in the Kafka and Hennen study[35]). This points again to the need for validated diagnostic criteria and instruments.

Eleven (18%) subjects received a diagnosis of a paraphilia NOS, characterized by an interest in adolescents. Interestingly, there was no significant difference in the frequency of this diagnosis between those arrested for possession of child pornography only and those arrested for trying to meet a minor. We did not clearly specify an age range in our original interviews, but had only asked if an individual had been sexually interested in adolescents who were not of legal age. Thus, the hypothesis that individuals who were arrested for trying to meet a child over the Internet would be more likely to have an interest in adolescents was not supported. Additionally, our sample had markedly less other paraphilic diagnosis than were reported in other samples, which could be caused by differences in interview style, instruments used, or because of the forensic nature of our sample, where there would be an incentive to minimize any history of sexual deviance.

This sample had significant Axis I symptomatology other than sexual disorders, with high rates of substance-related, mood, and anxiety disorders, as has been reported in previous studies of men arrested for Internet crimes against children,[14] hypersexual males,[25,26] men with problematic internet usage,[48-51] and men arrested for contact sexual offenses.[32-34] Our study found a low rate of attention-deficit hyperactivity disorder, with this existing in only 5% of the total sample, compared with 43% in one study of males with paraphilic and paraphilia-related disorders,[35] and 18% in a recent study of psychiatric comorbidity of Internet addiction in college students.[51] Differences in the population studied or the lack of a specific questionnaire to assess for the presence of ADHD could account for these discrepancies.

The findings that individuals arrested for pornography only were significantly more likely to have a diagnosis of pornography dependence and those arrested for trying to meet a child via the Internet were significantly more likely to have a diagnosis of cybersexual dependence may seem tautological. However only 21% of those arrested for child pornography were found to have this diagnosis and only 36% of those arrested for trying to meet a child were found to have cybersexual dependence. Thus, only some of the individuals arrested for such crimes had associated hypersexual syndromes. The fact that 18 (30%) subjects reported that they had tried to stop their computer usage in an attempt to control it at some point in the past suggests that such behavior was recurrent, compulsive, and difficult to control for these individuals.

Our study found that only 1 individual had been convicted of a prior sexual crime (trying to meet a minor). This is dramatically lower than the number of prior crimes against children reported in the other studies cited. It is not possible to conclude on the basis of this study that individuals arrested solely for possession of child pornography would or would not have progressed to meeting a child. However, several individuals with pedophilia in our study had used child pornography for many years without any identifiable attempts to abuse children. It is possible, as is seen in other adults with hypersexual behavior who prefer the use of pornography to actual sexual contact with a partner, that these individuals could have an enduring behavioral preference for sexual behavior that does not involve actual contact with a victim.

This study also suggests that the population of individuals being arrested for Internet crimes against children may be substantially different from the population of individuals arrested for crimes against children in the era before the Internet. Some features of the Internet, such as anonymity or the use of a computer, may allow for individuals, who would otherwise be inhibited or embarrassed if they had to directly purchase such material or interact with minors, to engage in such illegal behaviors over the Internet. Additionally, acquisition of images or involvement with children can be done with a minimum of effort, from the privacy and security of one's home, and this may contribute to different features of the population being arrested. The majority of subjects did not have a paraphilia or pedophilia, raising the question of what other motivations led to their criminal behavior. One motivation we observed among participants in this study included curiosity without a fixated interest. For instance, we found that many individuals would tend to search for all sorts of atypical pornographic images and "drift" from one site to another, selecting child pornography as one of many new types of images or activities to explore. Some subjects stated that they needed evermore stimulation and thrill seeking, and thought of their behavior as breaking taboos. Some subjects stated that they thought the adolescents they were communicating with were in fact adults who were role-playing teenage girls or boys.

This study has several limitations. It is a retrospective chart review, without a control group. Only some of the subjects agreed to objective assessment, such as penile plethysmography, and this prevented using these measures in the study. There are no validated, reliable, structured diagnostic interviews for diagnosing the paraphilias according to DSM criteria and there are no agreed upon criteria or quantitative instruments for diagnosing hypersexual disorders.Our sample size was small, and consisted of a sample of convenience and not a random selection of men arrested for Internet crimes against children. Finally, many of those interviewed had been referred by their attorney and had not yet been adjudicated, and therefore had a motive for not admitting any deviant or problematic sexual behavior.

Conclusion

The dramatic increase in arrests for crimes against children over the Internet, as well as the significant psychiatric morbidity of the men who commit them and the severe penalties involved, underscore the need for further study of those who commit such crimes. This study supports the utility of the diagnostic entity of hypersexual behavior and its subtypes of cybersexual behavior and pornography dependence. Many of those arrested for crimes against children over the Internet did not have paraphilias, but rather had this new form of compulsive sexual behavior. Our study provides the strongest evidence to date that these sorts of behaviors exist in individuals arrested for these crimes and contribute to them. These behaviors also provide targets for treatment and mandate methods of treatment different from that currently offered to individuals with pedophilia or paraphilias. More detailed studies of such hypersexual behavior, coupled with ongoing studies of the impact of such behaviors on overall functioning, and including dimensional and biological variables, would be of interest. *CNS*

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