

Characteristics of Internet Child Pornography Offenders: A Comparison with Child Molesters

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Published online: 16 November 2007
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Abstract The aim of this exploratory study was to compare internet sex offenders with a matched group of child molesters in the Greater London Area. Over an 8-month period 210 subjects were assessed, of whom 90 were internet sex offenders and 120 were child molesters. A wide range of background data was collected, including a number of psychometric measures to determine risk and personality traits. The research identified a number of similarities between internet sex offenders and child molesters on background variables. Specifically, in comparison to the child molesters, the internet offenders reported more psychological difficulties in adulthood and fewer prior sexual convictions. The socio-affective characteristics of internet offenders and child molesters look similar, but the antisocial variables, such as, ‘acting out’ and breaking social rules underlines their difference. The follow up research was carried out after a short period of time at risk—averaging 18 months—but suggested that internet sex offenders were significantly less likely to fail in the community than child molesters in terms of all types of recidivism.

Keywords Internet · Pornography · Sex offences · Risk

Internet child pornography offending is a new phenomenon in which ‘internet sex offenders’ download, collect, and circulate child pornography over the internet. Internet sex offending has sparked off a new wave of arrests, charges, and convictions. As a result, the courts, prison, and probation services have an influx of internet sex offenders, and questions are raised about their management and risk. Are they child molesters or

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are they a new type of offender? If an individual views child pornography on the internet, is he/she likely to progress to a contact sex offense?

To date, there is extensive research into contact sex offenders but there is little empirical research into internet child pornography offenders. Burke et al. (2001) found that individuals who accessed child pornography were generally aged 25–50 years with no prior criminal background. They also found them to be better educated, of higher intelligence, more likely to be employed, and in a relationship than those who commit contact sex offenses against children. In contrast, Galbreath et al. (2002), and Seto and Eke (2005) found that some internet users did have a criminal history. Galbreath et al. (2002) reported data from a selected group of 39 outpatients who were assessed because of concerns about their use of the Internet: 82% received a paraphilic diagnosis, 64% had no known criminal history, 23% had prior non-sexual offenses, 5% had had sexual contact with a minor, 3% indecent exposure, 3% solicitation, and 3% sexual battery. It was not clear if all of the internet users were accessing child pornography but Galbreath et al. reported that 54% had downloaded child pornography only, and 33% had attempted to meet a child for sex.

One recent publication provided follow-up data for a group of 201 adult male child pornography offenders (Seto and Eke 2005)—drawn from a Canadian Sex Offender Registry database—in terms of re-offending rates. A quarter of the sample had prior contact sexual offenses and 15% prior child pornography offenses. After an average time at risk of 29.7 months, 17% of the sample had re-offended. However, if this figure is broken down into sexual re-offending for those with contact sex offense convictions, other nonsexual offending, and child pornography only, then 9% of the contact sexual offenders committed a further contact sexual offense, and 5% committed a further pornography offense. In contrast, 1% of the child pornography only offenders escalated to a contact sexual re-offense, although 4% of them committed a further pornography offense. However, Hernandez (2000) reported 76% of 62 child pornography offenders in a U.S. prison, who did not have previous convictions for contact sex offenses, disclosed—while in treatment—that they had sexually assaulted children at an average of 30.5 children per offender.

There have been a few child pornography offenders in the past, but now the internet is a new medium with which to view pornography. There are a number of dimensions to accessing child pornography on the internet: it can be accessed by anyone, images can be viewed, stored or re-created, many images are free, and they can be accessed in the isolation of one's own home. Cooper (2002) points to three basic components of internet use: accessibility, affordability, and anonymity (called the “triple A engine”), which are factors that attract millions of users to general pornography use from the general population to sex offenders. Sullivan and Beech (2004) suggested three potential motivation typologies from their research on individuals who were caught as part of a police operation. An interrogation of hard drives indicated limited visits to illegal websites, which suggests either that some individuals are adept at covering their tracks, or they are in the early stages of developing a sexual interest in children, or they are just “curious.” Sullivan and Beech proposed the following types:

Type 1. Collecting as part of a larger pattern of sexual offending, possibly including contact sex offending.

Type 2. Collecting to feed a developing sexual interest in children.

Type 3. Accessing indecent images of children out of curiosity.

Quayle and Taylor (2002), and Sullivan and Beech (2003) suggest that internet pornography use can escalate to the commission of contact sex offenses through the process of downloading images, collecting, fantasy, masturbation, cognitive distortions, power, and control. Calder (2004) suggested that the step from child pornography to sexual contact is huge but that the desire for such contact is implicit in the use of the pornography. However, as yet, there is no empirical support for a direct causal link between internet sex offending and the commission of contact offenses.

The limited evidence available suggests there is a subgroup of internet sex offenders who commit contact sex offenses against a child in order to produce pornographic material that may then be displayed on the internet and subsequently traded. These offenders and others may also use the internet to engage with children through chat rooms, or view pornographic images (Quayle and Taylor 2002). Previous research into sex offending has not always addressed whether sex offenders use pornography prior to a contact offense and/or whether it is more likely that they will commit an offense as a consequence of viewing pornography. However, some studies found an effect of exposure to pornography on behavior and attitude. Allen et al. (1995a) meta-analysis consistently found that exposure to nudity diminishes aggression, but that non-violent and violent pornography increased aggressive behavior. Allen et al. (1995b) meta-analysis showed that for those studies using experimental methods an association existed between exposure to sexually arousing material and rape myth acceptance. However, the analysis does not provide sufficient basis for claims of causality.

Some pedophiles claim that masturbating to child pornographic images is a substitute for the abuse because the pornography has fulfilled their desire/need and therefore their behavior is under control (Quayle and Taylor 2002). Riegel (2004) conducted an anonymous on-line survey for self-identified “Boy-attracted Pedosexual Males” (BPM). Eighty-three percent of respondents said that viewing erotica was useful as a substitute for actual sexual contact with boys, and 84.5% of respondents said that viewing erotica did not increase their tendency to seek out boys for the sole purpose of sexual activity. Riegel stated that there remains little support for the perception that viewing child pornography is a substantive causative factor in sexual contact. Further, Seto et al. (2006) assessed the sexual interests and behavior of 685 male patients. Results revealed that child pornography offenders showed greater sexual arousal to children than to adults and differed from groups of sex offenders against children. Seto et al. suggested that child pornography offending is a stronger diagnostic indicator of pedophilia than sexually offending against children.

Small numbers of sex offenders report using pornography either as part of preparation for an offense or as part of the offense itself (Condon and Nutter 1988; Nutter and Kearns 1993). Howitt (1995) found no definite link between the type of pornography viewed and the type of sex offense committed, and suggested that the use of explicit child pornography is uncommon. Bauserman (1996) revealed findings inconsistent with the view that sexually explicit materials in general contribute directly to sexual offending. On balance, there is a growing consensus that while pornography use may be part of the offense process it is unlikely to be a cause of sexual offending (Bauserman 1996; Marshall 2000).

The aim of this research is to explore the potential relationship between internet offenders and contact sex offenders, so as to inform the risk management of internet offenders. Firstly, it aims to build a profile of internet offenders from a descriptive analysis, including background characteristics, psychological difficulties and offending profile. Secondly, it aims to compare internet offenders with contact sex offenders to determine similarities and differences in background and offense approach behaviors. Finally, the study aims to follow up the cohort of internet offenders and child molesters and assess their preliminary outcomes in terms of compliance and reoffending.

Materials and Methods

Subjects

Over an 8-month period, 210 subjects were assessed. The sample comprised convicted adult male internet child pornography offenders, referred to in this study as internet offenders, and convicted adult male sex offenders with child victims, referred to in this study as child molesters (CM), resident within the London Probation Area. Subjects were recruited from three sources. Firstly, from the Challenge Project,¹ where data is routinely gathered and psychometric measures administered as part of the assessment and treatment of sex offenders (internet = 16, CM = 12). Secondly, from the London Probation Area, from four sex offender units where accredited sex offender programs are run. Data were gathered on all subjects placed on a waiting list for treatment (internet = 67, CM = 106). Thirdly, from the Lucy Faithfull Foundation, a voluntary sector organization specializing in the assessment and treatment of sex offenders (internet = 7).

The offense categories were based on the index offense alone. Subjects with an index offense of both internet pornography and contact sex offending were excluded from the study because they were a small sample of five.

Procedure

Details of all subjects were obtained from the probation files and in discussion with probation officers. Specifically, information was gathered from pre-sentence reports, prosecution evidence, and social services reports where available. For those subjects referred to the Challenge Project psychology files were also available. Missing information was followed up by means of telephone contact with the probation officers. Data were gathered on personality and risk from a range of psychometric measures. Data were gathered on background and offending; these variables were chosen because they were easily identifiable from file information and there were in line with recent research conducted in the South East London area (Craissati and Beech 2004, 2005).

¹ The Challenge Project is a community assessment and treatment project for sex offenders in southeast London, run in partnership between the forensic mental health service and the probation service. Descriptive and outcome data from the project has already been published (Craissati and Beech 2004, 2005).

With regards to background variables, childhood sexual victimization was defined as sexual contact with a child under 16 that was either unwanted or perpetrated by an adult at least 5 years older than the subject. Ratings of physical abuse in childhood were defined as physical contact perpetrated by an adult on a number of occasions, which was unprovoked or excessive in relation to any misdemeanor committed by the subject. A rating of emotional or physical neglect in childhood was defined as persistent and marked failures on behalf of the caring adult(s) to provide adequate and consistent care.

A number of variables were considered—on the basis of self-report—which are associated with emotional or conduct disorder in childhood (before the age of 16). These included ratings for persistent truanting or school refusal, significant episodes of being bullied or bullying others, suspension from school for aggression, stealing, running away from home, deliberate self harm, experiencing prolonged difficulties with peer friendships, and marked feelings of misery. Subjects were defined as having experienced childhood disturbance/difficulties if they reported two or more of the above.

A forensic psychologist who was trained by a chartered forensic and clinical psychologist collected data. The training included scoring the PCL:SV and the Stable 2000 from file information. Ten cases were randomly selected for inter-rater reliability and the raters obtained acceptable levels of agreement (90% correct).

Measures

A number of standardized measures were administered, all of which have established normative data and adequate reliability and validity. All the measures were completed from file information save for the Millon Multi-axial Clinical Inventory (MCMI-III). The Risk Matrix 2000, PCL:SV, Stable 2000 variables, and MCMI-III were all completed at the assessment stage. The MCMI-III was completed by 103 subjects (45 = internet, 58 = child molesters). For those subjects whose reading ability was poor the MCMI-III was read out loud. All participants provided written informed consent in relation to the administration of the MCMI-III.

The *Risk Matrix 2000* (Thornton et al. 2003) is an actuarial measure predicting sexual reconviction in sex offenders. It is used widely in sex offending populations in England and Wales and can be derived from file information. It comprises a simple baseline risk classification based on conviction data adjusted at stage two if two or more aggravating factors are found (for example, male or stranger victims). Two cross-validation studies tested the predictive validity of the scale in a short-term follow up sample of treated sex offenders and a long-term follow up sample of untreated sex offenders. The samples predominantly—although not exclusively—comprised sexual offenders against children. The ROC Area under the Curve was 0.77 and 0.75 for the two samples. The 2 and 16 year follow up recidivism rates were 0.9 and 8% low risk, 1.3 and 18.3% medium risk, 5.7 and 40.5% high risk, and 17.2 and 60% very high risk, respectively. The Risk Matrix 2000 was designed to measure risk in contact sex offenders; however the London Probation Area were advised to use it with internet sex offenders in the absence of another measure albeit cautiously.

The *Psychopathy Checklist: Screening Version (PCL:SV)* is a 12-item scale derived from the PCL-R, which is a measure of personality often associated with violence risk. It is usually completed on the basis of an interview and detailed collateral or file information, although it can be compiled from file information alone. The PCL:SV has

two major purposes: to screen for psychopathy in forensic settings, and to assess and diagnose psychopathy outside of forensic settings (Hart et al. 1995). The PCL:SV has good validity as a screening tool. Each item is scored on a three-point scale, from “the item does not apply” through to “the item definitely applies”. The 12 items can produce a score ranging from 0 to 24. The scores are clustered into three categories: low 0–12 (no psychopathy), medium 13–17 (possible psychopathy and requires further evaluation), and high 18 (strong indication of psychopathy).

The *Millon Clinical Multi-axial Inventory—III (MCMI-III)* is a 175-item self-report instrument used for the clinical assessment and diagnostic screening of individuals who evidence problematic emotional and interpersonal symptoms (Millon et al. 1994). It assesses the extent to which the individual has problematic personality styles through 11 clinical personality patterns and three scales measuring severe personality pathology. The instrument also reports the prevalence of symptoms typical of Axis I disorders or ‘clinical syndromes.’ The MCMI-III also provides an impression of the test-taking attitude of the individual, with three validity scales, indicating whether there is an attempt to produce an overly positive or negative impression. The questionnaire has good internal consistency (more than 0.80 for 20 scales) and test–retest reliability (from 0.82 to 0.96). In this study, a personality trait is present with a base rate score of 75 (probable), and personality disorder present with a base rate score of 85 (definite).

The *Stable-2000/Acute-2000* provides a standardized method for measuring change in sex offender risk levels over time. It was developed from the work of Hanson and Harris (2001) with both child molesters and rapists (excluding incest offenders). They identified groups of recidivists and non-recidivists, matched on key static variables, and then interviewed their supervising officers in the community using a structured interview schedule, and examined the offenders’ files. The original version of the scale showed adequate internal consistency and moderate ability to differentiate between recidivists and non-recidivists ($r=0.43$; ROC area of 0.74). The current study used an updated version recommended by the authors. Stable-2000 assesses the following dynamic factors: significant social influences, intimacy deficits, sexual self-regulation, attitudes supportive of sexual assault, co-operation with supervision, and general self-regulation.

In sections 2, 3, 4, and 6, the sub section that gets the highest score is the score for the whole section. Scores on each factor, range from 0 (no problem) to 2 (problem). The score from each section is then totaled to give an overall score, which can range from 0 to 12. The overall score is then defined as low risk (0–4), moderate risk (5–8), or high risk (9–12).

The Acute-2000 factors comprised: opportunities for victim access, emotional collapse, collapse of social supports, hostility, substance abuse, sexual preoccupations, rejection of supervision, and unique factors. Scores on each factor can range from 0 (no problem) to 2 (problem), with an ‘intervene now’ (3) category for very immediate concerns. Although empirically informed, the psychometric properties of the Stable-2000 and Acute-2000 have yet to be established.

Follow Up

Outcome data were collected in a variety of ways. Probation and forensic mental health files contained data on breach and recall decisions in relation to sexual

offenders who had not re-offended, but were taken back to court or into custody as a result of inappropriate behavior. Convictions for sexual, violent, or any other offenses were also recorded. Thus *formal failure* in the community was subdivided into the mutually exclusive categories of sexual (internet or contact), violent (excluding sexual), general re-convictions, and breach/recall. Close collaborative working relationships between the researchers and the probations officers also meant that additional information was available regarding *sexually risky behaviors* (SRBs).

SRBs included sexual convictions, with the addition of any arrests and charges for sexual offending or other offending with a clear sexual element; observation of high-risk behaviors (for example, increased internet usage, or heavy drinking which was previously associated with internet sexual offending); and child protection investigations in relation to new allegations or concerns regardless of the outcome. This variable was intended to capture behaviors that might reasonably be thought of as sexual offending or ‘approach’ behaviors that were close to sexual offending.

Time at risk in the community was calculated from the time of research assessment to November 2005. The average time at risk was 18 months.

During November 2005, the Acute-2000 was administered on all subjects by means of telephone interviews with probation and psychology as appropriate. Practitioners were asked to comment on the acute factors 1 month prior to November 2005 for the survivors or in the 1 month prior to failure for the other subjects, with reference to an identifiable increase in the variable over and above the subject’s usual functioning.

Ethical permission for the research was obtained from the London Probation Area, as all subjects were under the jurisdiction of the probation service.

Results

The sample comprised 210 subjects, of whom 90 (43%) had an index offense of internet child pornography, and 120 (57%) had an index offense of sexually assaulting a child under the age of 16. Background characteristics of the whole sample are described in Table 1. The child molester characteristics are generally in line with other published samples of community sex offenders.

Internet offenders ($M=38$ years, $SD=10$) were significantly younger than the child molesters ($M=45$ years, $SD=14$), $t=3.74$, $p<0.0005$. Internet offenders were predominantly white compared to child molesters who came from a more mixed ethnicity ($X^2=15.30$, $df=2$, $p<0.0005$). Both types of sex offender had experienced substantial levels of childhood difficulties, although the child molesters reported significantly more physical abuse in childhood than internet offenders ($X^2=5.43$, $df=1$, $p<0.05$). A significantly higher number of internet offenders had contact with mental health services as an adult compared to child molesters ($X^2=9.93$, $df=1$, $p<0.005$). Internet offenders had significantly fewer live-in relationships than child molesters ($X^2=7.61$, $df=1$, $p<0.01$).

Offending

Offending characteristics for the whole sample are presented in Table 2. Internet offenders had significantly fewer previous sexual convictions than child molesters

Table 1 Background variables for the sample ($n=210$)

| Background variables | Internet ($n=90$) n (%) | CM ($n=120$) n (%) |
|---|-----------------------------|------------------------|
| Age | 38 sd 10 | 45 sd 14** |
| Ethnicity | | |
| White (British/Irish/other) | 82 (91) | 82 (71) |
| Black (Caribbean/African/other) | 1 (1) | 18 (16) |
| Asian (Indian/other) | 7 (8) | 15 (13)** |
| No childhood abuse/difficulties | 37 (41) | 44 (38) |
| Emotional/physical neglect in childhood | 16 (18) | 26 (23) |
| Physical abuse in childhood | 11 (12) | 29 (25)* |
| Sexual abuse in childhood | 23 (26) | 37 (32) |
| 2+ childhood difficulties | 33 (38) | 34 (29) |
| Taken into local authority care | 7 (8) | 13 (11) |
| Special schooling | 2 (2) | 7 (6) |
| Contact with mental health services | 37 (41) | 25 (21)** |
| History of self-harm | 5 (6) | 7 (6) |
| No co-habiting relationships (+1 year) | 39 (43) | 30 (25)** |
| Marital status | | |
| Single | 48 (56) | 49 (41) |
| Divorced/separated | 5 (6) | 23 (19) |
| Married/cohabiting | 33 (38) | 47 (40) |

* $p<0.05$, ** $p<0.01$ **Table 2** Offense-related variables for the sample ($n=210$)

| Offense-related variables | Internet ($n=90$) n (%) | CM ($n=120$) n (%) |
|--|-----------------------------|------------------------|
| Legal status | | |
| Remanded | 15 (17) | 3 (3) |
| Informal | 3 (3) | 0 (0) |
| Community rehabilitation order | 43 (48) | 33 (28) |
| Automatic release on license | 27 (30) | 83 (70) |
| Parole | 1 (1) | 0 (0)** |
| Previous sexual convictions | | |
| None | 83 (92) | 87 (73) |
| Child victim | 4 (4) | 24 (20) |
| Adult victim | 1 (1) | 1 (1) |
| Both child and adult | 0 (0) | 2 (2) |
| Non contact only | 2 (2) | 6 (5)** |
| Unconvicted allegations (sexual) | 8 (9) | 19 (16) |
| Victim gender (any sexual conviction) | | |
| Male | 7 (8) | 16 (13) |
| Female | 24 (27) | 90 (75) |
| Both | 57 (65) | 14 (12)** |
| Substance abuse at time of index offense | | |
| None | 77 (87) | 85 (71) |
| Drug | 3 (3) | 6 (5) |
| Alcohol | 8 (9) | 19 (16) |
| Both | 1 (1) | 10 (8)* |

* $p<0.05$, ** $p<0.01$

($X^2=12.97$, $df=1$, $p<0.0005$). Twenty (22%) internet offenders had previous convictions. The breakdown is as follows: 15 (17%) were general offenses, seven (7%) were sexual offenses (see Table 2 for type) and three (3%) were violent offenses. No internet offenders had both sexual and violent previous convictions. The most common type of index conviction for internet sex offenders was ‘making of child pornography’ (51%) and ‘possession of child pornography’ (36%).

Child molesters had no previous internet pornography convictions. The previous non-contact convictions for two internet offenders were—possession of videos with indecent images of children—and—indecent exposure to stepdaughter. Interestingly, where details were known about those internet offenders who had unconvicted allegations, half were admissions of unconvicted contact offenses against female children. Just one internet offender had both a previous sexual conviction and an unconvicted allegation. Internet offenders accessed images of male and female children from the internet, whereas child molesters targeted more female victims than male victims ($X^2=64.38$, $df=2$, $p<0.005$). However, it must be noted that the internet offender may or may not search for a specific gender, but it is likely that the results will contain images of both gender, hence why the numbers are higher for ‘both’ than for a specific gender. Internet offenders were significantly less likely to be under the influence of alcohol or drugs and alcohol at the time of the index offense compared to child molesters ($X^2=8.84$, $df=3$, $p<0.05$).

Risk

The results of the psychometric measures for risk are detailed in Table 3. The results for the Risk Matrix 2000 should be interpreted with caution, as it is not specifically

Table 3 Results of the psychometric measures for risk ($n=210$)

| Psychometric measures (risk) | Internet ($n=90$) n (%) | CM ($n=120$) n (%) |
|-------------------------------------|-----------------------------|------------------------|
| Risk Matrix 2000 | | |
| Low | 37 (43) | 48 (40) |
| Medium | 26 (30) | 40 (33) |
| High | 23 (26) | 21 (18) |
| Very high | 1 (1) | 11 (9) |
| Stable 2000 | | |
| Significant influences ^a | 4 (5) | 17 (15) |
| Significant influences ^b | 42 (48) | 59 (50) |
| Intimacy deficits | 56 (64) | 92 (79) |
| Intimacy deficits | 81 (92) | 114 (97) |
| Sexual self-regulation | 37 (42) | 30 (26) |
| Sexual self-regulation | 86 (98) | 78 (67)** |
| Attitudes towards assault | 4 (5) | 21 (18) |
| Attitudes towards assault | 30 (34) | 70 (60)** |
| Co-operation with supervision | 4 (5) | 31 (27) |
| Co-op. with supervision | 28 (32) | 73 (63)** |
| General self-regulation | 35 (40) | 61 (52) |
| General self-regulation | 76 (86) | 100 (86) |

^a Definite, ^b probable
* $p<0.05$, ** $p<0.01$

designed for measuring risk in internet sex offenders. However, the spread of risk scores across the four categories of Risk Matrix 2000 would suggest that the sample might be reasonably representative of a sex offending population. There were no significant differences in the Risk Matrix 2000 scores between the two groups.

Significant differences were found for the PCL:SV between the two groups with child molesters rated as having higher levels of psychopathy ($M=9.30$, $SD=4.80$) than internet offenders ($M=4.53$, $SD=4.09$), $t=7.71$, $p<0.005$. Significant differences were found for the Stable 2000 between the two groups with child molesters rated as higher on the risk domains ($M=6.41$, $SD=2.48$) than internet offenders ($M=5.47$, $SD=1.92$), $t=3.05$, $p<0.005$. Child molesters were rated as having significantly more problems with ‘attitudes towards sexual assault’ ($X^2=13.32$, $df=1$, $p<0.005$) and ‘co-operation with supervision’ ($X^2=19.38$, $df=1$, $p<0.005$) compared to internet offenders. Internet offenders were rated as having significantly more problems with ‘sexual self-regulation’ than child molesters ($X^2=29.50$, $df=1$, $p<0.005$).

Specific Internet Offense Variables

The most frequent offense variables for internet offenders can be found in Table 4. The data collected for each of the Copine Level categories were mutually exclusive. It is important to note that when the data were collected there was limited information in the offenders’ files on internet specific offense variables.

The main origin of the images found was through a search engine, the images were primarily kept on a hard drive, and the images were generally accessed at home. Of those internet offenders asked, over half reported that they were not ‘collecting’ indecent images. Information relating to the age of the victims in the images was available for 72 cases whereby 86% of the child victims in the images were under 10 years old; this was ascertained from self-report or police records. Of those internet offenders asked ($n=63$), nearly half paid to view the indecent images. Of those internet offenders asked ($n=51$), half said they masturbated to the images.

Of the sample, 34% fully accepted responsibility for their offending, and 37% denied any sexual arousal at the time of viewing the indecent images. Eighty-two (80%) of internet offenders said they were motivated for treatment.

Table 4 Internet offense variables ($n=90$)

| Internet offense variables | n (%) |
|--|---|
| Average number of images found | 16,698 (range 2–921,000, <i>Mdn</i> 317.50) |
| Images found through the search engine | 56 (62) |
| Images kept on hard drive | 60 (67) |
| Images accessed at home | 75 (83) |
| Level of image accessed ^a | |
| 1. Explicit erotic posing | 58 (71) |
| 2. Explicit sexual activity | 62 (77) |
| 3. Assault | 64 (80) |
| 4. Gross assault | 61 (76) |
| 5. Sadistic/bestiality | 25 (31) |

^a COPINE levels 1–5 full descriptions can be found in Appendix

Personality and Mental Health

No significant differences between internet offenders and child molesters were found on the MCMI-III, although child molesters scored significantly higher on the desirability scale compared to internet offenders.

The 103 subjects from the whole sample who agreed to complete the MCMI-III were compared with the non-completers on a range of variables, and there was a significant association between completers/non-completers on the scores of the PCL:SV categories. Those who did not complete the MCMI-III were rated as having higher levels of psychopathy than those who did complete the MCMI-III ($X^2=7.57$, $df=2$, $p<0.05$).

Follow Up

Outcome data were collected for 190 subjects, of whom 73 (38%) were internet sex offenders and 117 (62%) were child molesters. Table 5 details the outcome variables in terms of formal failure (re-convictions/breach/recall). Child molesters had significantly more failures (29%) than internet offenders (4%) ($X^2=17.85$, $df=1$, $p<0.005$). One internet offender was convicted for a general offense, and two internet offenders (3%) were convicted for further internet sexual offenses. With regards to child molesters, 3% were charged or convicted for further violent offenses, and 2% were charged or convicted for further contact sexual offenses. The breach and recall rate was significantly higher for child molesters at 17% whereas for internet offenders it was none ($X^2=19.06$, $df=2$, $p<0.005$).

Internet offenders did not miss any supervision or treatment sessions, whereas 8% of child molesters missed supervision sessions and 13% missed treatment sessions ($X^2=19.74$, $df=4$, $p<0.005$).

Attrition—any drop out from treatment including acceptable reasons such as poor health—was fairly low overall. However, child molesters were significantly more likely to drop out (18%) compared to 4% of internet offenders ($X^2=7.85$, $df=1$, $p<0.01$). We applied a more stringent variable, which just took into account those who

Table 5 Outcome variables ($n=190$)

| Outcome variables | Internet ($n=73$) n (%) | CM ($n=117$) n (%) |
|--------------------------------|-----------------------------|------------------------|
| Any failure | 3 (4) | 34 (29)** |
| Formal failures | | |
| None | 70 (96) | 83 (71)** |
| General | 1 (1) | 9 (8) |
| Violent | 0 | 3 (3) |
| Sexual | 2 (3) | 2 (2) |
| Breach/recall | 0 | 20 (17) |
| Missed 2+ supervision sessions | 0 | 9 (8) |
| Missed 2+ treatment sessions | 0 | 15 (13)** |
| Attrition (any drop out) | 3 (4) | 21 (18)** |
| Attrition (unacceptable) | 0 | 15 (13)** |
| Sexually risky behaviors | | |
| General risky behavior | 10 (14) | 30 (26)* |
| Specific risky behavior | 3 (4) | 19 (16)* |

* $p<0.05$, ** $p<0.01$

dropped out for unacceptable reasons, and again, child molesters were significantly more likely to drop out for unacceptable reasons (13%) whereas no internet offenders dropped out for unacceptable reasons ($X^2=10.20$, $df=1$, $p<0.005$).

Sexually risky behaviors (SRBs) were divided into two categories: those that were defined by generally risky behaviors such as continuing to access adult pornography daily, and a more stringent category where those who were defined by specific offense related behavior such as a new allegation or charge. Therefore the ‘general SRB’ category contains both general risky behaviors and specific risky behaviors including the sexually reconvicted; and the ‘specific SRB’ category holds the specific risky behaviors and the sexually reconvicted only. Child molesters had significantly more SRBs in both categories (general 26%, specific 16%) compared to internet offenders who had 14% general SRBs ($X^2=3.86$, $df=1$, $p<0.05$) and 4% specific SRBs ($X^2=6.46$, $df=1$, $p<0.05$).

Although the child molesters obtained generally higher scores on the Acute 2000 than the internet offenders there were no significant differences between the two groups.

Table 6 compares the predictive accuracy of the Stable 2000 and the Risk Matrix 2000 as risk indicators for internet offenders, for child molesters, and for the whole sample.

The Risk Matrix 2000 significantly predicted formal failure for child molesters (AUC.71, $p<0.01$). The Stable 2000 also significantly predicted formal failure for child molesters (AUC.67, $p<0.01$). The Stable 2000 significantly predicted those who were likely to engage in general sexually risky behavior for the internet sample (AUC.71, $p<0.05$).

Discussion

The overall findings were characterized predominantly by similarities between internet offenders and child molesters rather than differences. However, the internet offenders

Table 6 ROC results for the predictive indicators of risk ($n=190$)

| Outcome variables | Risk Matrix 2000 | | |
|-----------------------------------|--------------------|--------------------|---------------------|
| | All | CM ($n=117$) | Internet ($n=73$) |
| | AUC (95% CI) | AUC (95% CI) | AUC (95% CI) |
| Formal failure | 0.69** (0.61–0.78) | 0.71** (0.61–0.81) | 0.75 ^b |
| Specific SRBs | 0.68** (0.51–0.79) | 0.69* (0.57–0.82) | 0.65 (0.44–0.85) |
| General SRBs | 0.67** (0.57–0.76) | 0.61** (0.61–0.82) | 0.53 (0.35–0.71) |
| Attrition (any) | 0.56 (0.44–0.68) | 0.63 (0.50–0.75) | 0.19 (0.04–0.33) |
| Attrition (unaccept) ^a | 0.67* | (0.54–0.80) | 0.67* (0.54–0.81) |
| Stable 2000 | | | |
| Formal failure | 0.71** (0.61–0.81) | 0.67** (0.56–0.79) | 0.83* (0.66–1.0) |
| Specific SRBs | 0.72** (0.59–0.85) | 0.68* (0.53–0.84) | 0.83* (0.66–1.0) |
| General SRBs | 0.72** (0.62–0.82) | 0.71** (0.59–0.83) | 0.71* (0.53–0.89) |
| Attrition (any) | 0.63* (0.50–0.76) | 0.63 (49–0.76) | 0.42 (0.21–0.63) |
| Attrition (unaccept) ^a | 0.64** (0.64–0.87) | 0.71* (0.58–0.83) | |

^a This variable could not be calculated for the internet sample because there were no recidivists
^b Although the AUC could be calculated by the trapezoidal method, the distribution of scores was such that standard algorithms for calculating confidence intervals either aborted (Metz 1998) or yielded impossible results (SPSS, Version 15). The association was non-significant using other statistics (e.g., t , r)
* $p<0.05$, ** $p<0.01$

were younger than the child molesters, more likely to have had contact with mental health services in adulthood, to have failed to establish co-habiting intimate relationships, and to have fewer problems with substance misuse during the offense. Although the internet offenders had significantly fewer previous sexual convictions and fewer unconvicted allegations than the child molesters, 14 (16%) did fall into this group, and they may represent an important subgroup of internet offenders. However, this research was not able to establish a relationship between prior sexual convictions/concerns and other risk or mental health measures in the internet group.

Although the *Risk Matrix 2000* is a widely used static risk prediction tool for predicting the relative risk of sexual recidivism in convicted contact sex offenders it has not been validated for use with internet sex offenders. However, it was important to utilize here in the absence of any other measure. The Risk Matrix does take into account a non-contact offense, such as internet pornography, as an aggravating factor. In considering the results, the Risk Matrix does appear to suggest that the sample was reasonably spread across all risk levels, and there were no significant differences between internet offenders and child molesters.

The *Stable 2000* was able to identify high levels of difficulty in all the dynamic domains for both contact and internet offenders particularly so with intimacy deficits and general self regulation. However, there were differences between the two groups where internet offenders had more problems with sexual self regulation, and contact offenders had more problems with attitudes towards sexual assault and cooperation with supervision. The problems with intimacy deficits may reflect general issues for sex offenders in forming fully functioning adult relationships. Sexual self-regulation, as a domain, contains three factors: sexual preoccupations, sex as coping, and deviant sexual interests. The first factor is reflected in habitual pornography use (legal as well as illegal) and is likely to be particularly salient for a subgroup of internet offenders. The dynamic domains are useful in identifying treatment need in both types of sex offender and possibly providing a post treatment assessment of change.

The *MCMI-III* was administered to only 49% of the whole sample (50% internet and 48% child molesters). The questionnaire is a self-report measure, and therefore represents the views of the subjects rather than a structured diagnostic tool applied by mental health professionals, and the results should therefore be interpreted with caution. Interestingly, there were no major differences between internet and contact offenders in personality or mental health functioning. Overall, there were relatively high levels of self-reported psychopathology with 40% of the sample reporting the definite presence of personality disorder, spread across all three clusters, and 41% reporting marked difficulties in two or more clusters. Both internet offenders and child molesters presented with a more schizoid, avoidant and dependent profile suggestive of individuals who either retreat from interpersonal and social situations sometimes fearing rejection and cutting themselves off emotionally, or individuals who place excessive reliance on their relationships with others in order to cope. Both groups reported high levels of anxiety, which has been found in other studies (Craissati et al. 2006), and may reflect a situational response to their status as a sex offender in the community rather than persistent problems with anxiety disorder.

There was wide variability in the offense-related activity of the internet offenders in terms of the number of images downloaded, the duration and intensity of their viewing time, and the levels of seriousness of the images collected. Around half the

sample paid to view images or admitted to masturbating to images, and only a quarter admitted to having deviant sexual fantasies at the time of their offending. Interestingly, the majority of viewed images related to children apparently under the age of ten, which precluded any rationalization that the offender may have been seeking young adult pornographic images and “made a mistake” about age.

The overall findings of the follow up indicated that child molesters were more likely to fail in all areas compared to the internet sex offenders. Internet offenders had only three formal failures; one was a general offense and two were new internet sex offenses. Otherwise, internet offenders appear to be extremely compliant with community treatment and supervision sessions. Internet offenders (14%) did engage in some sexually risky behavior, which mainly related to increased usage of adult pornography or gambling on the internet rather than specific child pornography use or ‘approach’ behaviors. However, there were no real differences between internet offenders and child molesters in their risk as rated by the Acute 2000, and overall the ratings were fairly low.

Overall, the Stable 2000 and the Risk Matrix 2000 significantly predicted failure, sexually risky behaviors, and attrition. There was no significant relationship between risk and outcome for the internet offender sample alone; this is likely to be because the numbers were too low for meaningful statistical evaluation. However, the Stable 2000 significantly predicted those internet offenders likely to engage in general sexually risky behaviors, such as, further internet pornography use.

Limitations of this study include a possible sampling bias, in that offenders in total denial of their index offense were much less likely to be referred to treatment, and some would have received brief custodial sentences without any consideration of treatment needs. It is difficult to know whether this has therefore excluded more or less pathological and risky individuals from the research, and only a research design that identifies all convicted offenders would be able to overcome this potential bias. However, the background data on the child molester subjects is in line with other studies and suggests that it is reasonably representative of the general sex offender population, in terms of offending, legal status and risk profile.

There were difficulties in collecting information on background and offense variables, most notably, details of the nature of internet offending, and developmental histories. Even with personal contact between the researchers and the probation officers, it became apparent that case managers did not always routinely gather such information. There were also difficulties in collecting follow up information on the whole sample due to a variety of reasons: some cases were transferred out of area, or probation officers changed, which often meant the current probation officer had a limited knowledge of the offender and was therefore unable to comment. This was particularly evident when trying to collect information on the Acute 2000, which required at least some knowledge of the offender.

It could be argued that the variables chosen for this study were not necessarily specific to internet offending. However it was important to begin somewhere and as more is known about contact sex offenders it seemed logical to collect data on what we know and compare them to the same data from an internet group. Further research could explore other aspects of internet child pornography and consider whether they are an exclusive group or not.

In summary, this research makes a significant contribution to the limited literature on internet sex offenders, providing a comparison to child molesters on important

background and offense-related variables. This research is in line with previous research that showed internet sex offenders to be a heterogeneous group some of whom have previous sexual convictions (Galbreath et al. 2002; Quayle 2004; Seto and Eke 2005) and a small number who have disclosed previous unconvicted contact sex offenses against children (Hernandez 2000). Even though this study indicates a number of similarities between internet sex offenders and child molesters, it is important not to leap to the assumption that internet offenders are automatically at high risk of progressing on to contact sex offending, despite there being an identifiable subgroup with previous relevant convictions.

The follow up research revealed that internet sex offenders are significantly less likely to fail in the community than child molesters. The Stable 2000 may well be a useful measure to predict general sexually risky behavior in internet offenders but at the moment there is no risk measure to predict risk of failure for the internet offender group; however it must be noted that the numbers of internet failures in this study were extremely low and the follow up period brief. Despite the small numbers there is some indication to suggest that there is a sub group of internet offenders who pose a risk of repeated internet pornography offending, but not an escalation to contact sex offending. Nevertheless, as yet, by far the largest subgroup of internet offenders would appear to pose a very low risk of sexual recidivism.

Finally, the socio-affective characteristics of internet offenders and child molesters undoubtedly look similar, but their ability to manage their sexual interests underlines their difference. For example, child molesters are more likely to ‘act out’ and break social rules through the commission of contact offenses. This presents the question; are internet offenders vulnerable to contact sex offenses but have strong inhibitions, or are they a different type of offender? In the long term, further follow up work and building on the current research base will hopefully tease out these issues.

Acknowledgements We would like to thank all probation officers in the London Probation Area for their assistance and cooperation in providing key information for the research. We would also like to thank the Lucy Faithfull Foundation and the Home Office for their support.

Appendix

Table 7 Copine levels 1–5 (Taylor and Quayle 2003)

| Level | Name | Description |
|-------|--------------------------|--|
| 1 | Explicit erotic posing | Deliberately posed pictures of fully, partially clothed or naked children in sexualized or provocative poses. Emphasizing genital areas. |
| 2 | Explicit sexual activity | Involves touching, mutual and self-masturbation, oral sex and intercourse by child, not involving an adult. |
| 3 | Assault | Pictures of children being subject to a sexual assault, involving digital touching, involving an adult. |
| 4 | Gross assault | Grossly obscene pictures of sexual assault, involving penetrative sex, masturbation or oral sex involving an adult. |
| 5 | Sadistic/ bestiality | Pictures showing a child being tied, bound, beaten, whipped or otherwise subject to something that implies pain. Pictures where an animal is involved in some form of sexual behavior with a child. |

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