AREA REVIEW

Forensic Evaluation
of Internet Sexual Activity

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ABSTRACT. A vast array of sexually explicit material and activity is available on the Internet. As a result, an increased number of allegations of sexual impropriety have surfaced, sometimes resulting in criminal or civil action. Forensic psychologists can play an important role in investigating such allegations. This article provides an overview of the histor-

ical and legal issues regarding obscenity and pornography, along with the empirical research in this area. A comprehensive model is proposed for evaluating alleged sexual improprieties involving computer and Internet usage. This article also reviews the implication of such activity, and addresses ways of monitoring inappropriate or illegal usage. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com>* © 2005 by The Haworth Press, Inc. All rights reserved.]*

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The Internet has become a vast source of information for society. Over 168.6 million Americans have access to the Internet, a figure that represents about 80% of the population (EuropeMedia, 2003). In a typical week, 100 million people actually log on (Nielsen NetRatings, 2001). Internet access has opened up a whole new world; exploration of interests on the Internet is limitless. Search engines allow users to quickly find information, with ready access to a variety of websites. In addition, users can communicate with others via e-mail, chat rooms, and instant messages.

Although the Internet provides much useful information, it can be conducive to compulsive use and exploitation. Illegal sexual activity is one of the most common examples of the latter. During the past five years, the first author has been referred an increasing number of court cases alleging sexual impropriety via the Internet. These cases surface in both criminal and family courts, the latter of which commonly occur during custody and parenting time disputes. However, scant research has focused on this area. These cases are extremely complicated because of the nature of the allegation(s); lack of a specific test profile for sexual deviance; limited and inconclusive empirical findings on pornography; social, political, feminist, and religious fervor generated by the topic; and the complexity of the assessment issues. This article will review each of these issues, along with specific factors that need to be evaluated. Moreover, the implications are addressed, particularly regarding expert testimony, and proactive ways of monitoring and controlling sexual activity on the Internet.

SEX AND THE INTERNET

Sex is the number one search topic on the Internet (Cooper, 1998; Kahney, 2002). The five most frequently accessed sexually oriented adult web sites have roughly nine million visitors per year (Cooper, Scherer, Boies, & Gordon, 1999) and 31% of the online population has visited an adult web site (Leone & Beilsmith, 1999). There are over 100,000 adult subscription websites in the United States and about 400,000 globally (Thornburgh & Lin, 2002). The estimated money spent in the United States on the Internet sexual industry ranges from $366 million to $1 billion dollars (Griffiths, 2001). Internet sexual activity includes a variety of areas, such as viewing on-line sexually explicit images, downloading and/or printing such images, exchanging emails and photos of a sexual nature, posting messages in various sexual newsgroups, using chat rooms to communicate about sexual interests and fantasies, and using web-cams for sexual viewing.

It is important to note that not all sexual interests or activities on the Internet are deviant or illegal. The Internet is a way to explore sexuality and gather sexual information (Cooper & Griffin-Shelly, 2002; Cooper, 1998). Collecting and disseminating adult sexual pictures/images, exchanging sexual fantasies on-line, and providing sexual instructions are not considered illegal according to most community standards. It becomes illegal when sexual pictures/images involve actual children (i.e., individuals under the age of 18) or when children are solicited for sexual purposes (Foley, 2002). However, McCabe's (2000) research found that one third of her sample (N = 261) of middle class homeowners in two southeastern states did not know it was illegal to download child pornography.

COURT RULING AND FEDERAL LEGISLATION

The term obscenity is rooted in the Latin word filthy or repulsive, and has very specific legal meaning. In contrast, the term pornography applies to a wide variety of sexual material regardless of the content (Fisher & Barak, 2001; Marshall, 1988). The term is rooted in the Greek word "pornographos," which means writing about harlots. It has no real legal significance and is entirely separate from obscenity. Pornography is often further differentiated into nonviolent pornography (i.e., consenting sexual depictions with no coercion), violent pornography (i.e.,

coercive sexual material and/or sadomasochistic stimuli), and child pornography (i.e., involving sexual depictions of children under age 18).

Numerous court cases have addressed the obscenity issue. In two of the most famous cases, *Roth v. United States* (1957) and *Miller v. California* (1973), the court ruled that the First Amendment does not protect obscene material. In *Roth v. United States* (1957), the following definition was used for obscenity: "Whether to the average person, applying contemporary community standards, the dominant theme of the material taken as a whole appeals to the prurient interest" (Roth v. United States, p. 439). Therefore, a two-fold test was used: the material had to be patently offensive and appeal to prurient interests. The court also viewed obscene material as utterly without redeeming social value and outside the protection of the First Amendment.

In the Supreme Court ruling *Miller v. State of California* (1973), three test criteria for obscenity were established: (1) the average person finds that it appeals to the prurient interest, (2) the work depicts or describes sexual conduct in a patently offensive way, (3) the work lacks serious literary, artistic, political, or scientific value. This modified the obscenity law in two ways: it established the standard as local, not national, and replaced the "utterly without redeeming social value" with "lack of serious literary, artistic, political, or scientific value."

In terms of applying the Miller criteria to the Internet, immediate problems are apparent (Thornburgh & Lin, 2002). First, how does the court apply "community standard" to the Internet? If individuals are corresponding inter-state and exchanging sexual material, what community standard is used? Community standards vary widely, and the anonymity of Internet users and their locale further complicate this issue. Second, who is assigned legal responsibility for obscene material, the Internet Service Provider or the individual who posted the material? Third, what counts as the "work as a whole?" Is it the entire web page or merely the images that reside on it?

For over the past 25 years, numerous federal legislative initiatives have attempted to limit or prohibit obscenity. In particular, federal legislation has made it a crime to actually use children in the production of child pornography. The history of this legislation and ensuing court cases will be briefly reviewed to help the reader fully understand the evolution of this topic.

The Sexual Exploitation of Children Act (1977) criminalized creating visual depictions of sexually explicit conduct knowingly using children under the age of 16. It also prohibited the transportation, importation, shipment, and receipts of pornography through any instate

means, including computers. This act was expanded in 1984 with the passage of the Child Protection Act (1984), which raised the age limit to 18. Consequently, a sexually explicit photograph of anyone under age 18 is considered child pornography. It also eliminated the previous requirement that forbidden material be viewed as obscene under *Miller v. California* (1973). The Child Protection Act was again amended in the Child Sexual Abuse and Pornography Act (1986). This act banned the production and use of advertisement for child pornography. It also allowed for civil remedies for personal injuries suffered by minors who were victims of child pornography.

In 1988, the U.S. Congress passed the Child Protection and Obscenity Enforcement Act (1988), making it illegal to use a computer to transport, distribute, or receive child pornography. This act also prohibited controlling or temporarily gaining custody of minors for the production of child pornography. The U.S. Congress further attempted to restrict the access of minors to online sexual material by criminalizing the transmission of obscene, patently offensive, and indecent sexual explicit material to those under the age of 18 through the Communication Decency Act (1996), which was part of the Telecommunication Act of 1996. The U.S. Supreme Court later overturned sections of the Communication Decency Act pertaining to indecent and patently offensive images, noting it was unconstitutional, vague, and overbroad (*Reno v. American Civil Liberties Union*, 1997).

The U.S. Congress passed the Child Pornography Prevention Act (CPPA, 1996) in 1996. This act expanded the federal ban on child pornography to include computer-generated images of children involved in sexually explicit conduct. It immediately sparked constitutional challenges in the courts, with the majority of the U.S. Supreme Court ruling that the act was overbroad and unconstitutional. (*Ashcroft v. Free Speech Coalition*, 2002).

The U.S. Congress responded to the unconstitutionality of the Communication Decency Act by passing the Child Online Protection Act (COPA, 1998) in 1998 to protect minors from pornography available on the World Wide Web. This act focused on sexual material that was commercially available and harmful to minors (i.e., under the age of 17). It also used community standards as defined in *Miller v. California* (1973). Prior to the implantation of COPA, a court challenge occurred and an injunction was granted. In *Aschroft v. American Civil Liberties Union* (2002), the U.S. Supreme Court upheld the COPA section dealing with the use of "community standards" as a way of identifying material that is harmful to minors; noting, by itself, this standard does not violate the First

Amendment. The case was remanded back to the United States Court of Appeals for the Third Circuit with instructions to consider other aspects of the District Court's analysis. After revisiting this issue, the original decision was affirmed by the appeals court in 2003. An injunction against COPA's enforcement remains in effect.

ATTRACTION OF THE INTERNET

Cooper (1998) identified three factors which make the Internet a powerful force in the area of sexuality: Accessibility, Affordability, and Anonymity. He referred to these as the "Triple A Engine." Accessibility of the Internet has greatly increased over the last ten years, with access commonly available at home, school, and in the community (e.g., libraries, cafes). Additionally, one can connect to the Internet at any time of day or night; it is a 24-hour operation. The cost of computers and Internet service has greatly declined, and these items are affordable for most families. Fees for most sex sites are low due to competition and advertising. Anonymity is a key for many users. Users assume they can establish an identity without the fear of being identified or known, which reduces inhibition and allows for greater experimentation. It also gives users a greater sense of freedom to purchase sexually explicit material that they would not ordinarily obtain at local stores.

Cooper et al. (1999) surveyed on-line users about their preferences and motivation for accessing sexual Internet sites. The final group of 9,177 individuals consisted mostly of males (86%). The average age was 35, with almost half married (47%) and the clear majority (59%) working in a professional field. The findings indicated that 79% used their computers at home for on-line sexual pursuits, with 47% reporting less than one hour of activity per week. Most people reported they used sexual material on the Internet for entertainment rather than sexual release. Men indicated they preferred websites featuring visual erotica, whereas woman preferred chat rooms. Seventy percent reported that they kept their on-line sexual pursuits secret from others. The authors found that the amount of time spent on the Internet for sexual pursuits was related to the degree of distress experienced, with those spending more than eleven hours per week showing the greatest signs of distress and life interference.

Internet sexual activity ranges on a continuum from simple curiosity to obsessive involvement, with most individuals falling in the former category (Leiblum, 1997). Therefore, a sexual compulsion or addiction

should not be assumed when an individual is referred for Internet sexual activity. As noted by Cooper, Delmonico, and Burg (2000), on-line sexual compulsivity is rare (< 5%) among those using the Internet for sexual purposes. This finding was affirmed by Greenfield's (1999) ABCnews.com survey that involved over 17,000 online respondents.

A compulsive condition suggests a significant loss of control and diminished capacity to regulate Internet activity. Some individuals are at greater risk. Putnam (2002) identified two specific subtypes of at-risk individuals: depressive type and stress reaction type. Individuals belonging to both categories often feel overwhelmed, lack closeness or social outlets, and view the Internet as an escape. Putnam (2002) notes that idiographic factors contribute to sexual compulsivity too, such as physical, sexual, family, and social trauma and families' sexual behavior and attitudes.

Operant and classical conditioning also play a role (Putnam, 2002). In terms of operant conditioning, Internet sexual activity can be highly reinforcing, which increases the likelihood that the behavior will occur again. Users are reinforced by the sexual arousal it creates, and the ensuing sexual release that helps maintain this behavior. Further, the variable-ratio schedule of reinforcement for sexual on-line behavior makes operant conditioning particularly powerful. Classical conditioning plays a role because computer usage is paired with sexual arousal. Over time, repeated pairing causes physiological sexual arousal whenever the computer is used. Consequently, the computer becomes the conditioned stimulus. Use of the computer results in arousal and temporarily removes unpleasant emotions, which increases the likelihood that sexual activity will be pursued.

CONCERNS ABOUT INTERNET SEXUAL BEHAVIOR

A variety of factors may precipitate concern about Internet usage. First, increased on-line time for sexual purposes raises concern, with more than 11 hours per week associated with signs of psychological distress (Cooper et al., 1999). In addition, the more amount of time spent on-line means decreased time available for family and marital relationships. Second, a preoccupation with sexual activity and material on the Internet may drastically alter the sexual relationship. Sexual interests and desires may change. Further, since sexual gratification and release is obtained through other avenues, intimacy is often de-emphasized.

Third, the content of the material needs to be considered. There is evidence that normal males have a clear preference for sexually explicit scenes involving consensual sex (nonviolent pornography), whereas sexual offenders (rapists and child molesters) are more aroused by deviant scenes (Marshall, 1988). Also, college males rarely choose sexually violent or child pornography videos when offered a wide array of sexual and nonsexual video free-choice options (Bogaert, 2001). Fourth, Internet usage for sexual purposes may interfere with school or work obligations, even occurring in those settings. The latter is almost always a violation of employment or educational policy, and can result in reprimand, suspension, or dismissal. Nevertheless, Cooper et al. (1999) found that one in five employees used their office computers to access sexual material.

Fifth, financial problems may result from the cost of web subscriptions, purchasing sexual material via the Internet, upgrading the computer or accessories to enhance such activity, and/or loss of paychecks or job due to the abovementioned work problems. Sixth, exposure of other family members, especially children, to Internet sexual activity can be confusing and traumatic for them. Pop-up sexually explicit advertisements and sexually explicit "spam" (unsolicited junk e-mail) are commonly sent to users of the computer, not just the person (i.e., screen name) who specifically accessed the sexual material. Also, sexual sites or chat rooms may be minimized and mistakenly forgotten, or a screen with sexually explicit information unattended, and accessed by a child. Exposure to such material might be a means of grooming the child for further inappropriate sexual behavior.

Seventh, illegal sexual activity (i.e., possessing, downloading, or exchanging child pornography, or propositioning minors for sex) can result in legal charges and convictions, which drastically impact the person and family. Lastly, concerns have been expressed about the relationship between pornography and violent sexual acting-out by the consumer of such material. This is an area of ongoing debate and will be addressed later in the article.

It is important to note that individuals who abuse Internet sexual activity rarely refer themselves for evaluation or treatment. Rather, professional involvement is often initiated in response to marital problems, criminal proceedings, and/or a family court dispute. Further, when evaluated, Internet users tend to under-report Internet sexual activity. Consequently, it is critical to gather supplemental information from collateral sources, and to have access to the computer(s) whenever possible.

FORENSIC MODEL
FOR ASSESSING INTERNET SEXUAL ACTIVITY

Although the referring problem may focus on Internet sexual activity, it is critical that the forensic assessment be thorough and addresses all areas of functioning. The forensic evaluation must adhere to professional guidelines, such as the Specialty Guidelines for Forensic Psychologists (Committee on Ethical Guidelines for Forensic Psychologists, 1991), and when applicable, the Guidelines for Child Custody Evaluations in Divorce Proceedings (American Psychological Association, 1994). Evaluators should be neutral and objective, with no prior involvement with the referred individual (e.g., not a current or past therapist). It is important for evaluators to identify their role, i.e., court appointed expert or working for one of the attorneys. It is also critical that multiple data sources be used (APA, 1994; Committee on Ethical Guidelines for Forensic Psychologists, 1991). If an aspect of the evaluation is beyond an evaluator's knowledge and/or expertise, the case, or that portion of the case, should be referred to another expert (Committee on Ethical Guidelines for Forensic Psychologists, 1991).

Gathering Preliminary Information

The first step in the evaluation process involves obtaining written informed consent or notification of purpose for the evaluation, depending on the referral source (i.e., attorney vs. court). This document should include the purpose and procedures for the evaluation, along with the limits of confidentiality and payment issues. The evaluator then gathers all necessary documentation pertaining to the alleged Internet sexual behavior, such as police reports, previous evaluation reports, mental health records, and any computer related information. Gaining access to any computers used by the individual is also critical and may have to be part of the order in court-ordered cases. This step also involves gathering information from collateral sources that may have information about the alleged behavior.

Psychosocial History

It is important to gather a comprehensive psychosocial history, including a complete sexual history. The Revised Psychosexual Life History Inventory (Nichols & Molinder, 1999) is recommended for this purpose. This 19-page questionnaire covers all major areas of function-

ing, including a sexual history. The client completes the form and the responses are reviewed during the interview to provide clarification or to gather additional information. Table 1 lists a series of general questions about sexual behavior, feelings, and thoughts that need to be thoroughly assessed with the referred individual. Specific questions regarding Internet usage will be addressed later.

Analyzing Computer User's Knowledge and Capabilities

The next step involves gathering information about the referred individual's computer knowledge and capabilities. Table 2 shows basic computer information that must be obtained. Collateral sources should be utilized to verify much of this information, particularly when the actual computer is not available to the evaluator. Also, more than one computer may be used; therefore, all computers must be considered. Additionally, it is important to know the particular individuals who had access or used the computer(s).

The type of microprocessor unit (CPU) used is important because it functions as the "brain" of the computer, interpreting instructions received and then executing those instructions. The faster the CPU, the better it is able to perform tasks. At the present time, the Intel Pentium 4 processor is the fastest, with many computers having over 3.0 Gigahertz (GHz).

The Random Access Memory (RAM) is another important component. RAM determines the number of programs that can be efficiently operated at one time, and allows for the temporary storage of information by the operating system. Most computers today have at least 128 megabytes (MB) of RAM, with the upper limits around 2 gigabytes (GB). Assessing the amount of hard drive space on the computer is also critical because it reflects the storage capacity. Hard drive space is usually measured in gigabytes (GB). Downloading pictures and videos uses up storage space quickly, so it is not uncommon to have a hard drive in the range of 30-200 GB.

In an attempt to increase storage capacity, sometimes an external drive (e.g., USB hard drive, Thumb drive, Zip drive) is used. This is also done for secrecy and/or security reasons because external drives, as well as discs, can be stored apart from the computer. However, ordinary 3.5 floppy discs are generally useless because they can only store 1.44 MB. As a result, most computers come with a compact disc-recordable (CD-R) or rewritable (CD-RW), which holds up to 650 MB of information. One popular peripheral is a CD burner, which allows copies of the

TABLE 1. Sexual History Questionnaire

1. How did you learn about sex?
2. Describe your parents' attitude about sex.
3. First exposure to X-rated sexual material: age, type, source, and feelings?
4. How many X-rated sex magazines do you presently have? How many in the past? Types of magazines?
5. How many X-rated sex videos do you presently have? How many in the past? Types of videos?
6. How old were you when you had your first heterosexual experience? How old was the other person? How would you describe the experience?
7. Have you had a homosexual experience? If so, at what age? How old was the other person? How would you describe the experience?
8. At what age did you start masturbating?
9. Number of times you currently masturbate per week?
10. Describe your most common masturbation fantasy?
11. How would you rate your sex drive: very low, lower than average, average, above average, or very high?
12. How many different people have you had intercourse with?
13. Overall, how would you rate your sex life at this point in time?
14. Describe your most pleasant sexual experience.
15. Describe your most unpleasant sexual experience.
16. Describe any history of sexual performance problems.
17. Do you have a history of sexual abuse? If yes, at what age, by whom, and type of sexual abuse?
18. History of sexually transmitted diseases? If so, type and number.
19. How often have you visited the following:

	Last year	Last 5 years
Topless bar		
Massage parlors		
Prostitutes		
Phone sex		
Internet sex site		

19. Check those behaviors you have done:

——Obscene phone calls   ——Sex with a relative

——Peeped at others   ——Exposed self to others

——Forced sex on someone   ——Stolen female underwear

——Involved in group sex   ——Cross dressed

——Sex with an animal   ——Sex with a child

——Enjoy receiving pain during sex   ——Enjoy conflicting pain during sex

——Rubbed against a stranger in a sexual manner

20. Describe your most common sexual fantasy.
21. Describe any legal problems as the result of your sexual behavior.

TABLE 2. Computer Analysis

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1. Computer Hardware
     Type of chip and speed (Mhz)
     Amount of RAM
     Size of hard drive
     Additional storage space, such as Zip or Jaz drive
     Type of Graphic Card
     Presence of CD, CD-RW, and/or DVD

2. Peripheral Hardware
     Scanner
     Digital camera
     Web-cam
     Printer

3. Computer Software
     Image viewer or editor
     Word processing programs
     Encryption

4. Internet Connection
     Modem (dial up) or High speed (DSL, cable, T1)

5. Internet Service Provider
     America Online, AT&T, Comcast, MSN, etc.

CD to be made and distributed or traded. An increasingly popular option is the digital versatile disc (DVD) and DVD burner. The former allows videos to be shown, while the latter allows DVDs to be copied. DVDs are popular in the pornography industry. The graphic card and monitor determine the quality of videos and pictures; consequently, a high-resolution graphic card is commonly used.

It is also important to assess the computer's peripheral hardware. A scanner allows hard copy pictures to be copied into computer files and forwarded to others, which is a common practice among those exchanging amateur sexually explicit pictures. The development of digital still cameras has opened up a new frontier. Pictures can be taken and immediately transferred to a computer file or CD for distribution, thereby eliminating the need for pictures to be developed by a commercial service. Consequently, the availability of digital cameras has expanded the array of sexually explicit pictures. Web-cams have become increasing popular and allow direct viewing of another party. This accessory is popular among exhibitionists and those who enjoy voyeurism. The latter has become highly profitable; subscription Internet sites use col-

lege-aged coeds in dorm rooms or hidden web-cams in public places (e.g., restrooms, changing rooms).

Regarding computer software, image viewers and editing are commonly used because they allow pictures to be altered. The face of a famous person can be superimposed on another person's nude body, or a young pre-adolescent's face placed on a physically immature adult nude body. Also, computer-generated images of children engaged in sexually explicit conduct are being used to circumvent current laws.

Internet connection occurs via modem (dial up) or high-speed connection. The latter involves a digital subscriber line (DSL), cable modem, or T1 connection. The DSL connection uses a regular phone line, whereas the cable modem uses fiber optic cable to transmit. A cable modem is faster, with a download time of 3-10 MB per second (White, 2002). T1 lines are used in workplaces. Most individuals involved in downloading sexually explicit pictures or videos will have a high-speed connection, greatly reducing download time.

Many Internet Service Providers (ISP) are available. The most popular is American Online (AOL). Until recently, AOL only offered connection via phone modem; however, it now offers broadband (DSL) connection in certain localities. Comcast is one of many cable companies that offer a cable modem. ISPs also vary in the type of access allowed. Some provide parental controls and limit access to certain sexually oriented sites; other ISPs provide unlimited access to such material. A variety of Internet browsers are available, such as Netscape Navigator, MSN Explorer, Mozilla, and Microsoft Internet Explorer, which assist in locating and coordinating the transmission of web pages to the computer.

Instant messaging (IM) notifies users when designated individuals are online and allows chatting back and forth, similar to private chat rooms. IM programs can be installed and used for free. It is important to assess the contact list (i.e., buddy list), but actual conversations are not logged or tracked by most IM programs.

Assessment of Computer Usage

The next step in the evaluation process involves asking specific questions about Internet sexual activity (see Table 3). As mentioned earlier, while many individuals participate in online sexual activity, the vast majority spend less than one hour per week. When the total time exceeds eleven hours per week, it usually indicates distress and other psychological problems. It is also important to compare the ratio of online

sexual activity to the total time spent online. The closer this ratio is to one, the greater the concern. Finally, the timing of on-line sexual activity needs to be analyzed, along with the degree to which it interferes with school or work obligations, and social functioning.

The specific type and content of sexual online activity is difficult to assess without the computer, as such behavior tends to be denied and minimized by the individual. Nevertheless, specific questions, sometimes confrontational in nature, must be asked about the type of online sexual activity (as outlined in the second question in Table 3). It is also important to assess the content of the material, such as the number of individual(s) involved (e.g., single, couple, or orgy), sexual orientation (e.g., heterosexual, homosexual, or bisexual), age-grouping (e.g., child, adolescent, barely legal, and/or adult), specific types of sexual acts (e.g., vaginal intercourse, anal intercourse, and/or oral sex, etc.), degree of violence and humiliation (e.g., rape, sadistic/torture, bondage, golden showers, etc.), involvement in paraphilias (e.g., fetishism, exhibitionism, voyeurism, transvestic fetishism, etc.), and violation of inter-generational boundaries (e.g., incest). The quality of the pictures, drawings, or videos should be noted too (e.g., commercial or amateur).

If the computer is available, a wealth of information can be obtained because the computer keeps a record of all files downloaded and sites

TABLE 3. Assessing Internet Sexual Activity

1. Number of hours per week of on-line sexual activity
2. Type of on-line sexual activity
Viewing sexually explicit pictures–with emphasis on specific content
Downloading sexually explicit pictures
Chatting about sexual fantasies in chat rooms
Using sexually oriented newsgroups or bulletin boards
Using web-cam for sexual purposes
Exchanging e-mails and photos of a sexual nature
Accessing, downloading, and/or exchanging child pornography
3. Degree of preoccupation with on-line sexual activity
4. Degree to which it interferes with school and work
5. Impact on social functioning
6. Level of arousal to different sexual stimuli, i.e., masturbation pattern to different stimuli
7. Amount of guilt and shame related to on-line sexual activity
8. Degree of secrecy over activity
9. Insight into problem
10. Understanding of legal implications of illegal on-line sexual activity

accessed. In assessing computer usage, the following file sources should be analyzed: Web Browser History, Temporary Internet Files, and Cookies. Unbeknownst to many computer users, Internet browsers keep a running history of websites that have been visited. However, the amount of history available depends on the preference settings; the history setting may vary from one day to the entire lifetime of the computer depending on the user's preference or default settings. Also, a user can delete history files at any time.

Temporary Internet Files are stored on the hard drive to speed up web surfing, including graphics and web pages. If a site has been visited in the past, certain files from that site will be placed on the hard drive for future use, in order to speed up access to the site. The next time the site is accessed, the browser will first check the files on the hard drive and load those portions of the web page. In Microsoft Windows 98, temporary Internet files are stored at c:\windows\temporary Internet files; for Microsoft Windows XP, these files are stored at c:\Documents and Settings\<username>\local setting\temporary Internet files.

A "cookie" is a small piece of information that a web server can temporarily store in the web browser. Cookies help the browser retain specific information that the web server may want to access at a later time, for example the user's name, address, and purchasing information. The next time the computer accesses the site, information from the "cookie" on the computer tells the web server that it was previously accessed. A review of cookies will reveal the websites accessed in the past. In Microsoft Windows 98, cookies are stored in c:\windows\cookies. In Microsoft Windows XP, these files are stored on c:\Documents and Settings\<username>\cookies. Although specific identifying information is sometimes difficult to decipher, a cookie management program such as IECookiesView-version 1.5 will provide detailed information about each cookie. This program also allows the viewing of deleted cookies that are still stored in index.dat file.

When the computer is available it is also important to review the Bookmark Content, sometimes labeled as "Favorite Places." These are Internet sites that can be directly accessed without typing in the complete web address. Bookmark content provides instant information about preferred sites, and it is common for sexual sites to be listed for frequent users. One such site, NAMBLA (North American Man-Boy Love Association), would raise concerns because it is a popular pedophile site. This organization advocates for the abolishment of laws regarding age of consent. Durkin and Bryant (1999) found that this site

provides a highly sympathetic environment for its users, which can further their deviant thinking.

It is also imperative to analyze newsgroups for a listing of topics accessed. Individuals using newsgroups often exchange sexually explicit pictures and stories; newsgroups offer an unimaginable number of sexual topics. Installation and use of Internet Relay Chat (IRC) software, such as MIRC or Invison, are additional areas to assess. IRCs offer bulletin boards and chat rooms for contacting and corresponding with other Internet users. This software is very popular among the "underground crowd," as anything and everything can be found and exchanged. IRCs are unmonitored and contain tens of thousands of Internet topics focusing on sexual activity and interests. Also, becoming more popular in the "underground" computer market is a software technology called the "bit torrent" network. This network allows users to share files by using a special client without the use of a centralized server. This provides the users with a better chance of remaining completely anonymous when downloading files. This may eliminate the worry of being tracked.

The user's screen names, usually listed on the sign-on page for the ISP, are important to note. Screen names such as boylove or teenlover are quite explicit and convey information about one's interests. Records of e-mail correspondence should also be examined. E-mails are saved unless the user sets a preference to have them periodically deleted. Even then, e-mails are still accessible on the computer in the e-mail trash bin until emptied. The e-mails will also indicate if attachments were sent, such as pictures or text. E-mail content may provide valuable insight into the nature and extent of written communication with others, especially regarding sexual topics. Chat room activity is another source to assess. Examining the history files will provide information about the specific room/topics accessed; however, the computer does not record the actual conversations in those rooms unless a third party keystroke logging software is installed.

On occasion, a computer user will reformat the hard drive assuming this will eliminate all data or evidence of illegal or inappropriate sexual behavior. This is a false assumption. U.S. Government policy recommends that a hard drive be reformatted seven times to totally eliminate all data/files, which rarely happens. Even when a hard drive has been reformatted, important information may still be available, especially when high-tech tools and techniques are utilized.

Another important area to evaluate is the level of excitement and arousal to the different sexual online content. This can be partly measured by the quantity of such information accessed, along with mastur-

bation fantasies expressed regarding such material during the interview.

The amount of secrecy and shame/guilt regarding online sexual behavior should be assessed as well. Internet online activity is commonly hidden. The computer is usually located in a back room or other inaccessible area, and the activity may occur late at night when others are sleeping. As previously mentioned, files are commonly downloaded onto CDs or Zip drives and hidden. Also, encryption software is sometimes used to make files inaccessible to others, coding files so that access is limited to those with a password. Shame or guilt can occur on multiple levels, focusing on the activity itself, the time away from family, degree to which it interferes with school or work, and/or illegal nature of some of the activity.

Evaluators should also assess the individual's insight into his/her problem, and the impact it has on different aspects of life. Further, if the online activity involves illegal behavior, it is important to evaluate the individual's understanding of the possible legal consequences.

Psychological Testing

Another evaluation step involves the administration of psychological tests. These instruments help rule out major psychopathology and identify important personality traits and characteristics. The administration of the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989), the most widely test in clinical and forensic settings (Otto, 2002), is strongly recommended. The Millon Multiaxial Personality Inventory III (MCMI-III; Millon, 1994) has gained increased popularity, but recent criticism regarding unsupported gender differences on some MCMI-III personality scales has raised serious concerns about its usefulness (Hynan, 2004). One instrument gaining prominence in the forensic field is the Personality Assessment Inventory (PAI; Morey, 1991). Advantages of the PAI include its reasonable length (344 items), low estimated reading level (4th grade), and its ability to assess clinical variables relevant to forensic work (Edens, Cruise, & Buffington-Vollum, 2001). It is very likely the PAI will become preferred over the MCMI-III as a companion test for the MMPI-2.

Since substance abuse problems are common among offenders, it is recommended that the Substance Abuse Subtle Screening Inventory-III (Miller, Roberts, Brooks, & Lazowski, 1997; SASSI-III) and/or Michigan Alcohol Screening Test (MAST; Selzer, 1971) be administered to

rule out substance dependency and alcohol problems, respectively. The MMPI-2 and PAI also have useful scales that tap into this area.

Specific sexual inventories have obvious face validity, reducing their utility because sexual deviance is easily minimized or denied. Further, techniques such as the penile plethysmograph and polygraph are highly controversial (Haralambie, 1999). It is important to note that there is no particular test profile for sexual deviance (Becker & Murphy, 1998).

A variety of sex offender risk assessment inventories are also available. However, these instruments should be utilized with caution. The overwhelming majority of such inventories were normed on prison and institutional populations, rendering them inappropriate for this type of evaluation. One inventory that shows promise for the present type of evaluation is the Sexual Violence Risk-20 (SVR-20; Boer, Hart, Kropp, & Webster, 1997). This inventory provides explicit clinical guidelines for assessment.

The SVR-20 was developed for use with civil and criminal forensic cases, and is appropriate for alleged or committed acts of sexual violence. The latter is defined as, "actual, attempted, or threatened sexual contact with a person who is nonconsenting or unable to give consent" (p. 9). Sexual contact is defined broadly to include communication of a sexual nature, such as distributing pornography. This instrument assesses 20 risk factors in three areas: psychosocial adjustment, sexual offenses, and future plans. Specific cut-off scores are not provided since the particular items and combination of items need to be analyzed to determine the risk level (low, medium, or high). Overall, the SVR-20 is a promising inventory to include as one of many data sources in this type of evaluation.

The Hare Psychopathy Checklist: Screening Version (PCL:SV; Hart, Cox, & Hare, 1995) is a good screening measure for assessing the concept of psychopathy. It can be utilized with individuals from general, forensic, or psychiatric populations; whereas the Psychopathy Checklist-Revised (1st or 2nd editions) has a more limited normative population (e.g., prison, forensic psychiatric, etc.), which might not apply to the present evaluation.

In summary, it is important that a forensic evaluation model for assessing Internet sexual activity involve multiple data sources, including reviewing pertinent documents, contacting collateral sources to collaborate information, conducting thorough psychosocial and sexual histories, assessing the user's computer knowledge and capabilities, analyzing computer usage, and administering psychological tests and risk assessment instruments. This approach should provide a wealth of in-

formation about the individual's general functioning, along with his/her computer/Internet activity. Also, if an allegation involves possible sexual misconduct with a minor and the minor is available for questioning, it is recommended that a forensic interview model be used as proposed by Kuehnle (1998) and Poole and Lamb (1998). In child custody cases, it is suggested that forensic guidelines outlined by Bow, Quinnell, Zaroff, and Assemany (2002) be followed. In formulating the findings, it is critical to consider all information gathered and to consider every possible hypothesis.

EMPIRICAL RESEARCH AND IMPLICATIONS FOR COURT TESTIMONY

Few areas of research have evoked the political, feminist, and religious fervor displayed in the study of "pornography." It is important for expert witnesses to understand the controversies and empirical research in the field and to be able to appropriately address them in forensic reports and testimony. A brief overview will be provided of the different perspectives on pornography, along with the evolution of the issue and research over the past 35 years.

The liberal view is that pornography's impact is negligible, and interfering with its distribution and viewing would infringe on First Amendment rights. The conservative view is that pornography negatively affects individual and family values and is detrimental to the moral character of society in general. The radical feminist view is that pornography directly affects men's attitudes and behavior towards woman, and encourages male domination.

The fervor over this issue peaked after the findings of the Presidential Commission on Obscenity and Pornography (1970). This commission was appointed to study the impact of nonviolent "sexually explicit material" on attitudes and behaviors. The commission concluded that pornography has not been shown to have a dangerous impact, i.e., it is not a causal factor in sex crimes or sex delinquency. Much criticism followed (Cline, 1974).

The Attorney General's Commission on Pornography (1986), also known as the Meese Commission, was appointed to explore the relationship between violent pornography and attitudes/crimes against women. The Meese Commission found a causal relationship between exposure to sexually violent material and aggression towards women. It also found that some types of "nonviolent pornography" resulted in

anti-social behavior. These findings were immediately criticized for allegedly going beyond the empirical data (Linz, Donnerstein, & Penrod, 1987) and being ideologically motivated (Wilcox, 1987).

Many issues have plagued the study of pornography. First, ethical, moral, and legal issues play a major role in determining the boundaries of this research. As a result, the vast majority of research has been done in laboratories rather than in naturalistic settings. It is also noteworthy that relatively few studies have focused on Internet pornography.

Second, laboratory studies have focused on a limited sample, usually volunteer college students. The definitions of pornography and sexual violence have also varied widely in these studies. Further, the type of sexually violent depictions used in laboratory studies reflects a small portion of the pornographic material available. In addition, aggression is often condoned in laboratory experiments, in contrast to society's general view, and the artificial setting impacts subjects' perceptions of implicating harm.

Third, the study of pornography does not occur in a vacuum. Many other factors play a role, such as the subject's background, personality characteristics, and predisposition; cultural milieu; particular content stimuli; and experimental design, such as the dependent variables used (Malamuth, Addison, & Koss, 2000). Fourth, these studies generally focus on correlational data. It is very important to avoid inferring cause-and-effect from such data.

Nonviolent and Violent Pornography

In light of the factors noted above, a brief summary of research on the relationship between pornography and violence will be discussed, as a more thorough review of this area is beyond the scope of this article. Major work in this area has been done by many researchers, including Allen, D'Alessio, and Brezgel (1995), Barak, Fisher, Belfry, and Lashambe (1999), Boeringer (1994), Condron and Nutter (1988), Donnerstein, Linz, and Penroid (1987), Fisher and Grenier (1994), Fisher and Barak (2001), Langevin, Lang, Wright, Handy, Frenzel, and Black (1988), and Malamuth et al. (2000). These scholars vary in their interpretation of the data, but some general trends are outlined below:

- The evidence does not consistently suggest that convicted sex offenders and non-sex offenders (e.g., community and volunteer controls) differ significantly in their age of first exposure to pornography and frequency of usage of such material.

- For the majority of American men, exposure to sexually explicit material, even violent pornography, is not associated with high levels of sexual aggression.
- Exposure to nonviolent pornography does not appear to have a significant impact on negative attitudes towards women and sex crimes.
- The association between violent pornography and sexual aggression is less clear, but the research tends to suggest a link. However, any association might be more dependent on the violence than on the sexual content. Further, individuals at the extreme ends of the continuum might be most impacted.
- When men with a high predispositional risk for sexual aggression are frequent users of pornography, their rate of sexual aggression is much greater than that of men who very infrequently use pornography.
- The association between violent pornography and negative attitudes towards women is an area of ongoing debate.

Child Pornography

Society has raised concerns about child pornography on a variety of fronts. First, the use of actual children in the production of pornography victimizes them. It is a form of sexual abuse and has a detrimental impact on their emotional development and well-being. This was the rationale behind federal legislation to ban child pornography; moreover, this ideological viewpoint was supported by Supreme Court decisions. Second, child pornography violates societal and family values and traditions, and is taboo. It sexualizes children and erodes adult-child sexual boundaries. Third, serious concerns have been raised about the impact of child pornography on the consumer of such material; particularly, the possibility that it incites or instigates sexual crimes against children.

As previously discussed, the Internet has opened up a whole new world regarding access to child pornography. It is much easier to find such material through Internet search engines and newsgroups. Consequently, individuals might access Internet child pornography for a variety of reasons, particularly those who might never have done so prior to Internet access. Conversely, child molesters and pedophiles might strongly gravitate toward this readily accessible media. Therefore, the types and motives of individuals using Internet child pornography need to be explored.

At the present time, only a limited number of studies have focused on Internet child pornography (Durkin & Bryant, 1999; Foley, 2002; Quayle & Taylor, 2003). Moreover, these studies have involved a limited number of subjects. Consequently, caution must be used in generalizing the findings; however, they do provide useful information about possible trends.

Foley (2002) studied 22 individuals convicted of child pornography referred for sentencing evaluations. Group findings from the Rorschach Ink Blot Method, MMPI, and Abel Screening found these individuals to be angry, rebellious, and experiencing abusive fantasies. They displayed distorted self-perceptions with narcissistic traits, along with distorted perceptions of others and difficulty forming deep, meaningful relationships. Other findings on these individuals included antisocial attitudes and depression. However, only one-third of the protocols revealed a sexual interest in children. It is important to note that only three admitted to or had been charged with a sexual contact offense.

Foley identified four possible subject (taxonomy) groupings: mastery, rebellious/angry, disorganized, and pedophilic/child molester/traveler. The mastery group consisted of individuals who had been sexually coerced as children. These individuals were arrested for downloading child pornography that approximated their age at the time of their own victimization. The rebellious/angry group was drawn to child pornography because of its illegal nature and social taboo. Also, this group might have become bored with adult pornography and sought the novelty of child pornography. The disorganized group downloaded a variety of pornographic material, with little or no interest in organizing or viewing it. Some individuals in this grouping contended that they hoped to infiltrate the computers of other child pornographers. The pedophilic/child molester/traveler group consisted of individuals who entertained pedophilic or deviant sexual interests, with paraphilic interests as well. They were also sexually preoccupied and exhibited anti-social personality disorder.

Quayle and Taylor (2003) studied 23 men convicted of child pornography. Eleven of these men had committed a contact offense against children, which included producing child pornography. The researchers conducted individual interviews of these men and analyzed their responses for content. Findings revealed an attempt by the men to normalize their offending behavior. For example, they attempted to portray child pornography as art. They also seemed empowered by their ability to access such material, and to have gained much reinforcement from interacting with this milieu culture. The size of their collection and

unique nature of the pictures appeared to provide a source of status and credibility as well, and they often seemed more interested in these aspects of their material than in actually viewing the content. In addition, as the subjects became more entrenched and preoccupied with the activity, there was a corresponding reduction in actual social behavior. Collecting pictures led to an increase in both fantasy and sexual activity, especially solitary sexual activity.

Durkin and Bryant (1999) analyzed data gathered from a Usenet newsgroup (alt.support-boy.lovers) used by pedophiles. It was found that this newsgroup provided a highly sympathetic milieu for its users. Among this group, the most common defense for pedophile behavior was the denial of injury to children (39%). This was followed by the condemnation of condemners (nearly one-third), involving an attempt to shift the blame from the pedophiles to the attitudes and behavior of others in law enforcement or mental health, with claims of persecution by these groups. A smaller percentage (14.6%) asserted the justification that some great men had been pedophiles. Generally, users of this particular newsgroup used complex polythematic accounts (i.e., more than one justification) to explain pedophile interests and behavior.

Although these findings should be viewed as preliminary due to the limited number of studies and the small sample size, they offer some interesting trends. Prior to discussing them, though, it is vital to reiterate that child pornography is illegal. The downloading or distribution of such material could result in criminal prosecution. Consequently, this is serious behavior, with legal implications beyond the scope of mental health.

One similarity among the studies was the use of justifications and gross cognitive distortions by the subjects. In the sex offender field, this is referred to as thinking errors. These subjects attempted to normalize their behavior and downplayed concerns expressed by society, mental health, and law enforcement. Accordingly, it is critical for evaluators to assess for this type of thinking style. A second similarity was the heterogeneity of this population. There appear to be a variety of motives underlie individuals' desires to access child pornography on the Internet.

Third, a minority of these individuals was convicted of sexual contact offenses. Therefore, it cannot be assumed that viewing child pornography is synonymous with sexual contact. Fourth, the cultural milieu in the child pornography community appears to provide a highly supportive and sympathetic stance. It provides reinforcement for many of the gross cognitive distortions exhibited by pedophiles, and attempts to normalize the behavior. This creates concern as the pedophile/child mo-

lesting community becomes more computer sophisticated; especially for those who are predatory. For a discussion of this topic, see Dombrowski, LeMasney, Ahia, and Dickson (2004).

It is essential that expert witnesses remember that a variety of factors and motives play a role in individuals accessing pornography on the Internet. A link between deviant sexual fantasies and subsequent deviant behavior has not been empirically established (Foley, 2002). The presence of deviant sexual fantasies does not mean an individual will act upon such fantasies. Consequently, a father's involvement with child pornography does not constitute proof that he has been sexually inappropriate towards a child. However, it does represent a risk factor.

Further research is needed in the area of Internet pornography, and in particular, child pornography. It is hoped that such research will clarify characteristics, dynamics, and subgroups among this population. Through an understanding of the above-mentioned issues and controversies in the field, along with utilization of the comprehensive forensic investigative model previously outlined, it is hoped that forensic experts will be able to provide the court with pertinent and relevant information in addressing this complex topic.

PROACTIVE STEPS FOR CONTROLLING AND MONITORING INTERNET SEXUAL USAGE

Numerous steps can be taken to control or monitor Internet usage, reducing the risks of inappropriate or illegal sexual usage. First, computers should be placed in high visibility areas that allow others to monitor the activity. Second, all computer files involving sexual material should be deleted, as well as any screen names used for sexual purposes. Third, filtering software such as NetNanny, CyberPatrol, SurfControl, Spyware, or Cyber Sentinel should be installed to block access to adult sexual sites or newsgroups. Keystroke software such as iSpyNow 3.0, Spector Pro 4.0, and Computer WatchDog will record all emails, chats, instant messages, and websites visited. It is important that this software be installed by a professional rather than simply downloaded off the Internet in order to ensure that all security features are properly activated.

Fourth, all peripheral hardware (e.g., scanner, digital camera, webcam), and applicable software, should be removed from the computer to prevent misuse for sexual purposes. Fifth, all inappropriate sexual ma-

terial on interactive discs/CDs should be destroyed. Sixth, e-mail addresses that have been used for sexual purposes in the past should be blocked. Seventh, bookmarks or favorite places pertaining to sexually explicit sites should be deleted, with memberships to such sites canceled.

SUMMARY

A vast array of sexually explicit material/pornography and activity is available on the Internet. As a result, an increased number of allegations have surfaced regarding compulsive usage or sexual improprieties. Forensic evaluators are sometimes requested to assess these allegations for the court system. These are some of the most complex cases due to the nature of the allegation(s); numerous issues and factors that need to be considered; lack of a specific sex offender test profile; limited, controversial, and/or inconsistent empirical research in the pornography area; and the highly charged nature of the topic. It is vital for expert witnesses to understand all of these issues and to maintain a neutral, objective stance. It is also critical to understand the legal, political, and sociological issues underpinning the topic of pornography, along with the empirical research in the area and its limitations.

For these types of evaluations, a comprehensive forensic model should be employed which applies appropriate guidelines and procedures. Multiple data sources should be utilized, including interviews, psychological testing/inventories, collateral contacts, review of pertinent documents, and examination of the computer. Thorough knowledge should be gathered about the examiner's psychosocial history, including a complete sexual history and computer knowledge, expertise, and usage. The amount of online sexual activity and particular time, type of activity, content and themes, amount of excitement and arousal, degree of secrecy and shame/guilt, and amount of insight are relevant to the evaluation. Data regarding personality functioning (including degree and severity of any psychopathology) and risk assessment should also be obtained. Through utilizing this comprehensive model, along with the aforementioned knowledge in the field, it is hoped evaluators will be better able to assist the court in understanding the level and severity of the sexual activity and its possible implications.

REFERENCES

Allen, M., D'Alessio, D., & Brezgel, K. (1995). A meta-analysis summarizing the effects of pornography II. *Human Communication Research*, *22*, 258-283.

American Psychological Association. (1994). Guidelines for child custody evaluations in divorce proceedings. *American Psychologist*, *49*, 677-680.

Ashcroft v. American Civil Liberties Union, 122 S. Ct. 1700 (2002).

Ashcroft v. Free Speech Coalition, 122 S.Ct. 1389 (2002).

Attorney General's Commission on Pornography: Final Report. (1986). Washington, DC: Government Printing Office.

Barak, A., & Fisher, W. A. (1997). Effects on interactive computer erotica on men's attitudes and behavior towards women: An experimental study. *Computers in Human Behavior*, *13*, 353-369.

Becker, J. V., & Murphy, W. D. (1998). What we know and do not know about assessing and treating sexual offenders. *Psychology, Public Policy, and Law*, *4*, 116-137.

Boer, D. P., Hart, S. D., Kropp, P. R., & Webster, C. D. (1997). *Manual for the Sexual Violence Risk-20*. Burnaby, B. C: Mental Health, Law, and Policy Institute, Simon Fraser University.

Boeringer, S. B. (1993). Pornography and sexual aggression: Association of violent and nonviolent depictions with rape and rape proclivity. *Deviant Behavior*, *15*, 289-304.

Bogaert, A. F. (2001) Personality, individual differences, and preferences for the sexual media. *Archives of Sexual Behavior*, *30*, 29-53.

Bow, J. N., Quinnell, F. A., Zaroff, M., & Assemany, A. (2002). Assessment of sexual abuse allegations in child custody cases. *Professional Psychology: Research and Practice*, *33*, 566-575.

Butcher, J. N., Dahlstrom, W. G., Graham, J. R., Tellegen, A., & Kaemmer, B. (1989). *Minnesota Multiphasic Personality Inventory-2 (MMPI-2): Manual for administration and scoring*. Minneapolis: University of Minnesota Press.

Child Online Protection Act, 47 U.S.C. §231 (1998).

Child Pornography Prevention Act of 1996, 18 U.S.C. §2256 (2000).

Child Protection Act, 18 U.S.C. §2251-2255 (1984).

Child Protection and Enforcement Act, 18 U.S.C. § 2251-2256 (1988).

Child Sexual Abuse and Pornography Act, 18 U.S.C. § 2251-2256 (1986).

Cline, V. B. (1974). *Where do you draw the line?* Salt Lake City: Brigham Young University Press.

Committee on Ethical Guidelines for Forensic Psychologists. (1991). Specialty guidelines for forensic psychologists. *Law and Human Behavior*, *15*, 655-665.

Communication Decency Act, 47 U.S.C. § 223 (1996).

Condron, M. K., & Nutter, D. E. (1988). A preliminary examination of the pornography experience of sex offenders, paraphiliacs, sexual dysfunction patients, and controls based on Meese Commission recommendation. *Journal of Sex & Marital Therapy*, *14*, 285-298.

Cooper, A. (1998). Sexuality and the Internet: Surfing into the new millennium. *CyberPsychology & Behavior*, *1*, 187-193.

Cooper, A., & Griffin-Shelley, E. (2002). The Internet: The next sexual revolution. In A. Cooper (Ed.). *Sex and the Internet: A guidebook for clinicians* (pp. 1-15). New York: Brunner.

Cooper, A., Delmonico, D. L., & Burg, R. (2000). Cybersex users, abusers, and compulsives: New findings and implications. In A. Cooper (Ed.). *Cybersex: The dark side of the force* (pp. 5-29). Philadephia, PA: Buchanan.

Cooper, A., Scherer, C. R., Boies, S. C., & Gordon, B. L. (1999). Sexuality on the Internet: From sexual exploration to pathological expression. *Professional Psychology: Research and Practice*, *30*, 154-164.

Dombroski, S. C., LeMasney, J. W., Ahia, C. E., & Dickson, S. A. (2004). Protecting children from online sexual predators: Technological, psychoeducational, and legal considerations. *Professional Psychology: Research and Practice*, *35*, 65-73.

Donnerstein, E., Linz, D., & Penrod, S. (1987). *The Question of Pornography: Research Findings and Policy Implications*. New York: Free Press.

Durkin, K. F., & Bryant, C. D. (1999). Propagandizing pederasty: A thematic analysis of the on-line exculpatory accounts of unrepentant pedophiles. *Deviant Behavior*, *20*, 103-127.

Eden, J. F., Cruise, K. R., & Buffington-Vollum, K. (2001). Forensic and correctional applications of the Personality Assessment Inventory. *Behavioral Science and the Law*, *19*, 519-543.

EuropeMedia (2003, February 20). US leads the world in Internet usage, report. http://www.vandusseldorp.com/

Fisher, W. A., & Barak A. (2001). Internet pornography: A social psychological perspective on Internet sexuality. *The Journal of Sex Research*, *38*, 312-323.

Fisher, W. A., & Grenier, G. (1994). Violent pornography, antiwoman thoughts, and antiwoman acts: In search of reliable effects. *The Journal of Sex Research*, *31*, 23-38.

Foley, T. P. (2002). Forensic assessment of Internet child pornography offenders. In B. Schwartz (Ed.), *The sex offender: Current treatment modalities and systems issues* (Vol IV. chap. 26. pp. 1-18.), Kingston, NJ: Civic Research Institute.

Greenfield, D. (1999). Psychological characteristics of compulsive Internet use: A preliminary analysis. *Cyber Psychology and Behavior*, 2, 403-412.

Griffin-Shelley, E. (2003). The Internet and sexuality: A literature review–1983-2002. *Sexual and Relationship Therapy*, *18*, 355-370.

Griffiths, M. (2001). Sex on the Internet: Observations and implications for Internet sex addiction. *The Journal of Sex Research*, *38*, 333-342.

Haralambie, A. M. (1999). *Child sexual abuse in civil cases: A guide to custody and tort action*. Chicago: American Bar Association.

Hart, S., Cox, D., & Hare, R. (1995). *The Hare Psychopathy Checklist-Screening Version manual*. North Tonawanda, NY: Multi-Health System.

Hynan, D. J. (2004). Unsupported gender differences on some personality disorder scales of the Millon Clinical Multiaxial Inventory-III. *Professional Psychology: Research and Practice*, *35*, 105-110.
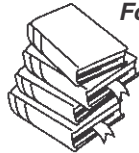
Kahney, L. (2002). Web searches take cultural pulse. Wired News [On-line]. http://www.wired.com/news/culture/1,1284,56861,00.html

Kuehnle, K. (1998). Child sexual abuse evaluations: The scientist-practitioner model. *Behavioral Science and the Law*, 16, 5-20.

Langevin, R., Lang, R. A., Wright, P., Handy, L., Frenzel, R. R., & Black, E. L. (1988). Pornography and sexual offenses. *Annals of Sex Research*, *1*, 335-362.

Leiblum, S. R. (1997). Sex and the net: Clinical implications. *Journal of Sex Education and Therapy*, *22*, 21-27.

Leone, S., & Beilsmith, M. (1999). *Monthly Report on Internet Growth*. Washington, DC: Media Metrix.

Linz, D., Donnerstein, E., & Penrod, S. (1987). The findings and recommendations of the Attorney General's Commission on Pornography: Do the psychology "facts" fit the political fury? *American Psychologist*, *42*, 946-953.

Malamuth, N. M., Addison, T., Koss, M. (2000). Pornography and sexual aggression: Are there reliable effects and can we understand them? *Annual Review of Sex Research*, *11*, 26-91.

Marshall, W. L. (1988). The use of sexually explicit stimuli by rapist, child molesters, and nonoffenders. *Journal of Sex Research*, *26*, 267-288.

McCable, K. A. (2000). Child pornography and the Internet. *Social Science Computer Review*, *18*, 73-76.

Miller v. State of California, 413 U.S. 15 (1973).

Miller, F. G., Roberts, J., Brooks, M. K., Lazowski, L. E. (1997). *SASSI-3: A quick reference for administration and scoring*. Bloomington, IN: Baugh Enterprises.

Millon, T. (1994). *Millon clinical multiaxial inventory-III (MCMI-III) manual*. Minneapolis, MN: National Computer Systems.

Morey, L. (1991). *Professional manual for the Personality Assessment Inventory*. Odessa, FL: Professional Assessment Resources.

Nichols, H. R., & Molinder, I. (1999). *Psychosexual Life History Inventory*. Tacoma, WA: Nichols and Molinder Assessments.

Nielsen//NetRatings. (2001, September 10). netReporter. Author.

Otto, R. K. (2002). Use of the MMPI-2 in forensic settings. *Journal of Forensic Psychology Practice*, 2, 71-91.

Poole, D. A., & Lamb, M. E. (1998). *Investigative interviews of children: A guide for helping professionals*. Washington, DC: American Psychological Association.

Presidential Commission on Obscenity and Pornography. (1970). The report of the Commission on Obscenity and Pornography. Washington, DC: U.S. Government Printing Office.

Putnam, D. E. (2000). Initiation and maintenance of online sexual compulsivity: Implications for assessment and treatment. *Online Sexual Addiction 3*, 553-563.

Quayle, E., & Taylor, M. (2003). Model of problematic Internet use in people with a sexual interest in children. *CyberPsychology & Behavior*, *6*, 93-106.

Reno v. American Civil Liberties Union, 521 U.S. 844 (1997).

Roth v. United States, 354 U.S. 476 (1957).

Selzer, M. L. (1971). The Michigan Alcoholism Screening Test: A quest for a new diagnostic instrument. *American Journal of Psychiatry*, *127*, 1653-1658.

Sexual Exploitation of Children Act, 18 U.S.C. 2251-2253 (1977).

Thornburgh, D., & Lin, H. S. (Eds.). (2002). *Youth, pornography, and the Internet.* Washington, DC: National Academy Press.

White, R. (2002). *How computers work* (6th ed.). Indianapolis, IN: QUE.

Wilcox, B. L. (1987). Pornography, social science, and politics: When research and ideology collide. *American Psychologist*, *42*, 941-943.