Risk Assessment of Online Child Sexual Exploitation Offenders

Matthew E. Hirschtritt, MD, MPH, Douglas Tucker, MD, and Renée L. Binder, MD

Over the past two decades in the United States, a dramatic increase in access to the Internet has facilitated an increase in the production, viewing, and distribution of child pornography. In this context, forensic mental health professionals may be called on to estimate the risk of future violence, especially of contact sexual offenses, among individuals charged with online sexual offenses. We summarize demographic and clinical characteristics that differentiate online from contact and "mixed" offenders (those who commit both online and contact offenses), offending histories of these three groups, and the current state of knowledge regarding risk of progression from online-only to contact offending. Multiple studies suggest that online, contact, and mixed offenders demonstrate distinct profiles, and wide variations exist in the offense histories of online-offending groups. Longitudinal studies of individuals charged with online offenses are few in number and are mostly limited to detection of formal charges. Nevertheless, available studies suggest that most individuals who are charged with online offenses and who do not have histories of contact offenses are unlikely to engage in future contact offenses. Within the limitations of the current literature, we suggest guidance for the evaluation and treatment of online offenders.

Rates of Internet use in the United States have increased dramatically. From 2000 to 2018, the percentage of U.S. adults who reported using the Internet increased from 52 percent to 88 percent.[1] The many benefits of this expanded access, including streamlined commerce and the rapid distribution and sharing of important news and ideas, have been accompanied by problematic uses of this technology, notably the production, distribution, and viewing of child pornography. We use the term "online offender" to refer to an individual with online-only engagement in child pornography or other child sexual exploitation material, in contrast to a "contact offender" (also referred to as in-person or hands-on) or a "mixed offender."

Dr. Hirschtritt is Forensic Psychiatry Fellow, Dr. Tucker is Clinical Professor of Psychiatry, and Dr. Binder is Professor and Director, Psychiatry and the Law Program, University of California, San Francisco, CA.

Address correspondence to: Matthew E. Hirschtritt, MD, MPH, Department of Psychiatry, University of California, San Francisco, 401 Parnassus Ave., Box 0984, San Francisco, CA 94143. E-mail: matt.hirschtritt@gmail.com.

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Given the covert nature of online sexual offending, it is challenging to quantify how much child pornography content is available and is actively being accessed, but recent observational studies of popular file-sharing networks provide a sense of the scale of the concern. For instance, a one-year study of a popular, peer-to-peer, file-sharing network in 2013 revealed that, among millions of unique Internet Protocol addresses, 244,920 of them shared files containing child pornography material, over 80 percent of which had saved or shared fewer than 10 known child pornography files.[2] In their 2017 Annual Report,[3] the Internet Watch Foundation summarized the results of a combination of expert analyst and public reporting of child exploitation material. In that year alone, researchers discovered 78,589 unique web addresses containing "child sexual abuse imagery, having links to the imagery, or advertising it" (Ref. 3, p 15), in which 57 percent of the images depicted youth 10 years old and younger. Nearly a third of the web addresses with child exploitation material were hosted in North America; the United States ranked second in the number of web addresses containing child exploitation material (The Netherlands ranked first). The authors of the

Internet Watch Foundation report note the increasing difficulty in detecting online child exploitation material because of increased use of disguised websites that require viewers to follow a digital pathway to access illegal material. This "dark web" of online child exploitation material has been fueled by the "triple-A engine" of the Internet: accessibility, affordability, and anonymity.[4]

The extent of online offending can also be tracked using trends in criminal prosecutions. In 2015, the U.S. Department of Justice's Internet Crimes Against Children Task Force Program arrested nearly 8,500 individuals for "technology-enabled crimes against children," including online offending and child sex trafficking (Ref. 5, p 6). Recent years have seen an increased number of individuals convicted of creating, possessing, or distributing online child exploitation material.[6]

The effects of online offending on its victims are poorly characterized; however, it has been posited that youth may be traumatized not only by the production of the exploitative content, but then by the repeated, perpetual exposure of their images online.[7,8] These youth are powerless to control the distribution of and access to these images, potentially leading to re-victimization long after the initial production of the digital material.

The relationship between online offending and contact offending, however, is unclear. As many as 17 to 27 percent of females and 3 to 5 percent of males 15 to 17 years old report being the victim of sexual assault.[9] The psychological impact of contact offenses can be profound, including increasing the risk of suicide and non-suicidal self-injury.[10]

In this context, forensic mental health professionals may be tasked with evaluating individuals charged with online offenses and estimating the risk of engaging in contact offenses. Therefore, in this report we summarize characteristics that may distinguish online from contact and mixed offenders, summarize crossover rates from online to contact offending, and apply these findings to forensic and clinical practice.

Online, Contact, and Mixed Offenders

General Considerations

Little is known of the demographic, psychosocial, and Internet-use patterns of online offenders, in part because many online offenders evade detection by law enforcement.[11] Other important limitations in the literature about online and contact offenders include lack of differentiation between online-only, contact, and mixed offenders; small sample sizes; and reliance on convenience samples from forensic settings instead of the general population.[12]

Because rapid developments in technology outpace research regarding online offenders, much of the existing literature may already be outdated. Likewise, many studies comparing online and contact offenders fail to distinguish among a wide range of online offending behaviors, including viewing child pornography, engaging in online sexual communication with minors, harassing minors with sexually explicit material, and locating children as potential victims. Moreover, some researchers have posited that there is overlap between contact and online offenders.[12]

An analysis of media reports involving online offending proposes three groups: travelers who attempt to meet children in person (also known as solicitation or luring offenders); traders who share child exploitation material; and combined traveler-traders. Traders may also have undetected contact offenses.[13] Within the limitations of the literature, the available data suggest that there are characteristics that may help distinguish between online, contact, and mixed offenders, and that patterns of crossover from online to contact offending are complex.

Group Characteristics

In a recent comprehensive meta-analysis that incorporated data from 30 distinct samples, Babchishin *et al.*[14] synthesized the existing literature regarding differences among online, contact, and mixed offenders. Individuals in all three groups are more likely to be male, but the groups were significantly different from one another in various demographic, legal, mental health, and relationship-related variables (see Table 1). The prototypical online offender is a white, single male in his 20s or 30s, is well educated, is employed, has no history of severe mental illness or significant childhood adversity, otherwise functions well in society, has low antisocial traits, and demonstrates sexual deviancy. In contrast, a contact offender is more likely to be an older, partnered male with ready access to children, strong antisocial traits, a criminal offending history, and low economic status, who is unemployed, poorly educated, and has a history of severe mental illness. Mixed offenders are more like contact offenders but

Table 1 Comparison of Characteristics Associated With Online, Contact, and Mixed Offenders

Characteristic	Contact vs. Online Offenders	Mixed vs. Online Offenders	Mixed vs. Contact Offenders
Internet access variables			
Age	C > O	NSD	NSD
Income	NSD	NSD	—
Manual labor	C > O	NSD	—
Formal education	C < O	NSD	M > C
Racial minority	C > O	NSD	M < C
Internet preoccupation	C < O	—	—
Antisocial traits			
Any prior offenses	C > O	M > O	NSD
Prior violent offenses	C > O	M > O	NSD
General empathy deficits	NSD	NSD	M > C
Callousness	C < O	—	NSD
Hostility	C > O	NSD	—
Problems with supervision	C > O	—	—
Low self-regulation	NSD	NSD	NSD
Impulsivity	—	NSD	NSD
Substance abuse	C > O	M > O	—
Unemployed	C > O	M > O	NSD
Sexual-offending variables			
Prior sexual offenses	C > O	M > O	NSD
Static risk scale	NSD	—	—
Other risk scale	NSD	—	—
Any paraphilia	NSD	M > O	M > C
Cognitive distortions	C > O	NSD	M > C
Victim empathy deficits	NSD	—	—
Emotional identification with children	NSD	NSD	NSD
Minimization of behavior	NSD	—	—
Access to children	C > O	M > O	NSD
Has own children	C > O	NSD	NSD
Relationship and sex life variables			
Single	NSD	NSD	NSD
Never married	NSD	NSD	—
Never lived with a partner	NSD	NSD	—
Homosexual or bisexual	NSD	M > O	M > C
Intimacy deficits	NSD	NSD	NSD
Problems with sex life	NSD	—	—
Detached relationship style	C > O	NSD	—
Low sexual regulation	C < O	M > O	—
Sexual preoccupation	C < O	—	—
Low-commitment sex	NSD	M > O	—

Table 1 Continued

Characteristic	Contact vs. Online Offenders	Mixed vs. Online Offenders	Mixed vs. Contact Offenders
Psychological variables			
Severe mental illness	C > O	—	—
Personality disorder	NSD	—	—
Anxiety	NSD	—	—
Depression	NSD	NSD	—
General social deficits	NSD	NSD	NSD
Low self-esteem	NSD	—	NSD
Poor coping skills	NSD	NSD	NSD
Low assertiveness	C < O	—	—
Social desirability	C > O	NSD	—
Impression management	NSD	NSD	M < C
Childhood variables			
Childhood sexual abuse	C > O	M > O	NSD
Childhood physical abuse	C > O	M > O	—
Family abuse in childhood	NSD	M > O	—
Family disruption	C > O	NSD	NSD
Conduct issues in childhood	C > O	M > O	NSD
Juvenile delinquency	C > O	—	NSD
Acting out in childhood	C > O	NSD	—
Emotional difficulties in childhood	NSD	—	—

Note: adapted from Babchishin et al.[14] Differences were considered significant if mixed-effect models comparing groups were significant at $p < .05$ after removing outliers.
—, there were not sufficient studies to make a valid comparison; C, contact offenders; O, online offenders; M, mixed offenders; NSD, no significant difference.

have greater familiarity with the Internet and less physical access to children. In addition, mixed offenders may be more likely than online offenders to exhibit traits typical of contact offenders, such as antisocial traits and illicit drug use. These general characteristics should be interpreted with caution, however, given the high probability of biased sampling and altered patterns of Internet access in recent years.

Although not specifically referenced in the meta-analysis by Babchishin et al.,[14] evidence from a small number of studies suggests that online solicitors, when compared with child pornography offenders, have lower relationship stability; deviant sexual preferences, sex drive, and preoccupation[15]; and higher rates of prior sexual offense-related arrests and substance use.[16] Furthermore, based on an analysis of chat logs, emails, and social network posts generated by 200 online solicitors, DeHart et al.[17] proposed four groups: cybersex-

only (online chatting and "coached" masturbation without intent to meet in person), schedulers (arranging in-person encounters), mixed cybersex and schedulers, and buyers (negotiating terms of in-person encounters for a pimp). In addition to their distinct offending behavior patterns, these online solicitor groups were differentiated by demographic characteristics and sexual interests; use of this classification scheme in subsequent studies may help identify online solicitors at highest risk for contact offenses.

Based on limited empiric data, multiple authors have attempted to subtype online offenders based on their motivations (e.g., latent curiosity, pedophilia), types of engagement (e.g., production, distribution, viewing), and patterns of engagement (e.g., daily, one-time). For instance, Merdian et al.[18] classified online offenders in three dimensions: fantasy or contact-driven, motivation, and level of social engagement. Contact-driven behaviors include efforts

to establish an in-person encounter with a minor, whereas fantasy-driven behaviors include trading child pornography and engaging in sexual chats with no efforts toward an in-person encounter. Merdian et al.[18] further divided motivations for fantasy-driven behavior into two groups. They suggest that generally deviant or pedophilic motivations are amenable to assessment of fantasies and treatment; however, the presence of strong financial or other material motivations should prompt a general criminal assessment and associated treatment. In contrast to fantasy-driven offenders, contact-driven offenders should be referred to traditional sex offender assessment and treatment.[18]

The Motivation-Facilitation Model

Despite the relative lack of empiric evidence to support these and other typologies (summarized in Henshaw et al.[12]), they can be used to describe the heterogeneity of online offenders. For the purposes of evaluation and risk assessment, it is important to highlight the factors that may distinguish online-only from contact offenders. In this context, the motivation-facilitation model (MFM) of sexual offending offers a useful framework for understanding the risk factors for sexual offending.[19] Specifically, the MFM consists of primary sexual motivations (consisting of paraphilias, high or poorly regulated sex drive, and significant effort devoted to obtaining new sexual partners), which are facilitated by both static (e.g., antisocial traits, criminal history) and dynamic (e.g., substance intoxication, negative affect) characteristics. Finally, motivations and facilitating factors interact with situational factors, such as access to children, which together lead to increased risk for contact offenses.

The strength of the MFM is that it was derived from large community samples of self-identified, hypersexual men as well as clinical and forensic studies of contact offenders. The MFM does not, however, account for other non-sexual motivations, including revenge, anger, need for control, or emotional affinity for children. It also does not explain the behavior of individuals who sexually offend against both minors and adults. Likewise, it does not account for protective factors or victim-specific factors. Furthermore, the MFM, like other models of sexual offending, is based on cross-sectional data; therefore, the causal pathway between motivation and sexual offending remains theoretical. The assumptions of the MFM must still be tested in longitudinal and experimental studies before it can be used as a conceptual framework to estimate risk of contact sexual offending. In the meantime, it provides a conceptual model to help understand factors that may increase the risk of crossover from online to contact offending.

Prior Contacts Among Online Offenders

In a meta-analysis of rates of previous contact offenses among adults with an index online sexual offense, Seto et al.[20] examined all published data related to this topic through July 2009. Among 24 studies from France, Australia, the United States, the United Kingdom, Canada, Switzerland, Germany, and New Zealand, with sample sizes ranging from 30 to 870 subjects and a total of 4,697 online offenders, 17.3 percent had a previous contact offense. The majority (75%) of these studies used data only from charges, convictions, or arrests for contact offenses; the remainder used either a combination of these official records with self-report (12.5%) or self-report alone (12.5%). When the authors restricted their analysis to studies that only used official records, the overall rate of previous contact offenses among online offenders decreased to 12.2 percent. Using only data from self-report, the rate of previous contact offenses among online offenders increased to 55.1 percent. In a notable outlier in this meta-analysis,[21] researchers administered structured interviews to 155 online offenders enrolled in an intensive, residential, sex offender-specific voluntary treatment program at a medium-security federal prison. At the time of sentencing, 26 percent had an officially documented contact offense; by the end of the treatment period, however, 85 percent had disclosed a history of contact offending. Although it is possible that respondents falsely claimed that they had previously engaged in contact offending to artificially inflate their treatment progress,[22] this study does suggest that a large percentage of online offenders may, on closer examination, be mixed offenders.

Using a study design similar to that of Bourke and Hernandez,[21] Bourke et al.[23] interviewed 127 men under investigation for online offending charges, none of whom had a criminal record of contact offending. Only 4.7 percent disclosed a prior contact offense initially, but an additional 52.8 percent (or 57.5% of the total sample) subsequently disclosed a prior contact offense during a polygraph examination. Similarly, among 251 cases of online sexual

exploitation of children, Owens et al.[24] found that 32 percent had engaged in at least one contact offense before or after the index online offense. About half of these cases (about 16% of the total sample) started with an index offense of online offending only, but further investigation of criminal histories, physical evidence, and sentencing information revealed a history of contact offenses.

In summary, the available evidence suggests that individuals with an index online offense may have undetected prior contact offenses. Therefore, online offenders should be carefully evaluated for a contact offending history, preferably through both review of official records and interviews with or without the use of polygraph. As we describe below, a history of contact offending carries important prognostic implications for subsequent offending.

From Online to Contact Offending

In addition to assessing for a history of contact offenses among online offenders, forensic mental health professionals may be asked to estimate the risk of subsequent sexual offending among these individuals. The existing data on this topic suggest that most online offenders without a history of contact offenses are unlikely to cross over into contact offenses within one to five years after their index offense. Mixed offenders, however, are more likely than online offenders to crossover into contact offending following an online offense. As we describe below, these conclusions should be interpreted with multiple caveats given the limitations of the current literature on this topic.

In the same meta-analysis referenced above, Seto et al.[20] identified nine studies that quantified rates of reoffending among online offenders from the United Kingdom, the United States, and Canada. Among 2,630 online offenders, only 4.6 percent had any sexual re-offense in follow-up periods ranging from 18 months to six years. Furthermore, only 2.0 percent had a subsequent contact offense, and 3.4 percent had a subsequent online offense. The authors did not examine predictors of re-offense, and all nine of these studies used official records to determine re-offense. The study's reliance on official records may have led to an underestimate of the recidivism rate.

More recent studies generally confirm these findings regarding low rates of officially recorded recidivism among online offenders and provide evidence to support static and dynamic factors that may elevate this risk among certain offenders. Studies based in Canada,[25–27] Australia,[28] the United Kingdom,[29] Switzerland,[30] and the United States[31] have found that 0 to 9 percent of online offenders, followed for one to nine years after their index offense, demonstrate repeat online offenses. Rates of subsequent contact offenses in the follow-up period were lower, ranging from 0 to 6 percent. Mixed offenders were more likely to engage in subsequent contact offenses compared with online offenders.

Eke et al.[25] found that only 3.9 percent of 541 online offenders had an official record of a contact offense within approximately four years following their index online offense. Recidivism was associated with younger age at first offense, positive prior criminal history, any prior nonviolent history, higher number of prior violent offenses and prior contact sex offenses, and higher severity of prior violent offenses. Perhaps not surprisingly, these characteristics are also associated with the prototypical contact offender. Seto and Eke[26] followed 266 online offenders over five years and found that, regardless of their history of contact offending, only 3 percent of the sample had a subsequent contact offense. Using a similar study design, this same research group[27] examined fixed five-year recidivism among 80 online and mixed offenders. Rates of sexual recidivism and online offenses were 9.8 percent and 4.9 percent, respectively, among online offenders and 31.6 percent and 21.1 percent among mixed offenders. Put another way, the five-year contact recidivism rate was 2.2 percent for online offenders and 7.5 percent for mixed offenders.

In contrast to these findings from official records, data from the German Prevention Project Dunkelfeld (PPD) provide a rare insight into self-reported behavior among male online offenders.[32] The PPD was initiated in 2005 as a public-outreach program designed to provide free, confidential support for adults with pedophilic and hebephilic interests; it aims to prevent any form of sexual offending and reduce the risk of re-offending among sexual offenders. In a recent pilot study using data from a small subset of PPD participants, the authors found that 90.6 percent of online offenders in the treatment arm of the trial endorsed ongoing online behaviors during a one-year treatment period, none of which were reported to the authorities.[33] These preliminary results suggest that actual rates of continued online

offending following an index online offense may be significantly higher than studies using official records indicate.

In summary, these data suggest a relatively low risk of subsequent contact offending among online offenders in studies using official records with follow-up periods ranging from one to nine years. When anonymous self-report is used, however, rates of subsequent online offenses increase dramatically, again supporting the contention that a significant proportion of online offenses likely go undetected. In addition, mixed offenders are nearly as likely as contact offenders to engage in subsequent contact offenses following an index online offense. This latter finding again points to the importance of assessing for a history of contact offending among online offenders.

Assessment of Online Offenders

Synthesizing the available data regarding the demographic, clinical, and forensic characteristics and rates and predictors of recidivism of online offenders is challenging. There are multiple limitations of the current literature, including relatively small sample sizes, reliance on official records instead of self-report, relatively short follow-up periods, heterogeneous categorization of online offenders, and varying definitions of recidivism. Furthermore, data about online solicitors is limited because researchers often classify these individuals as either online or contact offenders, depending on whether they have physical contact with a minor. Nevertheless, online solicitors may have a distinct offending and risk profile.

Many of the retrospective and longitudinal studies are based outside of the United States, where different legal regulations may influence research findings and recommendations. For example, in many European countries, the Combating Paedophile Information Networks in Europe (COPINE) Scale has been used to classify the severity of sexual exploitation images. The COPINE Scale is a collection typology that ranks the volume and characteristics of an individual's sexual exploitation collection on a scale of 1 to 10.[34] The COPINE scale has been used in samples from the United Kingdom[35] and the Netherlands[36] to compare characteristics of online and contact offenders. Forensic mental health professionals in the United States are rarely provided access to evaluees' sexual exploitation material, so this scale

cannot be applied realistically to estimate their recidivism risk.

Other tools have been developed to systematically approach evaluation and assessment. As recently reviewed by Garrington et al.,[37] there are at least two English-language, online offending–specific evaluation tools currently available. The seven-item Child Pornography Offender Risk Tool (CPORT)[26,27] was developed and validated in two samples of Canadian men 18 years or older who were convicted of an online offense and followed over five years. The CPORT includes four static predictors (younger age at time of offense; presence of any criminal history; prior or index-offense-related failure of probation, parole, or conditional release; and prior or index-offense–related contact offending history). Three predictors are related to the content of the online sexual exploitation material: indication of pedophilic or hebephilic interests; more boy than girl sexual exploitation content; and higher ratio of boy-to-girl content "in nudity or other child content." Combining results from the development and validation samples, the CPORT demonstrated good predictive accuracy for five-year sexual recidivism (area under the curve [AUC] = .72) and online recidivism (AUC = .74).[27] The scoring manual and updated reference material for the CPORT are available online.[38]

A second risk-assessment tool is the Kent Internet Risk Assessment Tool (KIRAT),[39] developed in the United Kingdom among 170 mixed or high-risk and 204 online or low-risk offenders. The authors narrowed 166 candidate variables to nine items, organized into four evaluation steps: previous behaviors (e.g., convictions for sexual offenses), access to children, current behavioral facilitators (e.g., grooming behaviors), and other factors (e.g., domestic abuse charges). In a retrospective, cross-sectional analysis, the KIRAT demonstrated an AUC of .91 discriminating between high- and low-risk offenders. As of this writing, there is no publicly available scoring manual for the KIRAT; however, instrument items and scoring instructions are described in the validation study.[39]

The COPINE and KIRAT have limited use among forensic mental health professionals in the United States in part because of the required scoring elements related to the sexual exploitation material itself. In addition, as Garrington et al.[37] note, these scales were developed and validated using relatively

small sample sizes and official records, and only the COPINE was developed using longitudinal data. More commonly used actuarial scales (e.g., the Static-99/R[40] and the Risk Matrix 2000/R[41]) and dynamic scales (e.g., the Stable-2007 and the Acute 2007[42]) were developed specifically for contact offenders and, to date, have limited applicability to online offenders. Nonetheless, these scales may be used to help supplement a forensic evaluation of an online offender, which should include, at a minimum, a history of contact offenses, any other criminal history, and whether the individual meets criteria for a paraphilic disorder.

In their opinions delivered to the court, forensic mental health professionals may reference the available data that suggest that most online offenders who have not committed contact offenses are at low risk of future contact offenses, noting the limitations discussed above. The German PPD study[32,33] suggests that most online offenders may continue to engage in online offending undetected, but even that study suggests that the crossover from online to contact offending occurs infrequently. When tasked with assessing the risk of recidivism among individuals charged with online offending, forensic mental health professionals can apply validated measures such as the CPORT or KIRAT when sufficient information is available. In addition to estimating risk, these measures have the added benefit of potentially identifying dynamic or modifiable factors that, if addressed, may reduce the risk of sexual recidivism.

Treatment of Online Offenders

Online offenders may come to clinical attention for a variety of reasons. At the start of treatment, clinicians should explain any mandated reporting requirements that apply. For example, in California, the production, distribution, or promotion of child pornography in any form is considered sexual exploitation and is subject to mandated reporting.[43]

Evidence supporting behavioral and pharmacologic approaches to treatment of online offenders have been reviewed elsewhere.[44–46] In brief, given the limited understanding of online offenders compared with contact offenders, current treatment paradigms are frequently based on open-label trials or case series with relatively small sample sizes and short follow-up periods. Furthermore, as Ly et al.[45] note, published treatment studies for online offenders do not differentiate between viewers or collectors and distributors, which may represent distinct groups with different treatment needs.

Preliminary evidence supports the use of cognitive-behavioral therapy for online offenders, which typically includes appreciating the impact of online offending on its victims, practicing interpersonal skills, differentiating between emotional and physical intimacy, and acquiring prosocial behaviors.[45] Behavioral approaches may include aversion therapy.[47] Psychotherapeutic modalities may focus on improved self-esteem among online offenders.[48] Evidence supporting the use of pharmacologic approaches, including androgen-deprivation therapy and selective serotonin reuptake inhibitors, is reviewed elsewhere.[49] Ly et al.[45] note that there are currently no known pharmacologic trials that exclusively include online offenders; when online offenders are included in trials, they often are underrepresented compared with contact or mixed offenders. Only three pharmacologic trials have included online offenders to date,[50–52] with unclear applicability specific to online offenders.

Numerous community-based programs are available that focus on correcting cognitive distortions, improving victim empathy, practicing problem-solving strategies, building healthy relationships, and constructing a prosocial lifestyle.[45] These programs, including the Internet Sex Offender Treatment Programme (i-SOPT),[53] are currently only available outside of the United States.

In summary, there is a robust literature regarding treatment and management of contact offenders, but there are far fewer empirically supported treatments that are tailored to online or mixed offenders. After determining mandatory-reporting requirements, clinicians may offer individual and group cognitive-behavioral therapy or purely behavioral psychotherapeutic approaches to reduce maladaptive behaviors and coping strategies and to enhance prosocial and adaptive skills. Given the paucity of supporting evidence regarding online offenders, pharmacologic approaches should be reserved for treatment-refractory cases or based on patient preference. Certain groups of low-level offenders who are at low risk of recidivism may require no specific treatment. Hanson et al.[54] and Day et al.[55] suggest frameworks that forensic mental health experts may apply to stratify offenders into relative risk levels to prioritize treatment for those at higher risk levels.

Conclusions and Future Directions

Forensic mental health professionals who are retained in cases of online offenders to assess the risk of contact offenses face a conundrum: how does one assess risk of harm to minors with limited empirical data? The studies we have reviewed here suggest that online offenders may demonstrate different demographic characteristics and criminal-offense histories when compared with contact offenders. The former tend to have greater formal education and to be younger, of higher socioeconomic status, and employed. In addition, the limited available data suggest that most online offenders without a history of past contact offenses are unlikely to engage in future contact offenses. Nonetheless, some online offenders may simultaneously be at risk of recidivism for contact offenses or, as demonstrated by the German PPD study, for subsequent online offenses. When forming an opinion regarding the sexual recidivism risk of an online offender, a forensic mental health professional should take into account both static and dynamic factors; the use of novel scales such as the CPORT and KIRAT are helpful in this regard. The literature is limited by factors such as sampling from forensic populations and historical cohorts that may not fully represent the current demographics of Internet users. Because many people who view, distribute, or even produce online sexual exploitation material are never arrested, the current literature likely underestimates the extent of online sexual exploitation in the United States.

More research is needed to stratify the relative risk of online-only offenders in comparison to contact and mixed offenders. For instance, additional longitudinal studies that use anonymous reports among those who engage in online offending, like the German PPD study, may yield valid data about previous and subsequent contact and online offending patterns. Such studies will hopefully allow clinicians and law-enforcement agents to estimate risk based on offender characteristics, leading to fairer sentencing and more effective treatments.

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