Adult Sex Offenders

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Chapter 1: Incidence and Prevalence of Sexual Offending

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Introduction

Simple questions do not always have easy answers. For example, the answers to, "How many sex offenses are committed each year?" and "How great is an individual's lifetime risk of being a victim of a sex crime?" vary greatly depending on the source consulted. Even with the best sources of data, it is extremely difficult to estimate the actual number of sex crimes committed because of low levels of reporting. Sex crimes are not only often unreported, they are often unseen by anyone other than the victim and perpetrator. One group of researchers puts it aptly:

> Among highly personal and sensitive behaviors and experiences, including other forms of interpersonal violence, rape and other forms of sexual violence are probably the most difficult experiences to measure. They are rarely observed and occur in private places (Cook et al., 2011, p. 203).

Nevertheless, statistics on the incidence and prevalence of sex crimes, as well as trend data, can provide important insight into the nature and extent of sexual violence that policymakers and practitioners can use to design and deliver more effective prevention and intervention strategies. This chapter presents empirically derived information that helps paint a portrait of what we currently know about the incidence and prevalence of sexual offending and victimization. It also describes the strengths and weaknesses of the available data so policymakers and practitioners can better assess and interpret the existing knowledge base.
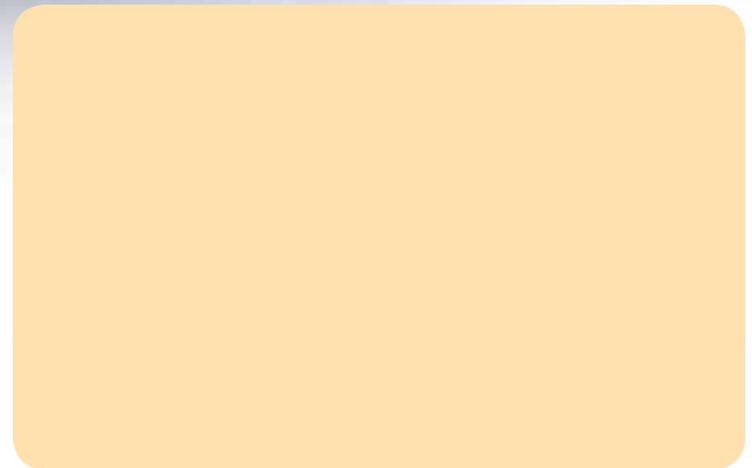
Key Data Sources
and What They Can Tell Us About the Incidence and Prevalence of Sexual Offending

Creating a complete and accurate accounting of the extent of sexual offending is challenging. First, there is no single definition of sexual offending. Statutory definitions of sex offenses differ from jurisdiction to jurisdiction; a sex crime committed in one state might not be classified as a sex crime in an adjacent state. State laws differ on whether rape must involve physical force or threats of physical force, and so on. Even when using national standards, such as the categories reported by the 17,000 police departments submitting Uniform Crime Report (UCR) data to the Federal Bureau of Investigation (FBI), it is impossible for each of the officers in each of the departments to use the same exact criteria for deciding how to classify a crime. Comparing recorded crime and

victimization statistics is also challenging due to the variety of reference periods. UCR data are reported on a calendar year basis while National Crime Victimization Survey (NCVS) data, also completed annually, are compiled based on reports of victimization in the 12 months prior to the time of the interview. Comparing victimization data from different sources is even difficult, as some sources measure lifetime victimization while others measure annual or college semester victimization. Finally, rate comparison can be problematic given the different ways in which the sample being studied is measured.

With these challenges in mind, following is a review of key data sources and what they reveal about the incidence and prevalence of sexual offending.

Uniform Crime Reports

The FBI compiles its UCR from data submitted by law enforcement agencies across the nation. Law enforcement agencies reporting crimes to the FBI oversee approximately 93 percent of the total U.S. population (FBI, 2004). As part of the UCR program, the FBI collects data on 8 serious crimes[1] as well as arrest data for 21 additional crime categories. Prior to 2012, for the purposes of UCR reporting, the FBI

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DEFINITIONS

◆ **Incidence** refers to the number of separate victimizations, or incidents, perpetrated against people within a demographic group during a specific time period.

◆ **Prevalence** refers to the number of people within a demographic group (e.g., women or men) who are victimized during a specific time period, such as the person's lifetime or the previous 12 months.

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Source: Tjaden & Thoennes, 2006.

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defined forcible rape as the carnal knowledge of a female by force (including threats of force) and against her will.[2] Conversely, the NCVS definition of sexual assault measures the extent of sexual assaults against both men and women. Also, UCR does not count sexual assault, statutory rape without force, or simple assault.

UCR indicates that 88,097 forcible rapes were reported to law enforcement in 2009, a rate of 28.7 crimes per 100,000 inhabitants of the United States. Slightly more than 4 out of 10 rapes reported to

UCR STRENGTHS AND WEAKNESSES

◆ Strengths—**UCR's key strength is that it is a consistently collected source of data that covers most of the nation.** This data source has credibility among law enforcement and provides a basis for analysis of long-term trends.

◆ Weaknesses—**UCR's key weakness for purposes of assessing sexual offending is that UCR crime incident data reflect only crimes reported to police, and this type of crime frequently is not reported to police.** An additional weakness is that the classification of crimes by police officers in the field can be subjective—what one officer calls a rape, another may classify as an aggravated assault. Finally, until 2012, UCR used a definition of rape that excludes many sexual assault crimes even if they are reported to the police. Some examples include:

  • Sex crimes not meeting the FBI definition of rape, including oral and anal sexual assaults, penetration with a finger or foreign object, and sexual battery.

  • Sexual assaults facilitated with drugs and/or alcohol, or of an unconscious victim.

  • Sexual assaults when the victim is male.

  • Sexual assaults when the victim has a disability that precludes the individual from legally being able to give consent.

  • Sexual assaults of children under the age of 12 (reported as child sexual assault) (Lonsway, 2010).

police in 2009 were cleared by arrest or exceptional means (FBI, 2009a). Overall, an estimated 21,407 arrests for forcible rape were made by law enforcement agencies in the United States in 2009 (FBI, 2009b). Offenders arrested for rape in 2009 were predominantly young, white, and (as would be expected) overwhelmingly male. Only 1 percent of the offenders arrested for rape in 2009 were female. About 15 percent of the nation's rape arrestees in 2009 were under the age of 18, and 37 percent were 18–29 years old. Whites accounted for 65 percent of the rape arrestees, African-Americans accounted for 33 percent, and other races made up about 2 percent of the arrestees (FBI, 2009c).

National Crime Victimization Survey

NCVS was established by the Bureau of Justice Statistics (BJS) in 1973 to provide a source of information on the characteristics of criminal victimization in the United States. NCVS collects information on the frequency and nature of rape, sexual assault, personal robbery, aggravated and simple assault, household burglary, theft, and motor vehicle theft. Murder is not included in NCVS as victim reporting is the method for collecting these data. A nationally representative sample of approximately 42,000 households is included in the survey. Each household is included in the survey for 3 years, and all individuals over age 12 in the household are interviewed. The initial interview is in person and subsequent interviews are conducted by phone. NCVS collects data on crimes reported to police as well as those not reported and assesses the victim's experience with the criminal justice system. NCVS gathers data on the nature and circumstances of the crime, such as where it occurred, when it occurred, and whether the victim knew the perpetrator.

Based on NCVS data, an estimated 243,800 rape/sexual assault victimizations[3] occurred in the United States in 2011, a rate of 0.9 victimizations per 1,000 persons age 12 and over (Truman & Planty, 2012).

NCVS STRENGTHS AND WEAKNESSES

◆ Strengths—Two key strengths of NCVS are that it measures unreported victimization incidents as well as victimization reported to police, and that these data are collected and reported annually. An additional strength is that it includes sex crimes against both men and women. The survey includes semiannual interviews over 3 years; the first interview is conducted in person and subsequent interviews are conducted by phone. This may lead to development of rapport, trust, and interviewer credibility, possibly leading to increased rates of disclosure. Administration by the U.S. Census Bureau brings added credibility to NCVS. The survey is a convenient platform for more indepth studies and has periodically administered supplements to study specific topics (e.g., stalking, crime on college campuses).* Finally, in 1993, NCVS was redesigned and began to more accurately estimate incidents of violence perpetrated by intimate partners and family members, and also to ask more directly about unwanted sexual contact (Bachman & Taylor, 1994).

◆ Weaknesses—One challenge with NCVS is that, because it is a crime victimization survey, some respondents may not report victimizations that they do not personally label as a crime, such as unwanted sexual contact by an acquaintance. This may lead to an undercount of sex crimes. Additionally, the questions have a two-stage design: respondents are first asked if they were raped, and are only asked about specific aspects of the victimization if they respond affirmatively to this initial question. This approach may underestimate victimization compared to strategies that ask about specific behaviors† rather than a specific label.‡ For example, Fisher (2009) found that in comparing two samples of college-age women, rates of reported sexual victimization were 11 times higher when using behaviorally specific questions versus asking the yes/no rape screening question alone. **Another weakness of NCVS is that it omits crimes committed against victims younger than age 12.** Finally, because the survey is administered at the respondent's home, there is the possibility that a family member or partner who perpetrated a crime against the respondent is present at the time of the interview and that the victim would fail to report the crime committed by that person.

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* See later sections in this chapter for more information about these topics.
† For example, "Were you subject to sexual contact after you said 'no' or 'stop'?"
‡ Strategies that ask behaviorally specific questions allow for the categorization of a sex crime based on the answers to these questions.

NCVS data also indicate that most rape/sexual assault victims are female, white, and under age 30. Based on the 2010 survey, when victim gender information was most recently reported, more than 9 out of every 10 rape/sexual assault victims in the United States were female (Truman, 2011). Further, based on the results of the 2008 national survey (the latest survey for which comprehensive rape/sexual assault victim demographic information is available), an estimated 63 percent of victims are white, 28 percent are African-American, and 9 percent are other races. In 2008, the rape/sexual assault victimization rate for African-American females was about three times higher than it was for white females. Among different age groups, people ages 16–19 and 20–24 had the highest rape/sexual assault victimization rates in 2008—2.2 and 2.1 per 1,000 persons in each age group, respectively. By comparison, BJS (2011) found that people ages 35–49 had an estimated rape/sexual assault victimization rate of 0.8 per 1,000 persons in the age group in 2008, and people ages 12–15 had an estimated rate of 1.6 (although the latter estimate is based on a small sample of cases) (Truman & Rand, 2010).

Although NCVS data provide valuable insights about the incidence and prevalence of sexual offending nationwide, BJS acknowledges—

> The measurement of rape and sexual assault represents one of the most serious challenges in the field of victimization research. Rape and sexual assault remain sensitive subjects that are difficult to ask about in the survey context. As part of the on-going redesign of NCVS, BJS is exploring methods for improving the reporting of these crimes (Truman & Rand, 2010).

National Violence Against Women Survey

Sponsored by the National Institute of Justice (NIJ) and the Centers for Disease Control and Prevention (CDC), the National Violence Against Women Survey (NVAWS) was administered in the mid-1990s to assess the extent of violence against women in the United States. A nationally representative sample of 8,000 men and 8,000 women ages 18 and older were surveyed between November 1995 and May 1996.

NVAWS STRENGTHS AND WEAKNESSES

◆ Strengths—**The key strength of NVAWS is that it was a nationally representative sample of both men and women.** Another key strength of this study was the design—respondents were asked a series of questions (referred to as a scale) about their experience of sexual assault, rather than being asked yes/no questions. This means that victims who did not label their experience as a crime could be included in measures of sexual victimization. Questions included items identical to those used in the National Women's Study, which is described later in this chapter, allowing for comparability across studies (Tjaden & Thoennes, 2006). Finally, a strength of this study is that it measured both per-year and lifetime victimization.

◆ Weaknesses—The key weakness of NVAWS is its age. **Conducted 15 years ago, the findings may or may not reflect the experiences of women today.** Another weakness is that the survey was conducted by phone. Individuals without phones would not be included in this sampling frame. At the time of this study, individuals without phones were more likely to have low incomes.

NVAWS found that 17.6 percent of female and 0.3 percent of male respondents had been the victim of a rape at some time in their lives. Based on this finding, the authors estimate that almost 18 million women and almost 3 million men in the United States have been raped. Rape prevalence rates were the same for minority and nonminority women, but Native American/Alaska Native women were significantly more likely to have experienced a rape in their lifetime. Rape was more likely to affect younger women than older women, with more than half of female victims and nearly three-quarters of male victims being victimized prior to age 18. Overall, 86 percent of rape victims were female, while most rapists were male. Finally, female victims were significantly more likely than male victims to have been the victim of a rape by a current/former intimate partner and to be injured during the rape (Tjaden & Thoennes, 2006).

National Intimate Partner and Sexual Violence Survey

The National Intimate Partner and Sexual Violence Survey (NISVS) is an ongoing, nationally representative telephone survey that collects information about sexual violence, stalking victimization, and intimate partner violence among adult women and men ages 18 and older in the United States. CDC launched the survey in 2010, with the support of NIJ and the U.S. Department of Defense (Black et al., 2011). NISVS data will be collected annually as long as funding for the survey is available.

NISVS is unique because it is the first ongoing survey designed to describe and monitor sexual violence, stalking, and intimate partner violence from a public health rather than crime perspective. Survey respondents are first asked about various health conditions to establish a health context for the survey. Then they are asked about victimization experiences using behaviorally specific questions. Research has shown that this health-based approach increases disclosure of violent victimization.[4]

NISVS also collects data on victimization involving sexual violence other than rape, control of reproductive health, and other forms of sexual victimization that have not been measured in the past. It is also the first survey to provide national and state-level data on sexual violence, stalking, and intimate partner violence.

At the time of this review, findings from the first year of NISVS data collection were available.[5] Based on 16,507 completed interviews (9,086 women and 7,421 men), **the 2010 survey found that nearly 1 in 5 women (18.3 percent) and 1 in 71 men (1.4 percent) have been raped in their lifetime.** About one-half (51.1 percent) of female rape victims reported being victimized by an intimate partner, while 40.8 percent reported being victimized by an acquaintance. **More than 4 in 10 (42.2 percent) female rape victims experienced their first completed rape before age 18. More than 1 in 4 (27.8 percent) male rape victims experienced their first rape victimization when they were age 10 or younger.**

The 2010 survey also found that about 1 in 6 women (16.2 percent) and 1 in 19 men (5.2 percent) have experienced stalking victimization "in which they felt very fearful or believed that they or someone close to them would be harmed or killed" (Black et al., 2011, p. 2). Female victims were most often stalked by a current or former intimate partner, while men were stalked primarily by an intimate partner or acquaintance. Nearly 1 in 4 women (24.3 percent) and 1 in 7 men (13.8 percent) reported experiencing severe physical violence[6] perpetrated by an intimate partner, while nearly half of all women (48.4 percent) and men (48.8 percent) reported experiencing psychological aggression by an intimate partner.

One percent of the female respondents in the 2010 survey reported being raped in the 12 months prior to taking the survey. That equates to an estimated 1.3 million women nationally. About 1 in 20 women

and men (5.6 percent and 5.3 percent, respectively) reported being victims of sexual violence other than rape, while about 4 percent of women and 1.3 percent of men reported being stalked in the 12 months before the survey.

The 2010 NISVS also found that about 1 in 5 African-American and white non-Hispanic women (22 percent and 18.8 percent, respectively) and 1 in 7 Hispanic women (14.6 percent) have been raped in their lifetime. More than 1 in 4 (26.9 percent) Native American/Alaska Native women and 1 in 3 (33.5 percent) multiracial non-Hispanic women reported being raped in their lifetime. More than 4 out of every 10 women of non-Hispanic African-American or Native American/Alaska Native race/ethnicity (43.7 percent and 46.0 percent, respectively), and 1 in 2 multiracial non-Hispanic women (53.8 percent) reported experiencing rape, physical violence, and/or stalking by an intimate partner in their lifetime.

The 2010 NISVS produced the first national data on the prevalence of sexual violence, stalking, and intimate partner violence victimization among

NCWSV STRENGTHS AND WEAKNESSES

◆ Strengths—**Key strengths of NCWSV are its sample size (4,446 women) and the sample of colleges was a probability sample proportionate to female student enrollment and college location (urban, suburban, and rural)** (Fisher, Cullen, & Turner, 2000). Additionally, in an attempt to capture victimization that may not be classified by the victim as rape, the survey used a two-stage process to ask behaviorally specific questions to assess victimization (Fisher, Cullen, & Turner, 2000).

◆ Weaknesses—**A key weakness of this study is that it addresses a narrow population— women attending college.** Other weaknesses are that comparisons to other studies are difficult because the reference period is 7 months rather than 12 months and that lifetime victimization is not measured. Finally, the two-stage process for categorizing experiences as rape is not without methodological challenges and may require fine-tuning if it is to consistently estimate rates of victimization in the future (Cook et al., 2011).

lesbian, gay, and bisexual women and men. Lesbians and gay men were found to have sexual violence victimization rates equal to or higher than those reported by heterosexuals, while bisexual women had significantly higher lifetime prevalence rates of rape and sexual violence other than rape compared to both lesbian and heterosexual women (National Center for Injury Prevention and Control, 2011a).

National College Women Sexual Victimization Study

The National College Women Sexual Victimization Study (NCWSV), funded by NIJ, surveyed a randomly selected, national sample of 4,446 women attending 2- or 4-year colleges during the fall semester of 1996 (Fisher, Cullen, & Turner, 2000). Students were asked via telephone about events that occurred that school year, a period of approximately 7 months (Fisher, Cullen, & Turner, 2000). Lifetime exposure to sexual victimization was not assessed.

Fisher, Cullen, and Turner (2000) found that **2.8 percent of college women who responded to the survey had experienced either a completed or attempted rape during the semester. Of those who reported rape, 23 percent reported multiple rapes.** As the study period included only one semester of college, the authors caution that over the years of the participants' college experience, rates of victimization may be higher than reported for the time period under study. Further, they also found that many women did not characterize their sexual victimization as a crime. For the incidents categorized as rape by the researchers, 49 percent of the women responded "yes" when asked if they would describe the incident they experienced as a rape (Fisher, Cullen, & Turner, 2000). The reasons survey respondents gave for not describing the incident as rape were varied, and they included embarrassment, not clearly understanding the legal definition of rape, not wanting to define someone they know who victimized them as a rapist, or because they blamed themselves for their sexual assault (Fisher, Cullen, & Turner, 2000). Most victims knew their offender—the authors found that 9 out of 10 offenders were known to their victim. Most often the offender was a boyfriend, ex-boyfriend, classmate, friend, acquaintance, or coworker (Fisher, Cullen, & Turner, 2000). Campus rape victims were

not likely to report the crime to police; fewer than 5 percent of completed and attempted rapes were reported. However, in approximately two-thirds of the cases, the victim did report the incident to another person, most typically a friend rather than a family member or college official (Fisher, Cullen, & Turner, 2000).

Sexual Experiences Survey

The Sexual Experiences Survey (SES) was developed in the late 1970s to "operationalize a continuum of unwanted experiences that at the extreme reflect legal definitions of attempted rape and rape" (Koss et al., 2007, p. 359). Unlike the other sources described here, SES is neither an annual data collection instrument nor a one-time national sample. Instead, it represents a standard set of questions that have been used repeatedly by scholars, particularly in the public health field, to study unwanted sexual experiences. In some studies, the survey has been used in its original form, while in others it has been adapted by researchers who have customized the questions to suit their specific research needs. This self-report survey instrument was revised in 1987 and again in 2007. Its questions were modeled on the statutory definition of rape in the state of Ohio. Separate versions of the survey assess victimization and perpetration of sex crimes. The survey tool is available in both short form and long form, allowing for screening or for indepth study. Respondents are asked about incidents since age 14 and in the past year, thus providing both annual results and lifetime rates of victimization.

Using SES questions, **Testa and colleagues (2004) conducted in-person interviews with 1,014 women living in or near Buffalo, NY, between May 2000 and April 2002. Of the respondents, 38 percent indicated they had experienced sexual victimization since age 14.** The most common experience reported by respondents was unwanted sexual contact. Of the respondents, 27 percent reported unwanted sexual contact, 17 percent reported a rape, and 12 percent reported an attempted rape (Testa et al., 2004).

National Child Abuse and Neglect Data System

The National Child Abuse and Neglect Data System (NCANDS) has provided annual counts of incidents of child sexual abuse since 1992. NCANDS data are based on reports from participating state child protection agencies. NCANDS includes case-level data on the characteristics of screened-in reports of abuse and neglect made to the agencies, including the children involved, the types of maltreatment alleged, the disposition of the investigation, the risk factors of the child and the caregivers, the services provided, and information about the perpetrators.[7] The U.S. Department of Health and Human Services publishes an annual report—Child Maltreatment—that summarizes NCANDS data reported from the states. Each state has its own definition of child abuse and neglect based on federal law (Children's Bureau, 2010). Child sexual abuse is reported annually along with incidents of neglect, physical abuse, and psychological maltreatment. **For 2009, NCANDS estimates that nearly 66,000 children were victims of sexual abuse.**

NCANDS STRENGTHS AND WEAKNESSES

◆ Strengths—This data source provides annual data that are published and made available on the U.S. Department of Health and Human Services website. **State participation is nearly universal—as of 2007, all 50 states were providing summary data, and many also provide case-level data.** In place since 1992, this data source can help track trends over time.

◆ Weaknesses—Data from this source reflect incidents of abuse by caretakers reported to child protection agencies. **Sexual abuse committed by a nonfamily member or a noncaretaker may not be included in this data set.** Sexual abuse reported directly to law enforcement, and not to a child protective agency, would also not be included in this data set.

National Survey of Children's Exposure to Violence

The National Survey of Children's Exposure to Violence (NatSCEV) is sponsored by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and supported by CDC. This is the first national survey to measure both past-year and lifetime exposure to conventional crime, child maltreatment, victimization by peers and siblings, sexual victimization, witnessing and indirect victimization, school violence and threats, and Internet victimization for children ages 17 and younger. (For more on "Internet-Facilitated Sexual Offending," see chapter 4 in the Adult section.) This study was designed by the Crimes Against Children Research Center at the University of New Hampshire. It attempted to measure children's experience of violence in the home, school, and community. Telephone interviews were conducted with respondents ages 10–17. For respondents ages 9 and under, their adult caregivers were interviewed.

Key research findings were that 6.1 percent of children had been sexually victimized in the past year and 9.8 percent had been a victim during their lifetime. Sexual victimization includes attempted and completed rape, sexual assault, flashing or sexual exposure, sexual harassment, and statutory sexual offenses. In addition, 16.3 percent of youth ages 14–17 had been sexually victimized in the past year and 27.3 percent had been sexually victimized during their lifetime. This study found that children were often the victims of multiple types of violence. A child who was physically assaulted in the past year was found to be five times as likely to have been sexually victimized (Finkelhor et al., 2009).

In addition, the majority (61 percent) of reported past-year peer victimizations (including assault, bullying, sexual victimization, and property crime) occurred at school (Turner et al., 2011). Emotional bullying by peers was most likely to occur at school, while sexual assault and rape were most likely to occur elsewhere (Turner et al., 2010). Considering only serious violent events (rape, sexual assault, robbery, and aggravated assault), the rates for these crimes at school for adolescents ages 12–18 are lower than those occurring away from school. In 2008, the serious violent victimization rates

NATSCEV STRENGTHS AND WEAKNESSES

◆ Strengths—This survey is notable for its large sample size (4,549 respondents). **A major strength of this study is the care taken to oversample in certain populations to allow for subgroup analysis.** For example, areas with high concentrations of African-American, Hispanic, and low-income households were oversampled so that analysis could be performed for these subgroups. This study also examines lifetime exposure to violence, crimes against children younger than age 2, threats of violence, and Internet victimization.

◆ Weaknesses—**A weakness of this study is that it is not conducted annually, so annual comparisons to other data sources are not possible.** Further, while NCVS includes interviews every 6 months, NatSCEV includes a single interview. Some respondents may have difficulty accurately recalling incidents in the past year, versus the past 6 months.

were 4 per 1,000 students at school and 8 per 1,000 students away from school (Robers, Zhang, & Truman, 2010). Children living in households with lower incomes have higher rates of exposure to sexual and physical assault than those living in households with middle and high incomes (Crouch et al., 2000).

Developmental Victimization Survey

A precursor to NatSCEV and conducted by the same researchers, the Developmental Victimization Survey (DVS) was a random-digit-dial survey of households conducted in 2003. The survey sample consisted of 2,030 children ages 2–17 within the households surveyed. One child from each household was randomly selected (the child with the most recent birthday). Telephone interviews were conducted directly with children ages 10–17, while a caregiver was questioned regarding children ages 2–9. DVS uses the Juvenile Victimization Questionnaire, which is widely known and used to screen individuals for incidence of violence (Finkelhor et al., 2005). DVS results indicated that 1 in 12 children in the sample (82 per 1,000) had experienced a sexual victimization in the sample year, including 22 per 1,000 who experienced an attempted or completed rape and 32 per 1,000 who experienced a sexual assault (Finkelhor et al., 2005).

National Incidence Studies of Missing, Abducted, Runaway, and Thrownaway Children–2

The National Incidence Studies of Missing, Abducted, Runaway, and Thrownaway Children–2 (NISMART–2)

was an estimate of the number of missing children based on surveys of households, juvenile residential facilities, and law enforcement agencies. Data were collected via telephone interviews in 1999 and have been reported in several publications.

Key research findings were that an estimated 285,400 children were victims of a sexual assault, for a rate of approximately 4.1 victims per 1,000 children in the United States. Of these, an estimated 141,400 children were victims of a rape (anal, oral, or vaginal penetration) and 60,400 experienced an attempted rape. Eighty-nine percent of victims were female and 95 percent were assaulted by a male. Eighty-one percent of victims were ages 12–17. Victimization of whites and African-Americans was proportionate to their presence in the general child population. Hispanics constituted 9 percent of victims and 16 percent of the U.S. child population. Seventy-one percent of child sexual assault victims were victimized by someone they knew or recognized by sight, 18 percent were victimized by a stranger, and 10 percent were victimized by a family member (Finkelhor, Hammer, & Sedlak, 2008).

National Women's Study

The National Women's Study (NWS) is a 3-year longitudinal study of a national probability sample of 4,008 adult women in the United States ages 18 and older. Three waves of interviewing were completed: at the time of the initial study and at 1 and 2 years after the initial interview.

The results indicated that 13 percent of women reported being the victim of at least one completed

rape in their lifetime. Based on this, it was estimated that **12.1 million women in the United States have been the victim of one forcible rape in their lifetime.** In addition, .07 percent of women surveyed reported having been raped in the past year, equating to 683,000 adult women in the United States. Of those who reported being raped, 56 percent reported one rape and 39 percent indicated they were raped more than once (with 5 percent uncertain how many times they were raped). Twenty-nine percent of the rapes occurred when the victim was younger than age 11 and another 32 percent occurred when the victim was between 12 and 18. In total, 61 percent of rapes were committed against a female victim younger than age 18. In terms of the relationship between the perpetrator and the victim, 22 percent were raped by a stranger, while the vast majority of rapes were perpetrated by an intimate partner, family member, friend, or neighbor (National Victim Center & Crime Victims Research and Treatment Center, 1992).

Drug-facilitated, Incapacitated, and Forcible Rape: A National Study

For the Drug-facilitated, Incapacitated, and Forcible Rape (DAFR) national study, Kilpatrick and colleagues (2007) conducted a national telephone survey of 5,000 women ages 18–86, including approximately 3,000 who represented all women in the United States and 2,000 women attending college.

The research results indicated that for women of all ages, an estimated 18 percent had been raped during their lifetime. This translates into an estimated 20 million victims of rape out of 112 million women in the United States. In looking at past-year victimization alone, the authors estimated that more than 1 million women had been raped. Of those who reported that they were raped, 16 percent indicated they had reported the crime to law enforcement. The study found that victims of drug-facilitated or incapacitated rape were less likely to report the crime to the police than victims of forcible rape (Kilpatrick et al., 2007).

National Survey of Adolescents

The National Survey of Adolescents consisted of interviews of 4,023 adolescents (ages 12–17) on various topics that included victimization history. The survey used random-digit dialing and stratified sampling techniques to identify households that had

a telephone, an adolescent ages 12–17 with a parent or legal guardian, and both a parent or guardian and an adolescent who spoke English or Spanish.

Results of the survey indicated that 8.1 percent of those responding had a history of sexual victimization. Native American adolescents had the highest prevalence rate of sexual victimization (15.7 percent), compared to 13.1 percent for African-Americans, 10 percent for Hispanics, 6.7 percent for whites, and 6.5 percent for Asians. Adolescent females were at greater risk of sexual assault than males (13 percent compared to 3.4 percent). Seventy-four percent of victims reported knowing the perpetrator prior to the sexual offense. Finally, only 13 percent of victims reported the sexual offense to the police (Kilpatrick, Saunders, & Smith, 2003).

Adverse Childhood Experiences

The Adverse Childhood Experiences (ACE) study was conducted with members of the Kaiser Permanente Health Plan who had visited the San Diego Health Appraisal Clinic. Data were collected from 17,337 study participants between 1995 and 1997. Unlike some of the other studies described above, the ACE study surveyed adults about a variety of previous childhood experiences: psychological, physical, and sexual abuse during childhood; substance abuse;

mental illness; violence against the respondent's mother; and criminal behavior in the household. The results indicated that 20.7 percent of the sample experienced childhood sexual abuse, including 24.7 percent of women and 16 percent of men (Felitti et al., 1998).

Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) is a national school-based survey conducted biennially by CDC. In 2009, 16,460 questionnaires were completed in 158 schools. This survey monitors several categories of health-risk behaviors among youth and young adults, including violence. Both public and private schools in the United States with students in grades 9–12 are included in the sampling frame for this survey. YRBS includes violence measures for dating violence, rape, and bullying. The 2009 study indicated that 8 percent of the sample had been subject to forcible sexual intercourse, with 11.8 percent of females and 4.5 percent of males reporting such an incident (Eaton et al., 2012). (For a discussion of adult "Sex Offender Risk Assessment," see chapter 6 in the Adult section.)

Survey of Inmates in Local Jails

BJS's Survey of Inmates in Local Jails (SILJ) has been conducted periodically over approximately the past 40 years and consists of interviews with a national sample of jail inmates. Based on the 2002 survey of nearly 7,000 jail inmates, it is estimated that the most serious offense for 3.4 percent (nearly 21,200 inmates) of the 623,492 jail inmates in the United States was for rape (0.6 percent) or another type of sexual assault (2.8 percent) (James, 2004). This survey and the 2004 Survey of Inmates in State and Federal Correctional Facilities (SISFCF) both provide information about the prevalence of sexual offenders within local, state, and federal correctional/detention facilities.[8]

Trend Data

Historical data on the incidence of sexual assault can provide important insight about trends over time. **Data from law enforcement as well as from**

victimization surveys suggest that sexual assaults, much like other types of crime, have substantially declined over the past 10 to 20 years.

"No single definition of sexual offending is used across data sources."

According to the FBI, the number of forcible rapes reported to the police fell 14 percent between 1990 and 2009, from 102,555 to 88,097. The number of rapes reported to police per 100,000 U.S. residents also fell during that time (from 41.1 to 28.7), a decline of 30 percent (FBI, 2009). Data on sexual assault victimization surveys follow a similar pattern. According to NCVS, the number of rape/sexual assault victimizations for those ages 12 and older in the United States fell by more than 30 percent between 2002 and 2011, dropping from 349,810 to 243,800 over the 9-year period. Overall, the estimated number of rape/sexual assault victimizations fell by more than one-third in 2011 (from about 383,000 in 1990 to 243,800) (Rennison, 2000; Truman & Planty, 2012). Finally, data from NCANDS indicate that substantiated cases of child sexual assault in the United States have also fallen in recent years, dropping by 53 percent between 1992 and 2006 (Finkelhor, Hammer, & Sedlak, 2008).

Limitations of the Data

Although increased scholarly attention has been paid to sexual victimization and victimization surveys in the past two decades, and notable improvements regarding the reporting of sexual assault crimes have recently been made in the national UCR program, much remains to be done to develop standard definitions of sex crimes and to measure victimization in a way that elicits self-report of a traumatic experience many victims may choose not to discuss. As Cook and colleagues (2011, p. 210) point out, the field "remains hampered by the lack of a standard definition of rape and its components of act, tactics, and non-consent." What is known about victims and offenders is based on an incomplete picture of the true extent of

victimization. Studies of victims rely on self-report, resulting in dramatic undercounts of victimization. What we know to date is that sexual victimization is far more common than existing sources indicate and that more needs to be done to develop a credible literature on the extent, causes, and consequences of sexual victimization.

Summary of the Data

Information on the incidence and prevalence of sexual offending in the United States can be obtained from a diverse range of sources. Some sources, such as the FBI's UCR program, focus on sex crimes reported to the police and the offenders arrested for those crimes. Others, such as NCVS, focus on victims of sex crimes. Some sources collect and report data on a regular, ongoing basis. Others do so only periodically or on a one-time basis. A wide range of methods are used to collect incidence and prevalence data as well. Despite these differences, the available data provide important insight about the extent of sexual offending in the United States, along with the characteristics of victims and known offenders.

The FBI's UCR statistics indicate that in 2009, slightly more than 88,000 forcible rapes were reported to law enforcement and that just over 21,000 arrests for forcible rape were made (FBI, 2009a, 2009b). Arrestees for forcible rape are typically young, white males (FBI, 2009c). Based on NCVS data, nearly 244,000 rape/sexual assault victimizations are estimated to have occurred in the United States in 2011 (Truman & Planty, 2012). NCVS data also indicate that most rape/sexual assault victims are female, white, and younger than age 30 (Truman, 2011). Based on NCANDS estimates, nearly 66,000 children were victims of sexual abuse in 2009 (Children's Bureau, 2010).

NVAWS found that 17.6 percent of women and 0.3 percent of men had been the victim of a rape at some time in their life, meaning that almost 18 million women and almost 3 million men in the United States have been raped (Tjaden & Thoennes, 2006). Data from NWS indicated that 13 percent of

women reported being the victim of at least one completed rape in their lifetime. Based on this, it was estimated that 12.1 million women in the United States have been the victim of one forcible rape in their lifetime (National Victim Center & Crime Victims Research and Treatment Center, 1992). Trend data indicate that the number of forcible rapes reported to the police fell 14 percent between 1990 and 2009, and that the estimated number of rape/sexual assault victimizations fell by more than one-third between 2002 and 2011 (Rennison, 2000; Truman & Planty, 2012).

"At least 16 different data sources report on sex crimes and victimization."

Although these data provide insight into the incidence of sexual offending and victimization, the gap between sexual victimizations and sex crimes reported to police, and the characteristics of victims and perpetrators, they must be interpreted in light of their limitations. Differences in the methods used to collect data as well as when the data were collected can render the comparison of statistics from certain sources difficult and sometimes meaningless. Users of the data must also recognize that quantitative statistics on sexual offending and victimization lack precision. An accurate accounting of sexual offending and victimization is virtually impossible because so many sex crimes and victimizations are hidden from public view. Although the available data can help policymakers and practitioners better understand incidence patterns and trends, efforts to enhance existing data systems and improve both the quality and comparability of the data are needed.

Underreporting of Sex Crimes

One of the greatest challenges to developing an accurate estimate of the incidence and prevalence of sexual offending is the fact that not every victim will disclose the incident to law enforcement, and many will also not disclose the incident to a researcher during a survey. Research has clearly demonstrated that many sex offenses are never reported to authorities. For example, NCVS data suggest that only about one in four rapes or sexual assaults have been reported to police over the past 15 years, with some between-year fluctuations (Bachman, 1998; Truman & Planty, 2012). In addition, Tjaden and Thoennes (2006) found that only 19 percent of women and 13 percent of men who were raped since their 18th birthday reported the rape to the police. Several studies of victims have shown that the likelihood that a sexual assault will be reported to law enforcement decreases with the victim's age (Kilpatrick, Saunders, & Smith, 2003). Finally, NWS results indicated that 84 percent of victims did not report the rape to the police. Of the 16 percent who did report the rape to the police, 12 percent did so within 24 hours of the rape and 4 percent did so more than 24 hours after the rape (National Victim Center & Crime Victims Research and Treatment Center, 1992).

"The vast majority of victims do not report sex crimes."

Attrition is the dropping of a legal case by authorities, for various reasons. Larcombe (2012, p. 483) argues that "the attrition of sexual offenses ... both before and after reporting to police, ensures that the minority of cases that secure a conviction for a sexual offense are not reflective of the most common or injurious forms of sexual violence experienced by women and children." Citing two Australian studies on police and prosecutorial discretion (Statewide Steering Committee to Reduce Sexual Assault, Victoria, 2006; Lievore, 2004, as cited in Larcombe, 2012, p. 482), she points out that cases "clearly interpretable as violence" and not involving what appears to be "potential sexual partners" are more likely to proceed to conviction. Examples include cases involving male and younger victims and victims whose perpetrators were strangers, particularly when force, threats, and weapons are used and result in physical injury to the victim

and when verbal resistance is offered. Further, Larcombe (2012) reports that women ages 15–24, those with a psychiatric disability or a mental health issue, and indigenous women are less likely to see their cases result in conviction. In terms of the offenders, those who have a prior history of criminal behavior (particularly violent and sexual offenses), are indigenous, and have a disability (intellectual or psychiatric) are more likely to have their cases proceed to conviction (Larcombe, 2012). Given the evidence that sex crimes and sex offenders that are identified by authorities and processed in the criminal justice system are not representative of sexual crimes and perpetrators overall, Larcombe (2012) suggests that policies, practices, and research need to consider attrition dynamics and their implications. Although the studies cited by Larcombe may have limited applicability because they used Australian samples, research on attrition dynamics and characteristics using American samples likely would strengthen our understanding of the incidence and prevalence of sexual victimization in the United States.

Special Populations and Related Topic Areas

Some studies have focused on a number of special populations and related topic areas regarding the incidence and prevalence of sexual victimization.[9] Several of these areas are addressed below: stalking, sexual offending on college campuses, and sexual offending against individuals with disabilities, members of the military, and Native Americans in Indian Country.

Stalking

Stalking was first defined as a crime in 1990 by the state of California. Since that time, every state and the District of Columbia have passed a law against stalking. State statutes define stalking behavior rather differently, however, and no single legal definition of stalking applies across all states. Even for a victim, defining stalking can be difficult, as behaviors that often appear as a part of stalking (e.g., gifts, notes, and visits) are not in themselves

criminal. Rather it is the nature of the behavior—unwanted attention, unwanted gifts, persistent or threatening notes, harassing visits, and so forth, that defines the act as stalking. In some states, stalking laws are invoked for verbal threats, while in other states the threat must be written or implied by the conduct (Klein et al., 2009). In some states the perpetrator must act in a way that makes the victim fearful, and in other states it is sufficient if the perpetrator acts in a way that would make a reasonable person fear the behavior (Fox, Nobles, & Bonnie, 2011). As Tjaden (2009, p. 263) points out, "Nearly 20 years after the first stalking law was enacted, many policymakers and practitioners still are unclear about what constitutes stalking."

With this confusion among state laws, it is not surprising that there has been no standard definition used by researchers in studying the crime of stalking. Fox, Nobles, and Bonnie (2011) found that the four major national assessments of the extent of stalking all used different questions, making comparisons across the studies problematic. A few of the questions are similar, but in no case are the exact same questions used. Fox, Nobles, and Bonnie (2011) also point out that the major studies have failed to publish reliability estimates for their scales, reducing the ability to generalize beyond the sample population. It also should be noted that the sampling frame used in each of the four national stalking victimization studies is different. NVAWS, NCVS, and the National Intimate Partner and Sexual Violence Surveillance System (NIPSVSS) sample the general population, while NCWSV samples only female college students (Fox, Nobles, & Bonnie, 2011). In reviewing 56 peer-reviewed assessments of stalking, Fox, Nobles, and Bonnie (2011) found that 55 percent of the studies examined a college-age population while 45 percent examined the general population; they also found that many studies of stalking rely on subpopulations, such as college students or nonprobability samples.[10]

Tjaden and Thoennes (1998) conducted the first-ever national study of stalking within NVAWS and found that 8 percent of women and 2 percent of men have been stalked in their lifetime. This telephone survey of 8,000 men and 8,000 women found that most stalking victims were female

(78 percent) and most perpetrators were male (87 percent). In most cases, stalking involved perpetrators and victims who knew each other—only 23 percent of female victims and 36 percent of male victims reported being stalked by strangers. Stalking was in many cases the continuation of a violent relationship—81 percent of women who were stalked by a present or former spouse or partner had also been sexually assaulted by that person and 31 percent had been raped by that person (Tjaden & Thoennes, 1998). These findings demonstrate the importance of looking at domestic violence, stalking, and sexual assault as a connected constellation of behaviors, given that the risk to the victim increases with the presence of these factors. In addition, Tjaden and Thoennes (1998) found that about half of stalking victimizations (55 percent for women and 48 percent for men) were reported to the police. In one out of five cases reported to the police, the victim indicated the police did not take any action. Only 24 percent of women and 19 percent of men who reported a victimization to the police indicated that their stalker had been criminally prosecuted (Tjaden & Thoennes, 1998).

In 2006, NCVS included a Supplemental Victimization Survey to assess the extent of stalking. Approximately 65,000 men and women completed the survey between January and June 2006. This survey estimated that 2.4 percent of the population experienced stalking or harassment in the year prior to the study (Baum et al., 2009). The study did not seek to assess lifetime victimization. Women were at greater risk of stalking victimization than men (3 percent of women reported being a victim of stalking compared to 1.7 percent of men). Stalking and harassment rates for those ages 18–24 were significantly higher than for other age groups, with the rate of victimization decreasing with age. For those who reported stalking, many reported being victimized by persistent offenders—46 percent of stalking victims experienced at least one unwanted contact per week, and 11 percent of victims said they had been stalked for 5 years or more (Baum et al., 2009). **Most offenders were known to their victims (73 percent), and more than half of stalking victims lost 5 or more days from work due to their victimization (Baum et al., 2009).** One-third of women and one-fifth of men reported stalking or

harassment to law enforcement. However, many other victims did not categorize their experience as stalking. Researchers asked questions about seven types of harassing or unwanted behavior and classified a respondent as a victim of staking if he or she had experienced at least one of the behaviors on at least one occasion and felt fear as a result. Respondents who experienced the behavior but did not feel fear were categorized as victims of harassment. Researchers did not use the term "stalking" until the final question. Of those whose experiences were classified as stalking, 60 percent reported that the experience was "not stalking" (Baum et al., 2009). This finding raises the issue of definitions and terminology, and underscores the complexity of accurately providing a picture of the national experience of victimization in general and stalking in particular.

Sexual Offending on College Campuses

College campuses have frequently been used by researchers at universities seeking convenience samples for small studies. College campuses have also become of interest to researchers and policymakers in order to better understand the unique risks for young people during their first experience of living without parental supervision.

In a special study on the victimization of college students, BJS found that students experience both violent crime and serious violent crime at lower rates than nonstudents of the same age (Hart, 2003). Campuses themselves may provide some protection, as BJS found: "The number of off-campus victimizations of college students was over 14 times greater than the number of on-campus victimizations" (Hart, 2003, p. 1). The only category of violent crime for which the rates were not lower on college campuses was rape. Unlike robbery, aggravated assault, and simple assault, rape was reported at the same rate for those on campuses and same-age nonstudents. Several studies further examine rape and sexual victimization on college campuses.

In examining lifetime exposure to sexual violence, higher rates of rape victimization tend to be found for college women. Kilpatrick and colleagues

(2007) conducted a national telephone survey of drug-facilitated, incapacitated, and forcible rape[11] that included 2,000 women attending college. **The study found that 11.5 percent had experienced rape during their lifetime. When looking at past-year victimizations, they found that 5.2 percent of college women were raped. Of those reporting rape in this study, about 12 percent of the crimes were reported to law enforcement.** Victims of drug-facilitated and incapacitated rape were less likely than victims of forcible rape to report to the authorities (Kilpatrick et al., 2007).

A larger and more recent study found that similar levels of college women reported being sexually victimized in their lifetime. McCauley and colleagues (2009) interviewed a national sample of 1,980 college women and found that 11.3 percent reported having been sexually victimized at some point in their life.

The link between alcohol or drug use and sexual victimization has been studied, with consistent findings of a strong connection. Mohler-Kuo and colleagues (2004) surveyed nearly 24,000 women between 1997 and 2001 in the College Alcohol Study. They found that 4.7 percent had been raped and of those, 72 percent were intoxicated at the time the incident occurred (Mohler-Kuo et al., 2004). In a survey of approximately 300 female college students, Lawyer and colleagues (2010) found that 29.6 percent of the respondents reported a drug-related sexual assault or rape, and 5.4 percent reported a forcible sexual assault or rape. Voluntary incapacitation (via drugs or alcohol) preceded 84.6 percent of drug-related assaults, and involuntary incapacitation preceded 15.4 percent of drug-related assaults. The majority of drug-related assaults (96.1 percent) involved alcohol consumption prior to assault (Lawyer et al., 2010).

Finally, when looking at stalking behavior on college campuses as part of NCVS, Fisher, Cullen, and Turner (2000) found that 13 percent of college women had been stalked. This rate of victimization is much higher than that reported by Tjaden and Thoennes (2006). The key difference in the studies is the age of the sample population. While Tjaden and Thoennes (2006) studied all ages, Fisher, Cullen, and Turner

(2000) studied college students exclusively, and this is an age group at higher risk for stalking.

In summary, college students seem to be at unique risk for sexual violence and warrant the increased attention paid by policymakers in the form of sexual violence prevention and intervention programs.

Sexual Offending Against Individuals With Disabilities

The rate at which individuals with disabilities are victimized is not well understood. Until mandated by law, no national statistics on this population were gathered in the United States. The few studies that have been conducted are mainly outside the United States or are exploratory in nature. Petersilia (2001, p. 658) described the state of literature in the field as "… not a scientifically rigorous literature, consisting mostly of anecdotal evidence, data from convenience samples, and nonrandom program evaluations."

Key issues for individuals with disabilities include challenges reporting crimes and being believed or taken seriously when they do report crimes. This problem is documented in Sorensen (2002), who refers to crime victims with disabilities as "invisible." Another challenge is repeat victimization. In a Canadian study of 162 individuals with cognitive disabilities, Sobsey and Doe (1991) found that 80 percent of those who had been sexually assaulted had been victimized more than once, while 49.6 percent had experienced 10 or more sexual assaults.

In one of the few studies specifically designed to gather data from individuals with cognitive disabilities, Wilson and Brewer (1992) surveyed 174 individuals at a sheltered workshop in Australia. The study found that the rate of sexual assault was 10.7 times greater in the sheltered workshop than for the general population (Wilson & Brewer, 1992). Further, Wilson and Brewer (1992) found that rates of victimization were greater for individuals living in institutions. The Crime Victims with Disabilities Awareness Act became law in 1998 to "increase public awareness of the plight of victims of crime with developmental disabilities, to collect data to measure the magnitude of the problem, and to

develop strategies to address the safety and justice needs of victims of crime with developmental disabilities" (P.L. 105–301, October 27, 1998). NCVS now includes statistics on the rate of victimization of individuals with disabilities.

In examining the data collected as part of the 2008 NCVS, Harrell and Rand (2010) found that the rate of violent crime against individuals with disabilities is twice that of individuals without disabilities. When adjusted for age, the rate of victimization for individuals with disabilities is two to three times higher than it is for individuals without disabilities for each type of violent crime measured (rape/sexual assault, robbery, aggravated assault, and simple assault). When measuring rates of victimization for rape/sexual assault, the age-adjusted victimization rate for individuals with disabilities is more than twice that of individuals without disabilities. Individuals with disabilities were slightly less likely than individuals without disabilities to offer resistance to the offender during a crime. Within measured categories of disability (hearing, vision, ambulatory, cognitive, self-care, and independent living), individuals with cognitive disabilities had the highest risk of victimization (Harrell & Rand, 2010).

These data are limited in that they do not include those residing in institutions. A significant number of individuals with disabilities reside in institutions, particularly those with severe disabilities. In addition, the format for the NCVS interviews may limit the ability of individuals with hearing or cognitive disabilities to participate. Individuals with cognitive disabilities may have difficulty understanding the terminology used in the interview questionnaire, and individuals with hearing impairments may not be able to participate in telephone interviews. Finally, when proxy interviews are allowed for individuals who are not able to answer for themselves due to cognitive or communication challenges, it may lead to underreporting of victimization. The proxy responder may not know about the victimization, or could even be the perpetrator of abuse. In these cases, the crime would go unreported (Harrell & Rand, 2010).

The issue of sexual offending against individuals with disabilities is receiving more attention today than in the past, yet both the rate and characteristics of sexual victimization involving individuals with disabilities is not well understood. Clearly, more and better data are needed to determine the extent of sexual offending against this population.

Sexual Offending Against Members of the Military

Depending on the population studied and the definitions used, the extent of sexual offending against members of the military varies widely. **Studies have produced estimates suggesting that as few as 4 percent and as many as 78 percent of armed forces members have been the victim of a sex offense** (Bastian, Lancaster, & Reyst, 1995).

Unfortunately, there has been little consistency across studies in the methodologies, sample population characteristics, definitions of sexual offending, and the wording of questions used to determine if a sex offense has occurred. In response to congressional reporting requirements, the U.S. Department of Defense (DoD) now collects data on sexual offending against members of the active-duty military. However, this data collection effort addresses only active-duty personnel and has only been in place since 2002. A major shortcoming of the data collected by the department is the reluctance of service members to report acts of sexual misconduct. Scholars are beginning to look at the experience of military personnel both during active military service and after, but far more work is needed to understand the incidence and prevalence of sexual offending against this population.

In recent decades, increasing numbers of women have entered military service, and they now serve in a variety of roles. The Navy's Tailhook convention scandal in 1991 and the cases of sexual harassment and sexual assault at the Army training camp in Aberdeen, MD, in 1996 drew public attention to how women are treated in the military.

The department undertook a study of sexual harassment among active-duty military members in 1994 and published the results in 1995. This was the

first study of its kind since 1988 (Bastian, Lancaster, & Reyst, 1995). Results of this study showed that 55 percent of women and 14 percent of men reported one or more incidents of harassment at work during the prior year. When asked about unwanted "sex-related attention" at work or off duty, 78 percent of women and 38 percent of men reported that they had been harassed in the prior year (Bastian, Lancaster, & Reyst, 1995). Five types of unwanted sex-related attention reported are sexual assault, sexual coercion, unwanted sexual attention, sexist behavior, and crude/offensive behavior. Table 1 shows the results for women and men respondents.

Many service members did not consider the experiences they reported to be sexual harassment. Although 78 percent of women and 38 percent of men reported experiences that fell into the five categories presented in table 1, only 52 percent of women and 9 percent of men indicated that their experiences constituted sexual harassment (Bastian, Lancaster, & Reyst, 1995). Of those who indicated sexual harassment in the survey, 24 percent reported their experience to someone else, including 40 percent of women and 17 percent of men (Bastian, Lancaster, & Reyst, 1995). For those who reported the experience to someone else, the vast majority were not investigated, with only 14 percent of women and 4 percent of men indicating that the harassment was being investigated. Further, 10 percent of women and 7 percent of men were encouraged to drop their complaint, and 23 percent of women and 16 percent of men indicated their report was not taken seriously. Of those who

reported the incident, 21 percent of women and 12 percent of men indicated that a supervisor or coworker was hostile after the complaint was reported (Bastian, Lancaster, & Reyst, 1995).

Since 2002, the department has been required by law to conduct a quadrennial Workplace and Gender Relations Survey of Active Duty Members. This survey assesses the extent of "unwanted sexual contact"[12] between military service members (Rock et al., 2011). Data from 2006 found that 6.8 percent of women and 1.8 percent of men on active duty experienced some form of unwanted sexual contact during the previous year (Whitley, 2010). In the same study, 34 percent of women and 6 percent of men experienced some form of sexual harassment. These statistics may underestimate the extent of unwanted sexual contact, as "8 of 10 sexual assaults in the military go unreported" (Whitley, 2010, p. 1).

In a national cross-sectional study of women serving in the military from 1971 to 2002 (Vietnam era to Persian Gulf era), Sadler and colleagues (2003) found that 79 percent reported sexual harassment during their military service, 54 percent reported unwanted sexual contact, and 30 percent reported one or more completed rapes (Sadler et al., 2003). Of those who had been raped, 14 percent indicated they had been gang raped. The study found that rape occurred more frequently on base, often in the barracks. The definition of rape used in this study was that adopted by the American Medical Association and the American College of Obstetricians and Gynecologists.

TABLE 1. PERCENTAGE OF WOMEN AND MEN SUBJECT TO UNWANTED SEX-RELATED ATTENTION, BY TYPE

Type	Percentage of All Respondents Reporting	
	Women	Men
Any type (one or more)	78	38
Sexual assault	6	1
Sexual coercion	13	2
Unwanted sexual attention	41	8
Sexist behavior	63	15
Crude/Offensive behavior	70	35

Source: Bastian, Lancaster & Reyst, 1995.

In examining the extent of sexual offending against veterans of military service while they were still active, recent attention has focused on Military Sexual Trauma (MST), defined by the U.S. Department of Veterans Affairs as sexual assault or harassment during military service. Recognizing the importance of providing services, department hospitals now provide free services to survivors of MST, regardless of their eligibility for any other department services (Center for Women Veterans, 2011). The department has also supported research to understand the extent and consequences of MST.

Since 2002, the Veterans Health Administration has implemented universal screening for MST for veterans returning from Afghanistan and Iraq. The first national, population-based study of veterans accessing administration services after returning from Afghanistan or Iraq shows MST in 15.1 percent of women and 0.7 percent of men (Kimerling et al., 2010). This study was a cohort analysis of the medical records of 22,000 women and 143,000 men. High rates of postdeployment mental health conditions were found among all patients, and those with MST were significantly more likely to have a mental health diagnosis. This study may underestimate the extent of MST due to underreporting. Burnam and colleagues (2009) documented the stigma associated with seeking help among Afghanistan and Iraq war veterans. Examples of the stigma associated with help-seeking for MST are shame, desire to maintain unit cohesion, and fear related to reporting a fellow service member with whom the victim may continue to work.

Underreporting of incidents of sexual offending is a serious problem. A U.S. Government Accountability Office (GAO) survey found that half of service members who had indicated they had been sexually assaulted in the prior year did not report the assault (GAO, 2008). The office also found that even after being trained, 13 to 43 percent of military personnel were not sure how to report an assault (GAO, 2008). Sadler and colleagues (2003) reported that one-third of military women were uncertain of specific steps to take to report a rape and only 26 percent

of victims reported their rape to a superior officer. It has been suggested that the range of reasons for not reporting include the victim's fear that he or she will not be believed, shame, and fear of retaliation, being negatively judged, being revictimized, having to continue to serve alongside the perpetrator, and being prosecuted for other problematic or illegal behavior that occurred at the time of the attack, such as underage drinking, adultery, and so forth (DoD, 2004; GAO, 2008; Mullins, 2005; U.S. Air Force, 2002). Sadler and colleagues (2003, p. 5) found that one-fifth of victims did not report their attack because they believed that "rape was to be expected in the military."

In a study with a convenience sample of 196 female veterans, 72 percent reported that they had experienced sexual abuse (Himmelfarb, Yeager, & Mintz, 2006). This study differs from others in that it asked participants about sexual abuse that occurred during their childhood, during adulthood but before military service, during the time of their military service, and after their military service. Many other studies of MST among female veterans focus on the time of military service or solely on adulthood, and therefore are not comparable. This study was conducted at a Veterans Administration hospital in Los Angeles. The sample is not representative of the ethnic makeup of female veterans as a whole, or of those in other regions. The study participants volunteered to be in the study and may differ in their level of MST from those who chose not to participate. Also, the sample may not be representative of female veterans as clinical populations typically report higher levels of trauma than nonclinical populations (Himmelfarb, Yeager, & Mintz, 2006).

The issue of sexual offending against members of the military has received significant attention in the media in recent years, and DoD has placed a renewed emphasis on prevention and intervention policies and practices. Still, more study on the extent, nature, and dynamics of sexual offending involving members of the military is warranted to determine future policy directions.

Sexual Offending Against Native Americans in Indian Country

Although .9 percent of the U.S. population is Native American (U.S. Census Bureau, 2011), these 2.9 million individuals are not a uniform group. There are 565 federally recognized tribes, according to the Bureau of Indian Affairs (BIA); each tribe has its own culture, history, and traditions. No single, standardized repository of crime data exists to measure the extent of sexual offending against victims in Indian Country. Even though none of the existing estimates regarding the extent of sexual offending or victimization in Indian Country are precise, **the available data consistently indicate that Native American women experience violent victimization and sexual victimization at significantly higher rates than other women in the United States.**

NCVS's most recently published results do not provide victimization rates for Native Americans.[13] This is due to the reduction in the overall sample size for NCVS that recently occurred and the impact it had on the size of subsamples for certain groups, such as Native Americans. In short, Native Americans are no longer sampled in sufficient numbers to provide valid statistics for the group. To have an accurate national estimate of victimization against Native American women, NCVS would need to return to its original sample size.

In NVAWS, conducted in 1995 and 1996, 34 percent of Native American women reported a victimization of rape at some point in their life—the highest victimization rate of any racial or ethnic group and nearly twice the national average for all ethnic groups. The number of male rape victims cannot be estimated from this source due to the low numbers reported (Tjaden & Thoennes, 2006). The data sample for this survey included telephone interviews with a total of 88 Native American women and 105 Native American men. Caution is necessary when generalizing about 2.9 million Native American women and men from this sample of 193 individuals.

In their 1998 research, Tjaden and Thoennes found that lifetime victimization rates for stalking are higher for Native American women than for women of any other ethnicity examined in their study. For Native American women, the lifetime rate of victimization for stalking was 17 percent, while the rate for the study population as a whole was 8.2 percent (Tjaden & Thoennes, 1998). Similarly, Native American men reported higher lifetime victimization for the crime of stalking, with a rate of 4.8 percent compared to the 2.3 percent lifetime rate for men in the study population as a whole.

Available estimates of the extent of victimization are consistent in indicating high levels of victimization among Native American women. Few large-scale studies exist to describe the nature of victimization of Native American women. However, the studies that do exist point to a need for further research.

Hamby found that Native American women were twice as likely as women of other racial and ethnic groups to say that police would not believe them or would blame them if they reported a rape (Hamby, 2008). Hamby also found other barriers for Native American victims in seeking help from law enforcement, including prejudice, conflict between Western and native values, language barriers, and poverty. Getting help is also complicated by jurisdictional issues if the crime takes place in Indian Country, as often it is not clear which law enforcement entity has jurisdiction to prosecute the crime. For crimes that occur on Indian lands, jurisdiction for handling the investigation may fall to federal, state, or tribal law enforcement, depending on whether the perpetrator is Native American or not as well as on the nature of the crime (e.g., felony, misdemeanor).

Bachman and colleagues (2010) found that rapes involving Native American women are more severe than rapes committed against other women. Analyzing archived data from NCVS, Bachman and colleagues (2010) found that 94 percent of rapes reported by Native American women involved physical assault, compared to 74 percent of rapes reported by non-Native American women. Fifty percent of Native American women rape victims were physically injured during the rape, compared to 30 percent of non-Native American women rape victims. Finally, more than three times as many rapes of Native Americans involved weapons—34 percent compared to 11 percent (Bachman et al., 2010).

Hamby and Skupien (1998) conducted in-person interviews with 117 women living on the San Carlos Apache reservation and found that in their current relationship, 75 percent had experienced physical violence from their partner and 62 percent had been injured by their partner. In a study of 341 women who visited health clinics located on the Navajo reservation, Fairchild, Fairchild, and Shirley (1998) found that 42 percent had been physically assaulted and 12 percent had been sexually assaulted by a partner in their lifetime.

Comparisons across these studies are difficult as the sample sizes, sampling methods, study methods, and definitions used are different. Many of the studies use convenience samples, which may make the results less generalizable to the broader population. Further, there may be differences in the experience of Native American women in rural areas and urban areas, yet this has not been studied. Also, methods of data collection differ. For example, Tjaden and Thoennes used a telephone survey with random-digit dialing to select participants; Fairchild, Fairchild, and Shirley (1998) used in-person interviews conducted among medical clinic populations; and Hamby and Skupien (1998) used in-person interviews but recruited volunteers via media outreach.

Amnesty International found that Native American victims seeking help at their local health facility may not get the help they need, as facilities often lack rape kits or the specialized training needed to preserve evidence for use at trial. The organization reported that 44 percent of Indian Health Service facilities lack personnel trained to provide emergency services to respond to sexual violence, and 30 percent lack the basic protocols for treating victims (Amnesty International, 2007).

Similarly, the scarcity of resources in the criminal justice system in Indian Country is also a challenge. For Fiscal Year 2008, the Bureau of Indian Affairs reported that more than 30 Indian reservations had violent crime rates that exceeded the national average. Many of these reservations have law enforcement staffing shortages that require a handful of officers to cover geographically large areas. For example, according to the Senate report

accompanying the Tribal Law and Order Act of 2009 (Report 111–93), the Wind River Indian Reservation in Wyoming (with a violent crime rate that is more than three times higher than the national rate) has only six or seven officers to patrol 2.2 million acres of Reservation land. With two or three officers on duty at any given time, each could be responsible for covering 1 million acres (U.S. Senate, 2009).

Sexual assault has a significant impact on members of the Native American community. Despite the limitations of the available data, sexual victimization appears to occur disproportionately among Native American women, and resources for preventing and responding to sexual offenses in Indian Country appear to be inadequate and fragmented. While more research and better data collection systems are needed to document and understand sexual offending and victimization in Indian Country more thoroughly, there is little question that the problem of sexual offending against Native Americans warrants greater attention.

Summary

Although credible conclusions are difficult to make given the limitations of the available data, statistics from several key sources suggest that the incidence of sexual offending may be declining. UCR data on sex crimes reported to the police, NCVS data on sexual victimizations, and NCANDS data on substantiated reports of child abuse and neglect all present a consistent picture of declining incidence over time. Whether this pattern can be explained by factors other than a true decline remains subject to debate, but the convergence of key indicators and other empirical evidence suggests that the true decline hypothesis should be further examined and not dismissed (Finkelhor & Jones, 2004). Keeping in mind the limitations of the data, policymakers are encouraged to monitor key indicators of incidence over time and to work with researchers to better understand the factors influencing patterns in the data, including the roles of various policies and practices designed to prevent, treat, or otherwise intervene in sexual offending behavior.

Knowledge Gaps and Recommendations for Future Research

With so many inconsistencies and uncertainties in the available data, identifying the most important knowledge gaps and priorities for future research is a daunting task. Nevertheless, to improve our understanding of the incidence and prevalence of sexual offending, several of the most pressing issues that warrant examination are as follows:

◆ **Rates of disclosure.** Evidence indicates that victims choose not to disclose crimes that have been committed against them. In some cases, it may be to save themselves from reexperiencing the trauma of the event. **The SOMAPI forum participants identified the need for additional research concerning the ways the criminal justice** system contributes to underreporting and the steps that can be taken to address the problem and improve support for victims.

◆ **Victim perception of the crime.** With so many victims not labeling a sexual victimization as a crime or a rape, further study is needed to help identify the factors within the victimization experience (e.g., offender manipulation, posttraumatic stress disorder) that shape victims' perceptions of the offending behavior.

◆ **Wording of questions.** Some evidence suggests that the way in which questions are worded in a victimization survey will influence reported levels of sexual violence. For example, Cook and colleagues (2011) reported that when the question uses the tactic of leading with a behaviorally specific description of an unwanted sexual act rather than a question about the

sexual act, greater rates of victimization and perpetration are described by both men and women. This merits further investigation.

◆ **Prevention.** The literature on what works in preventing sexual abuse is neither complete nor rigorous. More study in this area could provide insight into how best to allocate scarce resources.

◆ **Vulnerable populations.** More research is needed to understand the extent and nature of sexual victimization of individuals in vulnerable situations, including children in schools or youth programs, young adults on college campuses, the elderly, individuals with disabilities, and those living in rural and hard-to-reach areas (including Native American and Alaska Native women and men). Individuals in settings such as these may have limited ability to protect themselves or seek help after victimization.

Without valid data on the nature and extent of sexual victimization, policymakers and practitioners are more likely to rely on anecdotes, opinions, or stereotypes rather than facts when developing prevention and intervention strategies. Gaining a better understanding of the extent and nature of sexual victimization will help policymakers and practitioners develop responses that are both more effective and more responsive to the needs of victims.

Given the current state of our knowledge base, there is an acute need to both improve and expand our data on the incidence and prevalence of sexual victimization. In particular, work should be done to enhance the comparability of incidence and prevalence data from different sources and time periods. Currently, methodological variations—including differences in the ways sex crimes and victimizations are defined—make comparisons across data sources and time periods challenging. Agencies responsible for administering data collection efforts should actively seek opportunities to implement common and consistent data collection methodologies when possible. Funding for such efforts and for the expansion of data collection is critically needed.

"Sex offenders do not typically self-report sex crimes."

There also is an acute need to learn more about the underreporting of sex crimes. Steps should be taken to create an environment in which victims feel appropriately supported and protected in the criminal justice and service delivery systems. **Many of the barriers to reporting have already been identified through research, but SOMAPI forum participants acknowledged the need for further study in this area.** In addition, policymakers must be committed to making the types of changes within the criminal justice and service delivery systems that are needed to overcome reporting barriers. Just as importantly, steps should be taken to help ensure that victims are not re-traumatized when reporting any victimization to authorities or when supporting the prosecution of perpetrators.

"An accurate accounting of sexual offending is virtually impossible because so many sex crimes are hidden from public view."

Finally, it is important to acknowledge that even when sex offender management approaches are designed and delivered based on scientific evidence, hidden offending presents significant challenges. (For more on "Sex Offender Management Strategies," see chapter 8 in the Adult section.) Given the number of sex crimes that go unreported, the number of sex offenders that have never come to the attention of authorities, and the disproportionate attrition of certain sex offenses and sex offenders within the criminal justice system, any perception or expectation on the part of the public or policymakers that sex offender management professionals working in the community are providing victims and the public with protection against all sex offenders is unrealistic. Simply put, there are many unidentified sex offenders who are not being managed within existing systems and much reoffending that is not accounted for in the management process. Therefore, practitioners must be up front about these limitations and expectations for sex offender

Chapter 2: Etiology of Adult Sexual Offending

by Susan Faupel, M.S.W.

Introduction

The etiology of adult sexual offending refers to the origins or causes of sexually abusive behavior, including the pathways that are associated with the behavior's development, onset, and maintenance. Even though questions about the causes of sexual offending have been asked for many years, they remain important today, primarily because definitive answers have been exceptionally hard to find. While research has generated important insights about the etiology of sexual offending, our understanding of the causes and origins of sexually abusive behavior arguably remains rudimentary.[1]

There are multiple reasons why it is important to be concerned with the etiology of sexual offending. First, the development of effective prevention strategies is contingent on having credible knowledge about the underlying causes of sexual offending and victimization. Without credible etiological knowledge, prevention efforts are likely to be haphazard and inefficient. Second, knowledge about causes can help sex offender management professionals manage and mitigate risk more effectively. (For a discussion of adult "Sex Offender Risk Assessment," see chapter 6, and for more on "Sex Offender Management Strategies," see chapter 8, both in the Adult section.) Simply put, knowledge about causes and pathways to offending can provide important insights into the characteristics of various sex offending behaviors (including victim preferences) and the likelihood that they will persist over time. Third, knowledge about causes can help sex offender management professionals develop more effective treatment interventions. (For more on "Effectiveness of Treatment for Adult Sex Offenders," see chapter 7 in the Adult section.) Rather than focusing on symptoms or using a one-size-fits-all approach, rehabilitation efforts can target the specific underlying causes and pathways to offending that apply to the individual offender. Fourth, etiological information can inform both discourse and decision-making at the policy level, whether the focus is on sentencing, oversight in the community, civil commitment, or any other criminal justice or societal response to sexual offending. In short, knowledge about origins, causes, and pathways to sexual offending can play a critical role in the development and delivery of effective public safety strategies.

Single-Factor Theories of Sexual Offending Behavior

Biological Theories

Biological theories of sexual offending have centered on abnormalities in the structure of the brain, hormone levels, genetic and chromosomal makeup, and deficits in intellectual functioning.

Key research findings concerning the validity of various biological theories are—

◆ A number of studies have found abnormalities in the brains of some sexual offenders; however, the evidence is clear that such abnormalities do not exist in the majority of cases (Aigner et al., 2000; Corley et al., 1994; Galski, Thornton, & Shumsky, 1990; Hucker et al., 1986; Langevin et al., 1988, 1989; Wright et al., 1990).

◆ Studies examining the link between hormonal abnormalities and sexual offending have focused on the role of certain hormones (e.g., testosterone) known to be related to physical changes in males. To date, these studies have not found evidence of a clear link between hormone levels and sexual offending (Bain et al., 1987; Hucker & Bain, 1990).

◆ Consideration has also been given to the possibility of a genetic defect in sex offenders that makes them more likely to engage in aggressive sexual behavior. The few studies that have examined this issue have been based on a small sample size, and far more research is needed before conclusions about a causal relationship to sex offending can be made (Beckmann et al., 1974; Harrison, Clayton-Smith, & Bailey, 2001).

◆ Links between deficits in intellectual functioning and sexual offending have also been hypothesized, but empirical evidence supporting these theories has not been produced. Moreover, it should be noted that aggression is not the norm in this population (Day, 1994; Murray et al., 2001; O'Callaghan, 1998).

Summary of the Evidence on Biological Theories

The empirical evidence produced to date does not indicate that the presence of a particular biological phenomenon has a causal relationship with sexual offending. However, biological studies are still relatively new. With improved methodologies, future research may demonstrate that certain aspects of biological theories yield beneficial information for understanding and explaining the origins of sexual offending behavior (Stinson, Sales, & Becker, 2008).

Evolutionary Theories

Evolutionary theories have been proposed to explain a variety of human behaviors, including sexual aggression. Evolutionary theory views human behavior as the result of millions of years of adaptive changes designed to meet ongoing challenges within the environment.

Several theories rely on evolutionary postulates about sexual selection and sexual strategies to explain sexual aggression. One is that sexual coercion is a conditional sexual strategy. In this theory, sexual coercion is postulated to be merely a type of reproductive strategy, as it is in nonhuman species (Bailey, 1988; Malamuth & Heilmann, 1998; Thornhill & Palmer, 2000). Another evolutionary theory views rape as an outcome of a competitive disadvantage for some men that causes them to lack the resources or ability to obtain a mate by more appropriate means (Figueredo et al., 2000; Lalumiere et al., 1996; Malamuth & Heilmann, 1998; Quinsey & Lalumiere, 1995). Another theory describes rape as a "courtship disorder" that results from an interruption in normal mating processes (Freund, 1990; Freund, Scher, & Hucker, 1983, 1984).

Summary of the Evidence on Evolutionary Theories

It is very difficult to empirically test the validity of evolutionary theories. They present a unique perspective in that they view sex offending behavior as an adaptation to environmental or interpersonal events. While this is a new direction that may deserve further consideration, **researchers in the**

field have largely disregarded these hypotheses as the cause of sexual offending because of their limitations (Travis, 2003).

Personality Theories

Personality theories are among the earliest sources of explanation for sexual offending behavior. They emerged based on the work of Sigmund Freud, who believed that sexual deviance is an expression of the unresolved problems experienced during the early stages of an individual's development. Due to a lack of empirical evidence, Freud's personality theories have fallen out of favor with etiological researchers in deference to other theories. Later personality theorists, however, suggested that early childhood relationships involving trauma or mistreatment could lead a child to internalize negative attitudes and beliefs about both the self and relationships with others, thus altering how the child perceives sex and his or her role in sexual relationships (Leguizamo, 2002).

One of these later personality theories—attachment theory—was first introduced by Bowlby (1988) to explain the relationship between a child and his primary caretaker, and how this early relationship affects later adjustment. According to attachment theory, humans have a propensity to establish strong emotional bonds with others, and when individuals have some loss or emotional distress, they act out as a result of their loneliness and isolation. Later research indicates that there is a relationship between poor quality attachments and sexual offending. Marshall (1989) found that men who sexually abuse children often have not developed the social skills and self-confidence necessary to form effective intimate relations with peers. This failure creates frustration that causes them to seek intimacy with young partners (Marshall, 1989; Marshall and Marshall, 2000).

Seidman and colleagues (1994) conducted two studies aimed at examining intimacy problems and the experience of loneliness among sex offenders. According to these studies, sex offenders have deficiencies in social skills that seriously restrict the possibility of maintaining intimacy. Ward and colleagues (1995) proposed that sex offenders are likely to have difficulty forming attachments with others and will engage in distorted thinking, such as "courting" a child and treating him or her as his lover.

Personality theorists also use formulations of personality development based on the results of testing instruments designed to profile personality types. Studies concerning this approach, however, have produced diverse and contradictory findings, and they have been criticized for failing to adequately demonstrate how the results obtained from testing instruments can add to the understanding of the origins of sexually deviant behavior (Stinson, Sales, & Becker, 2008). Further evidence is needed to show how certain personality traits relate specifically to the cause of sexual offending behavior.

Summary of the Evidence on Personality Theories

Personality theories are successful in demonstrating that sex offenders have poor social skills and problems with intimacy, and that there is a connection between poor relationships with others (particularly caregivers) and sexual offending behavior. **The primary criticism of personality theories is that while they show that disturbances exist within the personalities of sex offenders, they fail to explain why these disturbances occur.** Hence, personality theories alone do not provide a complete explanation of the cause of sexual offending behavior (Stinson, Sales, & Becker, 2008).

Cognitive Theories

Cognitive theories address the way in which offenders' thoughts affect their behavior. It is well documented that when individuals commit deviant sexual acts, they often try to diminish their feelings of guilt and shame by making excuses or justifications for their behavior and rationalizing their actions (Scott & Lyman, 1968; Scully, 1990; Sykes & Matza, 1957). These excuses, justifications, and rationalizations are commonly referred to as "cognitive distortions" or "thinking errors." They allow offenders to absolve themselves of responsibility, shame, or guilt for their actions.

Thinking errors on the part of sex offenders have been identified and supported frequently in research. These errors include denial, minimization of harm done, claiming the right or entitlement to the behavior, and blaming the victim (Marshall, Anderson, & Fernandez, 1999; Ward & Keenan, 1999). The literature also suggests that many sex offenders hold feelings of resentment and use these feelings as justification for their behaviors. Marshall, Anderson, and Champaigne (1997) theorized that sex offenders are more likely to be self-protective and self-serving due to low self-esteem, poor relationships with others, and emotional discomfort or anxiety. When challenged about their behavior, sex offenders reframe the situation to maintain feelings of self-worth.

Another type of cognitive distortion common among sexual offenders is a sense of entitlement, which involves the belief that the need to offend is more important than the negative consequences experienced by the victim (Hanson, Gizzarelli, & Scott, 1994). Hanson, Gizzarelli, and Scott (1994) found that this sense of entitlement in incest offenders led to decreased self-control, while Ward, Hudson, and Keenan (1998) found that thinking errors lead sex offenders to pay attention to information consistent with their distorted beliefs and to reject information that is inconsistent with their beliefs. For example, a child molester may interpret a child's hug as sexual interest because that interpretation conforms to his or her distorted beliefs, or a child molester may ignore a child's crying because it conflicts with his or her beliefs. Further, egocentricity or self-interest allows the sex offender to justify deviant sexual behavior on the basis that it satisfies his or her needs. The offender will see victims as deserving of victimization or may have distorted views of what the victim wants from the offender. He or she may display a consistent tendency to blame others or negate personal responsibility through such statements as "I just couldn't help myself" (Hanson, 1999; Hanson, Gizzarelli, & Scott, 1994: Segal & Stermac, 1990; Ward, 2000; Ward, Hudson, & Keenan, 1998).

Finally, the way sex offenders process both internal and external cues may explain how and why they manipulate information. Research suggests that sex offenders misinterpret social cues and have difficulty recognizing and interpreting the emotional state of others. Further, they do not make good choices based on the information they perceive and do not consider the perceptions of others in making decisions about their own behavior (Keenan & Ward, 2000; Ward, 2000).

Summary of the Evidence on Cognitive Theories

Cognitive theories have contributed to a better understanding of sex offenders and their behaviors. **There is evidence demonstrating that sex offenders engage in cognitive distortions or thinking errors, and that these distorted thinking patterns have the capacity to drive deviant sexual behavior.** Cognitive theories serve as a core component of many of the sex offender treatment programs in existence today, and most treatment programs incorporate some type of intervention to help the perpetrator identify and correct his or her thinking errors.

Despite the contributions made by cognitive theories and their use in treatment models, these theories have limitations. First, no method has been identified for connecting in a causal manner what the offender reports about his or her thought processes and a sex offending act itself. Second, cognitive theories do not explain where the cognitive distortion thought processes originate. Third, the research that is available on cognitive theories reflects few differences between sex offenders with cognitive distortions and non-sex offenders with cognitive distortions. In short, cognitive theories do not explain why some individuals commit sexually offensive acts specifically (Stinson, Sales, & Becker, 2008).

Behavioral Theories

Behavioral theories explain sexually abusive behaviors as a learned condition. Behavioral theories are based on the assumption that sexually deviant arousal plays a pivotal role in the commission of sex crimes and that people who engage in sex with, or have sexual feelings toward, inappropriate stimuli are more like likely to commit sexual violence than those with appropriate sexual desires (Becker, 1998; Hunter & Becker, 1994; Lalumiere & Quinsey, 1994).

In behavioral theory, the occurrence of continued deviant sexual behavior (as with all behavior) depends on reinforcement and punishment. Sexual gratification and the perceived lack of negative consequences for sexual offending, coupled with a lack of support for not engaging in sexual offending behavior, increases the likelihood for sex offenses to continue. The key factor is that if the negative consequences of the behavior (punishment) are sufficiently strong, the negative behavior (sex offending) is less likely to occur (Laws & Marshall, 1990).

Self-regulation is also a behavioral theory that has been applied to sexually deviant behaviors. Self-regulation involves the selection of a goal and strategies to reach that goal. The goals of sexual satisfaction, intimacy, mood control, or other rewards related to sexual deviance can affect recall, judgment, and information processing (Ward, 2000). According to self-regulation theory, the goal of engaging in sexually deviant behavior and the strategies employed to reach that goal become automatically integrated into the behavior of the offender because they have been consistently reinforced in the past (Ward & Hudson, 1998).

Summary of the Evidence on Behavioral Theories

Research offers support for sexual abuse being a learned behavior. Acknowledgment of the role of self-regulation also appears to be a necessary component of a thorough understanding of sexual behavior problems. Further research in these areas certainly seems merited. **Nonetheless, behavioral theories have limitations.** First, it is important to recognize that many male sex offenders lack deviant sexual arousal patterns; in fact, many male sex offenders have arousal patterns similar to those of non-sex-offending men (Looman & Marshall, 2005). This limits the ability to generalize the deviant arousal patterns of some sex offenders to all such offenders. In addition, no research has predicted which reinforcements or consequences are likely to increase or inhibit sexual offending behavior. This seems critical both in understanding etiology and prescribing treatment and public policy. Research is also limited on the effect of "mediators"—such as support for nonoffending behavior, levels of

supervision, and restricting access to victims—in the process of sexual offending. Other variables such as the lack of victim empathy, moral values, or remorse in some individuals may also play a role in the development of deviant sexual behavior patterns. Behavioral theories postulated to date do not take these variables into consideration. Additionally, the theories are based on the assumption that individuals are influenced by the threat of negative consequences (punishment). However, no empirical evidence substantiates this assumption consistently. Therefore, **sex offenders may not consider the consequences of their behavior as a deterrent to their actions** (Stinson, Sales, & Becker, 2008).

Social Learning Theories

Two primary social learning hypotheses have been suggested as possible explanations for sexual offending behaviors. The first is that children who are sexually abused grow into sexually abusive adults, and the second is that sexually explicit material contributes to sexual offending behavior.

Much research has examined the impact of victimization on future victimizing behavior. However, early childhood victimization does not automatically lead to sexually aggressive behavior. While sex offenders have higher rates of sexual abuse in their histories than would be expected in the general population, the majority of perpetrators were not abused as children (Berliner & Elliot, 2002; Putnam, 2003). There is relatively good evidence to support this, including the disproportionate number of women who were victimized as children who do not go on to sexually abuse others (Berliner & Elliot, 2002; Putnam, 2003).

"Negative or adverse conditions in early development have been linked to sexual offending later in life."

Even so, a large percentage of sex offenders do report being sexually abused as children (Becker, 1998; Craissati, McClurg, & Browne, 2002; Graham, 1996; Jonson-Reid & Way, 2001; Seghorn, Prentky, & Boucher, 1987; Veneziano, Veneziano, & LeGrand, 2000; Worling, 1995; Zgourides, Monto, & Harris, 1997). Certain types of offenders, such as those who

sexually offend against young boys, have higher rates of child sexual abuse in their histories (Becker & Murphy, 1998; Burgess, Hartman, & McCormack, 1987; Burton, Miller, & Schill, 2002; Freeman-Longo, 1986; Freund & Kuban, 1994; Garland & Dougher, 1990; Ryan, 2002). For those victims who later become perpetrators, the majority are male (Berliner & Elliot, 2002; Stinson, Sales, & Becker, 2008). Therefore, in this regard, researchers have focused on male victims, the way they perceive their abuse, and how it affects them later in life. The aspects of the abusive experience that influenced their learning have been of most interest.

Using social learning theory, researchers have identified the process through which this learning occurs and the key variables that help to determine whether deviant sexual behavior patterns will be adopted. For example, a child who has internalized the victimization experience as normal or pleasurable in some way is more likely to adopt a belief system that is favorable to offending (Briggs & Hawkins, 1996; Burton, Miller, & Schill, 2002; Eisenman, 2000; Freeman-Longo, 1986; Hummel et al., 2000). Several different types of thought patterns may lead more easily to the development of sexually abusive behaviors in victims. For example, the victim may think "this must be normal" or "it isn't a bad thing because someone who loves me is doing it to me" or even "this feels good and I like it" (Briggs & Hawkins, 1996; Burton, Miller, & Schill, 2002; Eisenman, 2000; Freeman-Longo, 1986; Hummel et al., 2000). A child who internalizes these thought processes in reaction to his or her own abuse is more likely to grow into an adult who views sexually abusive acts as less harmful and more pleasurable to the victim.

Studies have identified other factors that can play an important role in the link between being sexually abused and later exhibiting sexually abusive behaviors. These include the age of victimization, the relationship between the perpetrator and the victim, the type of sex act and amount of force used, the sex of the perpetrator, the duration of the abuse, and the number of perpetrators (Burton, Miller, & Schill, 2002; Garland & Dougher, 1990). The younger the victim, the more violent and intrusive the sexual acts, the longer the duration of abuse, and the greater the number of perpetrators, the

more likely it is that sexually deviant behavior will develop in victims (Burton, 2000; Burton, Miller, & Schill, 2002; Hummel et al., 2000; Seghorn, Prentky, & Boucher, 1987).

The manner in which others respond to an individual who discloses victimization is also a factor that has been shown to be related to the social learning process involved in victimization. An indifferent response or a response of disbelief to a disclosure of sexual abuse has been shown to contribute to a victim internalizing negative sexual behaviors and developing future abusive sexual behavior (Burton, Miller, & Schill, 2002; Garland & Dougher, 1990). All of this suggests that the experience of sexual abuse in childhood has some impact on the development of sexually abusive behavior patterns, but exactly how the abuse is modeled and manifested is still somewhat unclear. More research is needed in this area.

Another social learning theory related to sexual offending behavior suggests that pornography serves as a model for sexually aggressive behavior for some individuals, encouraging them to engage in behaviors depicted in pornography that they viewed. The literature defines sexually violent pornography as pornography in which women are portrayed in humiliating or degrading situations or are the victims of forced or coerced sexual interactions (Marshall, 1988).[2] Based on this theory, an individual who views sexually violent pornography can experience a change in attitudes toward women and can internalize myths about rape. Burt (1980) defined rape myths as prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists. Lonsway and Fitzgerald (1994, p. 134) expanded on the concept of rape myths and defined them as "attitudes and beliefs that are generally false but are widely and persistently held, and that serve to deny and justify male sexual aggression against women."

Evidence suggests that repeated exposure to sexually aggressive pornography contributes to increased hostility toward women, acceptance of rape myths, decreased empathy and compassion for victims, and an increased acceptance of physical violence toward women (Check & Guloien, 1989; Knudsen, 1988; Lahey, 1991; Linz, Donnerstein, &

Penrod, 1988; Malamuth & Check, 1980, 1981, 1985). From a social learning perspective, the likelihood that these views will lead to abusive behavior depends on the reinforcement in the learning process. One such reinforcer is a core feature of much pornography: the portrayal of women as desiring and enjoying both the sexual activity and degradation involved in the images (Check & Guloien, 1989; Knudsen, 1988; Norris, 1991; Sinclair, Lee, & Johnson, 1995). Another reinforcer lies in social cues from others—both the participants in the pornography and other viewers. If the participants in the pornographic material seem to be enjoying it and watching it appears to be socially acceptable based on the reaction of others, the viewer is more apt to see the sexually aggressive content as positive and desirable to imitate (Norris, 1991; Sinclair, Lee, & Johnson, 1995).

Another type of pornography believed to play a role in the etiology of socially learned sexual aggression is child pornography—material that either uses children or uses technology that makes the participants appear to be children. Social learning theory suggests that individuals use child pornography, internalize this behavior as acceptable, and adopt it into their own behavior. Since child pornography is illegal, research on the role of child pornography is somewhat limited. Nonetheless, it is known that child molesters report increased use of pornography prior to sexually abusing children (Howitt, 1995; Marshall, 1988). Recent research has suggested the use of child pornography as a reliable indicator of sexual interest in children (Seto, Cantor, & Blanchard, 2006). Across multiple studies, offenders have reported the use of pornography to desensitize and arouse them so they can engage in abusive behaviors with children (Knudsen, 1988; Marshall, 1988). Child pornography also appears to reduce empathy toward child victims (Knudsen, 1988). Portrayals of enjoyment on the part of the children and lack of negative consequences may serve as reinforcers of these behaviors.

Summary of the Evidence on Social Learning Theories

Social learning theories do not offer the only explanation for sexual offending behavior. However, they do provide valuable insights for understanding

sexual offending and there is evidence to support various tenets of social learning theory in the context of sexual offending. For example, **there is sound empirical evidence that sexual offending is a learned behavior.** Also, while it is true that a direct connection between the use of pornography and rape does not exist, research has made it clear that the use of pornography is a factor in shaping the attitudes and behaviors in some men who use it and that it is a factor in some men's sexual aggression. Scholars may differ about the specific nature of pornography's effects, but none have argued about pornography's articulation of the myths about rape and the contributions of these thinking errors to sexual offending behaviors.

Social learning theory also introduces the notion of environmental influences on sexual offending, which is contrary to the notion of other theories that have assumed that abusive behaviors are inherent within some individuals. Insights about the impact of childhood abuse and its ramifications for sexual offending are also valuable contributions.

The most often cited criticism of social learning theory is that there is little evidence that suggests internalized beliefs or attitudes actually result in related behaviors. More research on children who are victimized but do not go on to abuse others may be helpful. Further, much of the research on social learning theory, as in many other theoretical approaches, depends on self-reports of abusers. Because offenders may be motivated to distort stories to place themselves in a more positive light, relying on self-reporting can be problematic. These concerns call into question the validity of social learning theory as the sole explanation of sexually abusive behavior (Stinson, Sales, & Becker, 2008).

Feminist Theories

Although there are many forms of feminist theory, one of the more prominent focuses on the structure of gender relations and the imbalance of power between men and women. This feminist analysis assumes that the elimination of sexual violence is linked to gender equality because it is male power that enables the acceptance and perpetuation of sexual assault.

Feminists have argued that male sex offenders are no different from "normal" men but rather are conditioned within a culture that accepts, tolerates, condones, and even perpetuates sexual violence toward women and children. Perpetrators within this framework are extended to male partners and acquaintances who cajole, pressure, harass, threaten, coerce, and/or force women into any sexual behavior to which they do not or are unable to consent. This makes it possible to examine acts of sexual coercion that remain hidden or taken for granted as "normal" social practices within the confines of heterosexual dominance (Chung, 2005; Cossins, 2000).

According to Cossins (2000), child sexual abuse is the way some men alleviate a sense of powerlessness and establish their ideal image of masculinity. Because masculinity is learned, according to feminist theorists, in order for a man to experience power, he must engage in accepted social practices (such as sexual violence) that prove his masculinity. Connell (2000) suggests that there can be different concepts of masculinity with varying degrees of social acceptance and power. Connell proposes this as the foundation for why sexual violence occurs. This perspective has given rise to treatment approaches that shift the focus to positively reconstructing a man's sense of masculinity to exclude the use of sexual violence (White, 2000). Jenkins (1990) also developed an approach to therapy that focuses on what restrains men from engaging in respectful relationships with women, as opposed to what causes them to engage in these relationships.

Summary of the Evidence on Feminist Theories

Currently, there is insufficient evidence to scientifically support the feminist theory of gender imbalance as the sole cause of sexual violence. However, **while the imbalance of power between men and women may not be the sole or direct cause of sexual offending, it is clearly a factor.** Psychological theorists have long neglected the fact that an overwhelming number of perpetrators are male, and thus they have failed to explain the role of gender in sexual violence. Additionally, it is important to keep in mind that many feminist theories go beyond the binary of gender and discuss the intersections of gender, race, class, ethnicity,

culture, and other factors. This makes the simple gender/power relationship much more complex than that described above, and research that explores both the impact of these interactions and their value for understanding sexual offending is clearly needed.

Multifactor Theories of Sexual Offending Behavior

Believing that single-factor theories are inadequate, a number of scholars have developed theories that combine multiple factors to explain sexual offending behavior. The most prominent of these theories are discussed below.

Finklehor's Precondition Theory

The first integrated theory of sexual offending behavior was put forth by Finkelhor in 1984. Finkelhor's theory, which applies only to child sexual abuse, outlines four preconditions that must exist for a sex offense to occur:

1. The motivation to abuse (e.g., sexual satisfaction, lack of other sexual outlets, a desire to have intimacy, a relationship with the child).

2. The overcoming of internal inhibitions (e.g., personal sense of morals, values, ethics; fear of being caught). Internal inhibitors may be overcome due to poor impulse control, the use of alcohol or drugs, engaging in excuses and justifications, or impaired mental ability.

3. The overcoming of external inhibitors (e.g., lack of privacy, adequate supervision, strong personal boundaries of the child, good support system around the child, negative social consequences). For an offender to overcome external inhibitors, he or she must locate both an opportunity for privacy and a child with poor boundaries and inadequate supervision. The offender also must consider that the possibility of negative consequences is unlikely.

4. The overcoming of victim resistance (e.g., taking advantage of a trusting relationship with

the child or caregiver; using bribes, trickery, or manipulation). These strategies are called "grooming behaviors" and are used by the offender to successfully engage the potential victim.

Summary of the Evidence on Finklehor's Precondition Theory

Although the existence of motivating conditions (overcoming internal and external inhibitors as well as victim resistance) has been supported, **Finklehor's Precondition Theory never explained why someone would possess such motivation in the first place.** For example, Howells (1994) noted that while poor social skills or lack of available sources of sexual gratification (among other factors) may be important, they are not direct causes of sexual offending. It is also unclear whether deviant sexual interest, deficits in intimacy, or a need for power and control may be at work when an individual offends.

Marshall and Barbaree's Integrated Theory

In this theory, the prominent causal factors for sexual offending are developmental experiences, biological processes, cultural norms, and the psychological vulnerability that can result from a combination of these factors. Marshall and Barbaree (1990) proposed that early negative experiences in childhood (e.g., sexual abuse, physical abuse, neglect) cause children to view their caregivers as emotionally absent, and to see themselves as being unworthy to receive love or be protected. This results in low self-esteem, poor interpersonal skills, and weak coping skills. The presence of antisocial and misogynist attitudes in the home can be aggravating factors. If adolescent males feel inadequate, the theory argues, they are more likely to accept messages that elevate men to positions of power and dominance. Another key feature of the theory is that sex meets a number of psychological needs beyond sexual gratification. These may include an increased sense of competence, elevated self-esteem, personal connection and fulfillment, and a sense of achieving the ideal image of masculinity.

Marshall and Barbaree suggested that a key developmental task for adolescent boys is to learn to distinguish between sexual impulses and aggression. They argued that this task is difficult because both types of impulses are generated by the same brain structure. Hence, adolescent boys may find it difficult to know when they are angry, sexually aroused, or both, and they must learn how to inhibit aggression in sexual situations. Combined with the influx of hormones that occur in adolescence, these factors render the young male vulnerable to developing sex-offending behaviors. Situational factors such as loneliness, social rejection, or a loss of a relationship may then trigger the sexually abusive acts committed by adolescents. The more vulnerable a person is to committing a sexual offense, the less intense these situational experiences need to be to trigger sexually aggressive behavior.

A later addition to the theory by Marshall and Barbaree is that mood states initially associated with sexual arousal may later be able to elicit sexual desire on their own through the process of conditioning. For example, if a young man frequently uses masturbation to cope with loneliness, eventually the state of loneliness itself creates sexual arousal.

Summary of the Evidence on Marshall and Barbaree's Integrated Theory

Marshall and Barbaree's Integrated Theory has been the subject of much research. **Many of the theory's hypotheses—such as the presence of poor impulse control and a lack of sufficient social skills in sexual offenders—have been supported through research** (Smallbone & Dadds, 2000). Additionally, Smallbone and Dadds (2000) found that insecure childhood attachment, especially parental attachment, can be linked to coercive sexual behavior. Thus, the theory is an important achievement. It is both innovative and has many compelling features. One of its key strengths is its ability to unite multiple influences. **Even so, a number of the theory's features merit closer examination** (Ward, 2000). One concern is the issue of embedded offense pathways to sexual offending behavior. There are distinct and possibly competing offense pathways (e.g., early exposure to problematic relationships, unsuccessful relationships, negative consequences for masturbation, deviant

sexual fantasies to boost self-esteem and a sense of power or worth) in the model. Once these etiological pathways are identified and distinguished from one another, it becomes difficult to explain why a specific pathway leads to specific sexual rather than other offending behavior.

Another weakness relates to impulse control. In their theory, Marshall and Barbaree placed great emphasis on the loss of impulse control, stating that individuals commit sex offenses due to their failure to inhibit deviant impulses. However, the empirical evidence indicates that while some sex offenders have trouble with sexual impulse control, this is not the case for all sexual offenders. In fact, research shows that a comparably small number of sex offenders have problems with self-regulation (Proulx, Perreault, & Ouimet, 1999). Another weakness is the claim that adolescent males have difficulty distinguishing sexual drives from aggression because sexual urges and aggression are generated by the same general neurological structures. The assumption that basic human drives and capacities share neurological structures has been cast into doubt by the results of several studies (Kolb & Whishaw, 1995; Symons, 1979; Tooby & Cosmides, 1992).

Hall and Hirschman's Quadripartite Model

Hall and Hirschman (1991) grouped sex offender personality traits and characteristics derived from other studies into four factors they believed to be most significant in the etiology of sex offending: 1) sexual arousal, 2) thought processes, 3) emotional control, and 4) personality problems or disorders. Hall and Hirschman proposed that while all four factors are important, one is generally prominent in the individual sexual offender.

> *"Many sex offenders have problems with self-regulation and impulse control."*

For example, Hall and Hirschman determined that it is not only sexual arousal that is driving the deviant sexual behavior, but the individual's

thoughts regarding the arousal. Thought processes—particularly those involving justifications and myths—may disinhibit an individual to such an extent that deviant sexual behavior seems acceptable or even appropriate. Believing rape myths is a prime example. Negative emotional moods also often precede sexual offending, with anger being an important aspect of negative emotion for rapists and depression being the same for child molesters. These emotional states become so uncomfortable that the individual has further difficulty controlling behavior. The final factor includes negative childhood conditions that contribute to personality characteristics highly associated with personality disorders. They include traits such as selfishness, a manipulative and exploitative personality, lack of remorse, and an unstable or antisocial lifestyle. These traits interact with deviant sexual arousal, lack of emotional control, or negative thought processes and intensify their respective impacts.

Summary of the Evidence on Hall and Hirschman's Quadripartite Model

Hall and Hirschman's theory is based on sound empirical research about the traits of sex offenders, including the use of cognitive distortions, the presence of poor impulse control, and problems with self-regulation of emotions and mood. Additionally, the notion that individual offenders display contrasting problems has empirical support. **Nevertheless, the theory has serious limitations.** One significant shortcoming is the failure of the theory to adequately explain the relationships that exist and interactions that take place among the theory's four etiological factors. Another shortcoming is the theory's inability to identify causal mechanisms behind each factor. A third is the theory's failure to explain how the factors function as motivations to abuse (Ward, 2000; Ward, Polachek, & Beech, 2006; Stinson, Sales, & Becker, 2008). Ward (2001) also argues that Hall and Hirschman seem to confuse typology with theory. (For an explanation of "Sex Offender Typologies," see chapter 3 in the Adult section.) Taken together, these shortcomings significantly limit the theory's etiological and clinical utility.

Ward and Siegart's Pathways Model

Ward and Siegert's Pathways Model attempts to combine the best of all of the integrated theories previously mentioned. The model suggests that a number of different pathways lead an individual to engage in sexually abusive behavior. Within each pathway is a unique set of factors that contribute to the problem of sexual abuse. The theory focuses primarily on the sexual abuse of children by adults.

Based on different symptom clusters, Ward and Siegert created five different causal pathways for the development of problematic and abusive sexual behavior:

1. The **intimacy deficit pathway** describes an offender who takes advantage of an opportunity to offend if a preferred sexual partner is not available. This offender has significant problems with intimacy and turns to sex to ease feelings of loneliness.

2. The **deviant sexual scripts pathway** suggests that sex offenders have distorted thought processes that guide their sexual and intimate behaviors. This involves a fundamental confusion between sex and intimacy as well as difficulty in determining when sexual contact is appropriate or desirable.

3. The **emotional deregulation pathway** is the primary cause of abusive sexual behavior with children. Offenders in this category demonstrate significant problems regulating emotional states. In this pathway, the offender experiences negative mood states that he or she is unable to manage.

4. The **antisocial cognition pathway** involves attitudes and beliefs supportive of criminal behavior. Such offenders have an antisocial lifestyle, a significant sense of entitlement, and little regard for the emotional and psychological needs of others. They commonly endorse cultural beliefs consistent with their offending lifestyle.

5. The **multiple dysfunctional mechanisms** pathway involves all symptom clusters associated with the previous pathways, with no single prominent feature among them.

In the pathways model, situational stressors serve as triggers to sexually abuse children. The specific triggers will vary according to the particular profile of causes underlying each individual's pathway. For example, for offenders who have distorted thought processes, the sexual need combined with the judgment that it is safe to abuse will result in a sexual offense. For an offender with deficits in emotional competence, intensely stressful situations can precede an offense (Ward, Polachek, & Beech, 2006).

Summary of the Evidence on Ward and Siegert's Pathways Model

This theory lacks a substantial evidential base. The data supporting the basic tenets came from other areas of psychology and there is little direct support from the sex offender research. It has also yet to be subjected to explicit evaluation. Additionally, there is no empirical justification for grouping offenders into separate categories. In fact, there is research to suggest that individuals in all five pathways share many of the same traits and they are not characteristic of only one pathway (Simon, 1997a, 1997b, 2002).

The theory also relies heavily on cognitive distortions related to deviant sexual attitudes and beliefs. However, similar to other cognitive theories, Ward and Siegert did not fully explain how an individual moves from a thought to a behavior. Nor did they address the origin of the symptom clusters or the role of each cluster. Finally, Ward and Siegert do not address the role of pedophilia in the sexual abuse of children. They mention that offenders experience deviant sexual arousal but do not explain the origin of this arousal. Rather, they focus on the psychological variables that interact with this arousal to result in sexual offending (Stinson, Sales, & Becker, 2008).

Nonetheless, the pathways model has a number of strengths. The model addresses some of the issues that have been empirically linked to sex offending behaviors. For example, problems with self-regulation of emotions and a sense of

entitlement have been shown to be associated with sex offending behavior, though not in a causal way. Perhaps the theory's greatest strength is its indepth description of the factors involved in sexual offending and the ability to unify promising aspects of other theories.

Malamuth's Confluence Model

The main idea behind Malamuth's Confluence Model is that two factors—sexual promiscuity and hostile masculinity—merge to result in sexually aggressive behavior. Sexual promiscuity is a preference for impersonal sex with many partners. A desire for intimacy through sex and the development of long-term relationships or monogamous sexual activity is lacking. The relevance of sexual promiscuity to sexually aggressive behavior is related to evolutionary theory. In short, natural selection has created fundamentally different psychological mechanisms in the brains of women and men with regard to sex and intimacy, resulting in the male's preference for short-term over long-term mating patterns. If men are adapted for sexual performance in impersonal contexts, then a disinterested or unwilling partner may fail to inhibit or may even entice sexual aggression.

Hostile masculinity involves dominating and controlling personality traits, particularly in regard to women. According to Malamuth's theory, it is in women's reproductive interest to withhold sex from insufficiently invested partners. Drawing on an earlier study that found that withholding sex angers men (Buss, 1998), Malamuth theorized that if a woman repeatedly withholds sex from a man, or does so at a developmentally significant time, the male may develop a chronically hostile interpersonal style. Thus, the male will be easily angered and resort to coercion and force to assert his dominance whenever he perceives that a woman is threatening his reproductive success (Malamuth, 1996).

Dean and Malamuth (1997) introduced a third component to the confluence model—the influence of a high-dominance, low-nurturance approach to interpersonal relationships. This personality style is distinguished by self-interested motives and goals, a lack of compassion or insensitivity, and little concern for potential harm to others (Malamuth, 1998).

Malamuth suggested that the level of dominance or nurturance traits develops as a result of early childhood socialization and the incorporation of familial and cultural messages. Malamuth also believed the development of a dominant personality style was due in part to evolutionary processes (Dean & Malamuth, 1997; Malamuth, 1998).

Summary of the Evidence on Malamuth's Confluence Model

Research on the confluence model suggests that a number of important tenets of the theory are valid. For example, a relationship between dominance and sexual aggression has been documented empirically. There is also empirical evidence that those who use sexual coercion are more likely to endorse short-term mating strategies, and that hostile masculinity is related to negative attitudes toward women (Dean & Malamuth, 1997; Malamuth et al., 1995). Research has also found that men with self-interested motives are far more likely to act on aggressive thoughts than those with more compassion or empathy (Malamuth, 1998). **Still, the confluence model has limitations, many of which relate to the shortcoming of evolutionary theory,** including using animal models as a basis for modeling human behavior (Stinson, Sales, & Becker, 2008). Also, the confluence model does not take into consideration situational factors, emotional dysregulation, or strong cognitive rationalizations. These and other variables that may contribute to sexual aggression have not been considered in the confluence model, and their absence from the model has not been adequately explained.

Stinson, Sales, and Becker's Multimodal Self-Regulation Theory

Multimodal Self-Regulation Theory was recently introduced as an etiological explanation of sexual offending by Stinson, Sales, and Becker (2008). The theory integrates various psychological perspectives and implicates self-regulatory deficits as a key variable in the development of sexually inappropriate interests and behaviors. As part of the theory, Stinson, Sales, and Becker (2008) argue that significant self-regulatory deficits resulting from negative childhood experiences combine for the development of deviant sexual interest and

arousal. When certain biological and temperamental vulnerabilities are also present, the individual is unable to manage his or her behavior and sexual offending can result.

Key to this theory is the premise that sexual arousal becomes linked with a deviant or inappropriate stimulus at some early point in sexual development. This occurs through the mind's attempt to label the experience of sexual arousal and to associate a source with the arousal. Since this scenario is unlikely to occur on its own, other dynamics are necessary for the connection to occur. The individual would have to normalize the experience in some way and also lack other sources to achieve the same results. Stinson, Sales, and Becker (2008) suggested that behavioral conditioning in the development of abusive sexual behaviors also occurs, as sexual gratification coupled with a lack of corrective action helps to solidify the behavior. Over time, the reinforcing effects of these practices, combined with a lack of negative consequences, will contribute to the development of a deviant sexual interest. Stinson, Sales, and Becker (2008) also suggested that cognitive beliefs and personality traits could serve as mediators in the development of deviant sexual behaviors. These include egocentricity, a need for excitement and sensation, resentment and a sense of entitlement, impulsivity, and irresponsibility. Finally, external factors (e.g., parental support for violence against women) and the development of offense-supportive cognitive beliefs (e.g., a man's right to control a woman) solidify the behavior in the individual.

Summary of the Evidence on Stinson, Sales, and Becker's Multimodal Self-Regulation Theory

Given the relatively recent introduction of the **multimodal self-regulation theory, there is a paucity of empirical research regarding its validity.** However, **there is empirical support for many tenets of the theory,** including the roles that negative developmental experiences, cognitive distortions, and a lack of emotional control play in sexual offending. Still, some of the linkages hypothesized in the theory have been criticized for being implausible (a criticism the authors themselves acknowledge) because deviant sexual

interests are not found among all sex offenders, making it difficult to generalize the theory to the larger sex offender population (Stinson, Sales, & Becker, 2008). Far more evaluative research needs to be undertaken before the validity and utility of the multimodal self-regulation theory can be determined.

Summary

The field of sex offender management has yet to find a clear explanation or cause for sexual offending behavior. Despite many unanswered questions, research has produced a number of important findings about the etiology of sexual offending:

1. No single factor or cause of sexual offending has yet been identified. Research suggests that a combination of factors likely contribute to sexual offending behavior.

2. Negative or adverse conditions in an individual's early development lead to poor attachment to others, particularly caregivers, and these conditions contribute to the development of sexual offending behaviors. These negative or adverse conditions may include sexual and/or physical abuse, as well as emotional neglect or absence.

3. Like other behaviors, sexual abuse appears to be a learned behavior. Further, the learning of sexually abusive behavior is influenced by reinforcement and punishment. If the perceived punishment for sex offending is sufficient, the behavior is less likely to occur. However, the specific punishments needed to mitigate sexual offending remain unclear, particularly in light of the cognitive distortions maintained by many sex offenders.

4. Many sex offenders have cognitive distortions or thinking errors, and these distorted thinking patterns appear to be involved in maintaining deviant sexual behavior. Many child victims of sexual assault who have thinking errors related to their own assault develop sexual offending behaviors as adults. These thinking errors often

parallel common myths about sexual assault (e.g., there's nothing wrong with it, no harm is done, the victim wants it and enjoys it).

5. Repeated exposure to sexually violent pornography may contribute to hostility toward women, acceptance of rape myths, decreased empathy and compassion for victims, and an increased acceptance of physical violence toward women. Positive reinforcement for the behavior, coupled with thinking errors, increases the likelihood that these beliefs will lead to sexually abusive behaviors.

6. Sex offenders appear to have a problem with self-regulation of emotions and moods as well as with impulse control. Self-regulation and impulse control problems both appear to be related to sexual offending behavior. However, a causal relationship has not been clearly established.

7. Men who use sexual coercion are more likely to engage in short-term relationships and maintain negative attitudes toward women. Men with self-interested motives are more likely to act on aggressive thoughts than those with more compassion or empathy.

I**t also should be noted that other etiological variables that are not addressed in this chapter have been linked to sexual offending. These include alcohol and drugs, domestic violence, and mental illness.** These variables have been found to be factors in sex offending in some cases; however, there is no scientific evidence that any of these factors are the cause of sexual violence. In addition, there is evidence that some individuals who are already prone to sexual offending behavior become more likely to engage in that behavior when certain situational factors or variables are present. These factors may include limited intellectual functioning, the use of alcohol or drugs, stress within the family/home, or loss of a relationship or job. **These situational factors, however, do not cause the sexual offending behavior but may increase the likelihood that it will occur in an individual who is already prone to the problem.**

"There is no simple answer to the question of why people engage in sexual offending behavior. The problem of sexual offending is too complex to attribute solely to a single theory. Multifactor theories provide greater insight into the causes of sexual offending."

Although numerous theories concerning the etiology of sexual offending have been proposed and empirically tested, knowledge about the causes of sexual offending remains somewhat rudimentary. This is due, at least in part, to two sets of factors— one related to etiological research and the other to etiological theories themselves. Two major, overwhelming shortcomings are noted from this review of the literature: the problem of sampling used in the research and a lack of intersection and balance among the different theoretical perspectives.

Much of the etiological research undertaken to date is based on populations of sex offenders who are either in treatment, in prison, or both. This is problematic because the evidence is clear that many sex offenders are never identified by authorities; hence, these studies generally represent a very small percentage of individuals who engage in sexually aggressive or abusive behavior. Many etiological studies also rely on data self-reported by sexual offenders. Because sex offenders are commonly known to engage in cognitive distortions, the validity of their self-reporting remains questionable. There may also be incentives for cooperation in treatment, such as reduced sentencing. Offenders who deny their offenses altogether typically are not included in research. Because many perpetrators who engage in sexually aggressive and abusive behaviors deny it, this implies that a large percentage of the population is ignored in research.

Equally important is the propensity of etiological theories to focus on explanations for sexual offending that reside within the individual. Most etiological theories are steeped in the traditional

scientific fields of biology, psychology, and psychiatry. Hence, the focus largely has been on psychopathological and cognitive-behavioral causes of sex offending. These perspectives, in turn, have strongly influenced policy debates regarding sex offender management and intervention. Few of the integrated theories that have been proposed consider the ways in which social structures and cultural phenomena contribute to sexual offending behavior. Some theories acknowledge situational and environmental factors as related variables or mediators, but the overwhelming emphasis is related to problems within the individual. Consideration of a broader range of theoretical perspectives may be necessary to understand and effectively combat sexual offending behavior. **Ending sexual violence may require knowledge and change at the individual, social, and institutional levels.**

Several other dynamics identified in etiological research warrant further study. They include:

1. Early maltreatment in childhood development and its impact on attachment.

2. The role of distorted thinking, how thinking errors originate, and why some individuals act on these thoughts and others do not.

3. How sexual behavior is learned and, more specifically, the role of punishment (e.g., what punishment is most effective, when and how punishment should be administered) and reinforcement (including the lack of reinforcement for nonoffending sexual behaviors).

4. The impact of sexually violent and exploitive images in the culture, not only in pornography but also in advertising, videos, and music (among others).

Because much of the etiological research undertaken to date is retrospective in nature, there is a clear need for prospective, longitudinal research, particularly to explore antecedents to sex offending and changes in sexually aggressive behavior over time. Efforts to employ samples that are more representative of the range of individuals who commit sex crimes also are needed, along with studies that include samples of nonoffenders and studies that incorporate the experiences of victims. Victims—both female and male—could contribute valuable information about offender motivations and behaviors through detailed disclosures of their interactions with offenders. This would also allow more opportunity to include the experiences of female victims, as opposed to the current focus on male victims who become sexual abusers. Rather than focusing on why some male victims go on to abuse others, perhaps it is time to ask why most victims, particularly females, do not go on to engage in offending behavior. Including family members associated with the offender could be useful as well. More research into the area of gender relations within the culture is also merited. **There also is a need for further study regarding the integration of theories and the ways that different factors involved in sexual offending relate to one another. This need was identified by the national experts at the SOMAPI forum.** Success in this area, however, requires more openness and collaboration among researchers with different theoretical perspectives and less loyalty to a particular focus or field of study.

Notes

1. This chapter does not distinguish between offenders who sexually abuse adults and those who sexually abuse children. However, when a theory focuses specifically on one of those populations, it is noted in the discussion. In addition, this chapter does not present research findings on the etiology of sexual offending perpetrated by juveniles. (For that discussion, see chapter 2, "Etiology and Typologies of Juveniles Who Have Committed Sexual Offenses," in the Juvenile section.)

2. Feminist theorists argue that all pornography is violent because it is based on the sexual exploitation and degradation of women.

Chapter 3: Sex Offender Typologies
by Dominique A. Simons

Introduction

Sexual violence remains a serious social problem with devastating consequences. However, scarcity of resources within the criminal justice system continues to impede the battle against sexual violence. The challenge of "making society safer" not only includes the need for resources, but also requires a comprehensive understanding of accurate offense patterns and risk. (For a discussion of adult "Sex Offender Risk Assessment," see chapter 6 in the Adult section.) This knowledge may be used to devise offense typologies, or classification systems, that will inform decisions regarding investigation, sentencing, treatment, and supervision. (For more on "Effectiveness of Treatment for Adult Sex Offenders," see chapter 7 in the Adult section.)

Although other typologies exist, this chapter only includes the classification systems that have been empirically derived and validated. Two empirically validated typologies—Massachusetts Treatment Center: Child Molester Version 3 (MTC: CM3) and Rapist Version 3 (MTC: R3) (Knight & Prentky, 1990)—were not included because some researchers (e.g., Barbaree et al., 1994; Camilleri & Quinsey, 2008; Hudson & Ward, 1997) have questioned their clinical utility.[1]

The crossover offending section encompasses more than 25 years of research using different methodologies and populations. Although not considered a classification system due to the dynamic nature of the offense pathways, the self-regulation model (SRM) was reviewed due to its clinical utility and relationship to risk. SRM has been validated using several offender populations and methodologies. Due to the limited scope of this chapter, this review focuses on adult sexual offenders, although some juvenile studies are included, where relevant. (For a discussion of "Etiology and Typologies of Juveniles Who Have Committed Sexual Offenses," see chapter 2 in the Juvenile section.)

Summary of Research Findings
Traditional Typologies

The majority of theories regarding sexual deviance postulate that sexual offenders specialize in types of victims and/or offenses (Simon, 1997). Researchers have developed specific classification-unique offender characteristics (Knight & Prentky, 1990; Simon et al., 1992). Most of these typologies imply

that victimization (i.e., who is a potential victim) is linked to the specific type of sexual offender (e.g., rapists sexually assault adults/peers, child sexual abusers sexually assault children).

Traditional typologies have been developed to provide a comprehensive understanding of deviant sexual behaviors required for treatment intervention and effective supervision. However, classifying sexual offenders has been shown to be problematic. Sexual offenders exhibit heterogeneous characteristics, yet they present with similar clinical problems or criminogenic needs (e.g., emotional regulation deficits, social difficulties, offense supportive beliefs, empathy deficits, and deviant arousal); the degree to which these clinical issues are evident varies among individual offenders (Ward & Gannon, 2006). Overall, traditional typologies have demonstrated considerable problems, as indicated by inadequate definitions and inconsistent research findings. In addition, most of the typologies have failed to address treatment issues and to predict recidivism (Camilleri & Quincy, 2008; Knight & Prentky, 1990). (For information on "Adult Sex Offender Recidivism," see chapter 5 in the Adult section.) This section reviews the most frequently used and empirically tested sex offender typologies for child sexual abusers, rapists, female offenders, and Internet sexual offenders.

Child Sexual Abusers

Finkelhor (1984) provides the most comprehensive definition of child sexual abuse—child sexual abuse is the use of force/coercion of a sexual nature either when the victim is younger than age 13 and the age difference between the victim and the perpetrator is at least 5 years, or when the victim is between 13 and 16 and the age difference between the victim and perpetrator is at least 10 years. In this definition, coercion does not necessarily imply a direct threat. Child sexual abusers often develop a relationship with a child to manipulate him or her into compliance with the sexual act, which is perhaps the most damaging component of child sexual abuse (John Jay College, 2004). Indeed, a defining feature of child sexual abuse is the offender's perception that the sexual relationship is mutual and acceptable (Groth, 1983).

Differences Between Child Sexual Abusers and Rapists

Child sexual abusers have been difficult to classify as they vary in economic status, gender, marital status, ethnicity, and sexual orientation. Child sexual abusers are often characterized as exhibiting poor social skills, having feelings of inadequacy or loneliness, or being passive in relationships (Groth, 1979; Marshall, 1993). They differ from rapists with respect to thought processes and affect, and often describe their offending behaviors as uncontrollable, stable, and internal, whereas rapists attribute their offenses to external, unstable, and controllable causes (Garlick, Marshall, & Thorton, 1996). Child sexual abusers display deficits in information-processing skills and maintain cognitive distortions to deny the impact of their offenses (e.g., having sex with a child is normative; Hayashino, Wurtele, & Klebe, 1995). In contrast, rapists display distorted perceptions of women and sex roles, and often blame the victim for their offense (Polaschek, Ward, & Hudson, 1997). With respect to affect, child sexual abusers assault to alleviate anxiety, loneliness, and depression. Rapists typically assault as a result of anger, hostility, and vindictiveness (Polaschek, Ward, & Hudson, 1997). Many of these characteristics have been incorporated into the typologies of rapists and child sexual abusers (Camilleri & Quinsey, 2008; Groth, 1979; Knight & Prentky, 1990).

Pedophilic and Nonpedophilic Distinction

The most important distinction among child sexual abusers is whether they are pedophilic or nonpedophilic, because pedophilia is a strong predictor of sexual recidivism (Hanson & Bussiere, 1998). **Not all individuals who sexually assault children are pedophiles. Pedophilia consists of a sexual preference for children that may or may not lead to child sexual abuse (e.g., viewing child pornography), whereas child sexual abuse involves sexual contact with a child that may or may not be due to pedophilia** (Camilleri & Quinsey, 2008). According to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision (American Psychiatric Association, 2000), a diagnosis of pedophilia requires an individual to have recurrent, intense, and sexually arousing fantasies, urges, or behaviors directed toward a prepubescent

child over a period of at least 6 months; to have acted on these urges or to be distressed by them; and to be at least 16 years old and at least 5 years older than the child victim.

Types of Child Sexual Abusers

One of the first typologies was formulated from the delineation of pedophilic and nonpedophilic child sexual abuse. Groth, Hobson, and Gary (1982) classified child sexual abusers based on the degree to which the sexual behavior is entrenched and the basis for psychological needs (fixated-regressed typology). The fixated offender prefers interaction and identifies with children socially and sexually (Simon et al., 1992). These individuals often develop and maintain relationships with children to satisfy their sexual needs (Conte, 1991). In contrast, regressed child sexual abusers prefer social and sexual interaction with adults; their sexual involvement with children is situational and occurs as a result of life stresses (Simon et al., 1992). The majority of fixated child sexual abusers are individuals who sexually assault male children who are not related; regressed child sexual abusers often consist of incest offenders or offenders who sexually assault female adolescents (Priest & Smith, 1992). The fixated-regressed typology has been incorporated into the current models of sexual offending (e.g., self-regulation model; Ward & Hudson, 1998, 2000) discussed later in this chapter.

Victim Characteristic Distinction

Of the traditional models, the victim gender-relationship typology is the only model that has demonstrated clinical utility because it accounts for much of the variability in child sexual abuse, addresses treatment issues, and is related to recidivism (Camilleri & Quinsey, 2008). The gender of the victim remains an important distinction among child sexual abusers because this factor has been shown to be a strong predictor of sexual reoffense (Hanson & Bussiere, 1998), although exactly what can be predicted is unclear. One study showed that male child sexual abusers who assault males are twice as likely to recidivate in comparison to offenders who abuse females (Quinsey, 1986). Yet, contradictory findings have also been reported in the literature. Several studies found that child sexual

abusers who sexually assault females report over twice as many victims as same-sex child offenders (Abel et al., 1981). More recent studies have shown that mixed-gender child sexual abusers reported the highest number of victims and offenses (Simons & Tyler, 2010) and the highest rates of risk for reoffense (Abel et al., 1988). However, small sample sizes have limited the extensive investigation of this group.

"Extrafamilial child sexual abusers are more likely to be diagnosed with pedophilia and are often unable to maintain adult relationships."

Within this typology, child sexual abusers are also categorized based on their relationship to the victim (i.e., intrafamilial or extrafamilial). According to Rice and Harris (2002), intrafamilial child sexual abusers (i.e., incest offenders) are less psychopathic, less likely to report male victims, cause less injury, are less likely to exhibit pedophilia, and have lower sexual and violent recidivism rates. Extrafamilial child sexual abusers are more likely to be diagnosed with pedophilia and are often unable to maintain adult relationships (Prentky et al., 1989). Although intrafamilial child sexual abusers substitute a child for an adult sexual partner, they often maintain their adult sexual relationships (Miner & Dwyer, 1997). Studies have reported that intrafamilial child sexual abusers have fewer victims as compared to extrafamilial sexual offenders (Miner & Dwyer, 1997). However, these studies relied on official records (i.e., criminal convictions) and do not take into account the possibility that many incest offenders may have undisclosed victims to whom they are not related. Nonetheless, the gender/relationship typology is the most frequently used and researched typology of child sexual abusers.

Rapists

In comparison to child sexual abusers, rapists are more likely to be younger, to be socially competent, and to have engaged in an intimate relationship (Gannon & Ward, 2008). Rapists differ from child sexual abusers in that they tend to be of lower socioeconomic status and are more likely to abuse substances and exhibit a personality disorder

(e.g., antisocial disorder) or psychosis (Langstrom, Sjostedt, & Grann, 2004). In addition, rapists often display the following criminogenic needs: intimacy deficits, negative peer influences, deficits in sexual and general self-regulation, and offense-supportive attitudes (e.g., justification of the sexual offense and feelings of entitlement in relation to the expression of a strong sexual desire) (Craissati, 2005).

Rapists and Violent Offenders

Rapists have been found to have a greater number of previous violent convictions, and they tend to use greater levels of aggression and force than child sexual abusers (Bard et al., 1987). Likewise, rapists are more likely to reoffend violently rather than sexually. A meta-analysis conducted by Hanson and Bussiere (1998) found that of 1,839 rapists, 19 percent (n = 349) sexually recidivated and 22 percent (n = 405) violently recidivated over an average followup of 5 years.[2] The researchers assessed recidivism from several studies that reported the commission of another sex crime (e.g., rape) or violent crime (e.g., assault) through reconviction records (84 percent), arrest records (54 percent), self-reports (25 percent), and parole violation records (16 percent).[3] They caution that these findings are based on diverse methods and followup periods.

Rapists have been shown to resemble violent offenders or criminals in general. Similar to violent offenders, Simon (2000) found that rapists displayed significant diversity in their offense records in comparison to child sexual abusers and had committed equivalent proportions of drug-related offenses, thefts, and burglaries. Harris, Mazerolle, and Knight (2009) suggest that rape can be explained by the general theory of crime. Rapists are versatile criminals who engage in many different types of crime over time; sexual offending reflects only one manifestation of an underlying antisocial condition (Gottfredson & Hirschi, 1990).

Types of Rapists

The majority of traditional rapist typologies have focused on the relationship to the victim, degree of aggression, motivation, sexual versus nonsexual nature of the assault, and degree of control

(impulsive vs. planned). Like child sexual abusers, rapists are often classified by their relationship to the victim (i.e., stranger vs. acquaintance). Seventy-three percent of rapists know their victims (Bureau of Justice Statistics, 2012). Acquaintance rapists are characterized as coercive, less violent, and less opportunistic than stranger rapists (Bruinsma, 1995). In contrast, stranger rapists are more hostile and use more expressive violence (i.e., inflicting pain or injury as the goal itself) toward women (Polaschek, Ward, & Hudson, 1997).

"Rapists have been shown to resemble violent offenders or criminals in general.

Acquaintance rapists are less violent and opportunistic than stranger rapists, who are more hostile and use expressive violence."

Rapists have also been classified based upon motivational characteristics. Groth (1979) created a typology based upon the degree of aggression, the underlying motivation of the offender, and the existence of other antisocial behaviors, which resulted in four types of rapists. The power-reassurance or sexual-aim rapist is characterized by feelings of inadequacy and poor social skills and does not inflict injury upon his victims (National Center for Women and Policing, 2001). The violence used by the power-reassurance rapist is only sufficient to achieve the compliance of the victim or to complete the sexual act. Such an individual may perceive that the victim has shown a sexual interest in him, or that by the use of force the victim will grow to like him (Craissati, 2005). The power-assertive or antisocial rapist is impulsive, uses aggressive methods of control, and abuses substances. His sexual assaults are often unplanned and he is unlikely to use a weapon (Groth, 1979). The third type of rapist is the anger-retaliation or aggressive-aim rapist, who is motivated by power and aggression. This individual sexually assaults for retaliatory reasons and often degrades or humiliates the victim.

The fourth type is the sadistic rapist, who reenacts sexual fantasies involving torture or pain. Sexual sadism is defined as the repeated practice of cruel sexual behavior that is combined with fantasy and characterized by a desire to control the victim (MacCullock et al., 1983). This type is characterized by extensive planning and may often result in sexual murder (Groth, 1979). Although it has been reported in only 5 percent of rapists (see Craissati, 2005, for a review), sexual sadism has consistently been shown as a strong predictor of both sexual and violent recidivism (Hanson & Morton-Bourgon, 2005).

Although inherently useful for research purposes, these traditional rapist typologies demonstrate little clinical utility because they exclude the irrational cognitions (i.e., offense-supportive beliefs) displayed by most men who commit rape (Hudson & Ward, 1997).

Female Sexual Offenders

Differences between male and female sexual offenders are identified in the literature. In contrast to male sexual offenders, female offenders are more likely to sexually assault males and strangers (Allen, 1991). Studies have also shown that female sexual offenders are less likely than male sexual offenders to sexually reoffend (Freeman & Sandler, 2008). For example, Cortoni and Hanson (2005) found a female sexual recidivism rate of 1 percent over a 5-year average followup period with a sample of 380 females. Yet the most evident distinction between male and female offenders is that female offenders are more likely to sexually assault with another person or group (i.e., co-offenders). In a sample of 227 female sexual offenders, Vandiver (2006) found that 46 percent offended with another person and the majority of these co-perpetrators were male (71 percent), 62 percent offended with one individual, and 38 percent offended within a group. Studies have differentiated female co-offending according to whether the female participated in an active or passive role (Grayston & De Luca, 1999; Nathan & Ward, 2002). Females who take an active role in the abuse engage in direct sexual contact with the victim. Females who participate passively do not engage in direct sexual contact; instead, these women may observe the abuse but not intervene, procure victims for others to sexually assault, or expose children to pornography or sexual interaction (Grayston & De Luca, 1999).

"Typologies of female offenders include the co-offender and the teacher lover/heterosexual nurturer."

Recently, more extensive typologies of female sexual offending have been developed to summarize these female offense characteristics (Matthews, Mathews, & Speltz, 1991; Nathan & Ward, 2002; Vandiver & Kercher, 2004). Most of the typologies differentiate female offenders based on the presence of a co-offender, the age of the victim, and the motivation for the offense. Females who co-offend with a male (i.e., accompanied abusers) have been described as emotionally dependent, socially isolated, and displaying low self-esteem (Matthews, Mathews, & Speltz, 1991; Nathan & Ward, 2002). These individuals are further differentiated based on the use of coercion by the accomplice. Female offenders coerced into sexual offending are motivated by fear and dependence upon the co-offender (Matthews, Mathews, & Speltz, 1991). Although they initially perpetrate under duress, some later initiate the abuse on their own (Saradjian & Hanks, 1996). These females have been shown to report a history of childhood sexual and physical abuse. Female offenders who accompany a male co-offender and take an active role in the abuse have been shown to be motivated by jealousy and anger and often offend in retaliation (Nathan & Ward, 2002).

Female offenders who sexually abuse alone (i.e., self-initiated abusers) are differentiated based upon age of the victim and motivation for the offense (Nathan & Ward, 2002). One typology, the teacher lover/heterosexual nurturer, describes female offenders who sexually abuse adolescent boys within the context of an acquaintance or position–of-trust relationship (Matthews, Mathews, & Speltz, 1991; Vandiver & Kercher, 2004). These females exhibit dependency needs and often abuse substances. They are less likely to report severe child maltreatment; instead, their sexual abuse behaviors often result from a dysfunctional adult relationship and attachment deficits. Female offenders within this category attempt to meet intimacy and/or sexual needs through sexual offending.

Self-initiated female offenders who sexually assault prepubescent children, and who are also referred to as predisposed offenders, have been shown to display significant psychopathologies (Matthews, Mathews, & Speltz, 1991). They are more likely than other female offenders to display symptoms of posttraumatic stress disorder (a serious psychological condition that occurs as a result of experiencing a traumatic event) (Foa, Keane, & Friedman, 2000) and depression. These female offenders report extensive physical and sexual abuse by caregivers. Researchers contend that they are often motivated by power (i.e., to reenact their childhood trauma, this time as the aggressor) and sexual arousal.

Recently, additional typologies have been added to describe female offenders who sexually assault adult or postpubescent females (Vandiver & Kercher, 2004). Female offenders who engage in the exploitation or forced prostitution of other females have been reported to be motivated by financial gain. These individuals also have higher number of arrests for nonsexual crimes. Female offenders who themselves sexually assault other female adults often offend within an intimate relationship as a form of domestic violence (i.e., aggressive homosexual offenders). They are motivated to assault out of anger, retaliation, and jealousy.

> *"To reduce the incidence and prevalence of sexual violence in the future, there remains a need for etiological research to provide an empirical basis for treatment interventions."*

Although these female typologies are useful to describe offense characteristics, they (like the male typologies) do not provide a theoretical framework for the etiology of sexual offending (Logan, 2008). (For a discussion of the "Etiology of Adult Sexual Offending," see chapter 2 in the Adult section.) To reduce the incidence and prevalence of sexual violence in the future, there remains a need for etiological research to provide an empirical basis for treatment interventions for female offenders.

Internet Offenders

The widespread availability of pornography on the Internet has facilitated the development and maintenance of sexual deviance (Delmonico & Griffin, 2008; Quayle, 2008). The Internet has been used as a vehicle for child sexual abuse in at least three ways: viewing pornographic images of children, sharing pornographic images of children, and luring or procuring child victims online (Robertiello & Terry, 2007). Individuals download pornographic pictures of children to aid arousal and masturbation, as a collecting activity, as a way of facilitating social relationships, and as a substitute for child sexual contact (Quayle & Taylor, 2003).

> *"Internet offender typologies: impulsivity/curiosity, fueling sexual interests, accessing victims/disseminating images, seeking financial gain."*

In comparison to child sexual abusers, Internet child pornography offenders reported more psychological difficulties in adulthood and fewer sexual convictions (Webb, Craissati, & Keen, 2007). In this study of 90 Internet offenders and 120 child sexual abusers (Webb, Craissati, & Keen, 2007), Internet offenders were more likely to succeed in the community (4 percent characterized as failures) and less likely to engage in sexually risky behaviors (14 percent) as compared to child abusers (29 percent and 26 percent, respectively). Formal failure was defined by reconviction, violation, and return to prison. With respect to demographics, the majority of offenders are male, younger than other sexual offenders, and likely to be of white European descent (Webb, Craissati, & Keen, 2007; Quayle, 2008; Seto, Hanson, & Babchishin, 2011). In a recent meta-analysis, Seto, Hanson, and Babchishin (2011) reported that in a sample of 2,630 online offenders, 4.6 percent recidivated sexually after an average followup period of 4 years. Likewise, of 983 online offenders, 4.2 percent recidivated with a violent offense. With respect to risk factors, Seto and Elke (2008) reviewed Canadian police files of 282 child pornography offenders to examine sexual contact

and predictors of recidivism; 10.3 percent of the sample sexually recidivated and 6.6 percent violently recidivated. Researchers reported substance abuse and criminal history predicted future contact sexual offenses; self-reported sexual interest in children, criminal history, and substance use problems predicted future violent offending among child pornography offenders.

Several typologies have been created to categorize Internet offenders. In their review of Internet offenders, Beech and colleagues (2008) summarized these typologies into four groups. The first group consists of individuals who access pornographic images impulsively and/or out of curiosity. This group includes those who never exhibited sexual problems until they discovered the Internet (Delmonico & Griffin, 2008). The second group is composed of individuals who access or trade pornography to fuel their sexual interest in children (Beech et al., 2008). For these individuals, the Internet facilitates an extension of an already existing pattern of sexual deviance (Delmonico & Griffin, 2008). The third group consists of sexual offenders who use the Internet as part of a pattern of offline contact offending, including those who use it to acquire victims and/or disseminate images that they produce (Beech et al., 2008; Delmonico & Griffin, 2008). The fourth group consists of individuals who download pornographic images for nonsexual reasons (e.g., financial gain). To date, studies have not examined the personality characteristics, criminogenic needs, or risk factors of these offenders. In addition, it is not known if these offenders are pedophiles and whether they view pornographic images more than the general population (Quayle, 2004).

For more on "Internet-Facilitated Sexual Offending," see chapter 4 in the Adult section.

Limitations of Traditional Typologies: Crossover Offending

Traditional typologies rely on an official record and/or self-report data. Over 25 years of research (including victim and offender studies) have shown that only 1–3 percent of offenders' self-admitted sexual offenses are identified in official records (Abel et al., 1988; English et al., 2003; Heil,

Ahlmeyer, & Simons, 2003; Tjaden & Thoennes, 2006). These studies reported a "crossover effect" of sex offenders admitting to multiple victims and offenses atypical of criminal classification. Specifically, studies (e.g., Abel et al., 1988; English et al., 2000; Heil, Ahlmeyer, & Simons, 2003; O'Connell, 1998) have shown that rapists often sexually assault children and incest offenders often sexually assault children both within and outside their family. These findings are consistent among populations (e.g., community, prison, parole, probation) and methodologies (e.g., guaranteed confidentiality, polygraph testing). This section reviews the evidence of crossover offending, which challenges the validity of traditional sex offender typologies (those that are based on a known victim type).

> *"Crossover offending presents significant challenges to traditional sex offender typologies."*

Despite differences in location and supervision status of offenders, crossover offending has been reported in studies using guaranteed confidentiality, anonymous survey, or treatment with polygraphy[4] (Abel et al., 1988; Emerick & Dutton, 1993; English et al., 2003; Heil, Ahlmeyer, & Simons, 2003; O'Connell, 1998; Simons, Heil, & English, 2004; Weinrott & Saylor, 1991; Wilcox et al., 2005). The findings indicate that offenders, on average, admit significantly more victims and offenses than are documented in official records. Using polygraph testing combined with treatment, Heil, Ahlmeyer, and Simons (2003) examined offense patterns of 223 incarcerated and 266 paroled sex offenders. This study found that the average number of victims reported in official records (2 for incarcerated offenders and 1 for paroled offenders) increased to 18 and 3, respectively, after polygraph testing. The average number of offenses reported in official records increased from 12 for incarcerated offenders and 3 for paroled offenders to 137 and 14 respectively, after polygraph testing.

These studies have also demonstrated that male sexual offenders engage in crossover sexual offending at higher rates than reported in other studies (e.g., Guay et al., 2001; Marshall, Barbaree, & Eccles, 1991; Smallbone & Wortley, 2004). Age

crossover (i.e., victimizing both children and adults) ranged from 29 to 73 percent (Simons, Heil, & English, 2004; Wilcox et al., 2005). Of further interest is the high percentage of official record-identified rapists who admit child sexual victimization. Studies have reported prevalence rates from 32 to as high as 64 percent; the majority of studies found rates in the range of 50 to 60 percent (Abel & Osborn, 1992; English et al., 2000; Heil, Ahlmeyer, & Simons, 2003; O'Connell, 1998; Wilcox et al., 2005). With respect to gender crossover (i.e., victimizing both males and females), findings have been relatively consistent and range from 20 to 43 percent (Abel & Osborn, 1992; English et al., 2000; Heil, Ahlmeyer, & Simons, 2003). The majority of offenders who assault males have also assaulted females (63–92 percent), but not the reverse (23–37 percent). With respect to relationship crossover, studies have shown that 64–66 percent of incest offenders report sexually assaulting children who they were not related to (Abel and Osborn, 1992; English et al., 2000; Heil, Ahlmeyer, & Simons, 2003).

Heil, Simons, and Burton (2010) reported similar findings with respect to offense patterns among female sexual offenders. Using polygraph testing, Simons and colleagues (2008) examined the offense patterns of incarcerated female sex offenders and female sex offenders who had been released in the community. The sample consisted of 74 incarcerated adult female sexual offenders and 22 female sexual offenders in the community who were under supervision at the Colorado Department of Corrections (CDOC). All participants received cognitive-behavioral treatment. Offense patterns disclosed during treatment with polygraph testing revealed similar findings to those of male offenders. Female sexual offenders reported more extensive offense patterns (i.e., number of victims and offenses, crossover offending) than otherwise indicated by their criminal history.

Simons and colleagues (2008) demonstrated that the average number of victims—reported in official records as one for both incarcerated offenders and offenders in the community—increased to four and three, respectively, after polygraph testing. The average number of offenses increased from 33 for incarcerated offenders and 5 for offenders

in the community to 44 and 13, respectively. In comparison to female sexual offenders in the community, incarcerated female sexual offenders reported significantly more offenses, but these groups were comparable in the number of victims. After polygraph testing, 21 percent of incarcerated females and 11 percent of female offenders in the community reported age crossover (i.e., offending against children and adults). Both incarcerated offenders (30 percent) and those in the community (21 percent) disclosed relationship crossover (i.e., offending against individuals from more than one relationship). This study indicates that female sexual offense patterns may be less extensive than those of male sexual offenders. Nonetheless, this research indicates that female offenders report poor sexual boundaries regarding illegal behaviors and they also disclose legal, but sexually problematic, behaviors. In addition, female offenders were more likely to co-offend than male offenders. Based on polygraph testing, these co-offenses were seldom coercive and the majority of women sexually assaulted alone either before or after the co-offense.

Polygraph testing has also recently been used to distinguish Internet offenders who commit "hands-on" child sexual assault from those who do not attempt physical sexual contact. Some Internet sex offenders do not attempt physical contact or engage in hands-on sexual offending (e.g., Surjadi et al., 2010; Quayle & Taylor, 2003; Webb, Craissati, & Keen, 2007). This classification is important because those individuals who view or download child abuse images but do not have inappropriate contact with children may not pose a direct threat. A recent meta-analysis examined the prevalence of child sexual abuse among Internet offenders. Seto, Hanson, and Babchishin (2011) reviewed 24 studies and found that 12.5 percent of Internet offenders engaged in hands-on offending as indicated by official records; however, this rate increased to approximately 50 percent using self-report. In this meta-analysis, only one study used polygraph testing to verify the self-report. Bourke and Hernandez (2009) demonstrated significant increases in the number of previously undisclosed victims, offenses, and paraphilic interests when self-report is corroborated through polygraph examination. Using polygraph testing, these researchers examined the

prevalence of hands-on sexual offending among 155 Internet child pornography offenders. Prior to testing, 74 percent (n = 115) of the Internet offenders had no known sexual contact with children. After polygraph examination, 85 percent of 155 (n = 132) offenders disclosed hands-on sexual abuse. These findings suggest that crossover to hands-on offending may be more prevalent among Internet offenders and further support the use of the polygraph to classify offenders. However, additional research is needed in this area due to the limitations of this study. The sample consisted of volunteers and the majority reported hands-on offenses prior to Internet pornography use. Future research should differentiate between those who view pornography and later commit sexual abuse from those who use pornography as a supplement to or a substitute for sexual contact. (For more on "Internet-Facilitated Sexual Offending," see chapter 4 in the Adult section.)

"The interaction of biological and social learning factors influences the development of sexual offending."

Taken together, crossover findings suggest that traditional typologies based on victim type may not be useful to allocate resources, evaluate risk, or devise individualized treatment interventions. Although crossover findings have been reported in numerous studies using different methodologies, some suggest that the prevalence of age crossover or multiple paraphilias is overstated, particularly in studies that use polygraph testing. Kokish, Levenson, and Blasingame (2005) report that 5 percent of individuals stated that they provided false admissions in response to a deceptive result on a polygraph exam. In addition, Marshall (2007) contends that very few sexual offenders commit more than one type of offense.

Accurate self-reporting of victim and offense information remains critical for risk assessment. According to Gannon, Beech, and Ward (2008), when offense crossover is disclosed, assigned risk level increases because child sexual abuse of males (i.e., gender crossover), impulsivity and regulation deficits (as suggested by age crossover), and stranger victims (i.e., relationship crossover) are shown to

be significantly associated with sexual recidivism (Hanson & Morton-Bourgon, 2004). To address the issue of heterogeneity and crossover offending with respect to offender typologies, researchers (e.g., Robertiello & Terry, 2007) have suggested that the best way to regard typologies is as a continuum rather than discrete categorizations, and they emphasize the importance of classifying offenders based on characteristics that have been shown to be related to recidivism.

Recent Advances in the Development of Sexual Offense Patterns

Recent models of the sexual offense process have been devised to include etiological theories of sexual offending and treatment-relevant factors. Assessment, classification, and treatment should be formulated from rehabilitation theories, which are integrative practice frameworks that contain elements of etiology, ethics, and research (Ward, Yates, & Willis, 2011). They are based on clusters of behaviors and psychological processes to account for the heterogeneity of offending. The most promising models are the developmental pathways of sexual offending model, the self-regulation model, and the specialist vs. generalist model. These models take into account problematic behaviors, distorted thought processes, and offense histories. Developmental factors have been shown to be predictive of high-risk sexual behaviors, treatment failure, and dynamic risk (Craissati & Beech, 2006), and the self-regulation model has been shown to be associated with static and dynamic risk for reoffense (Yates & Kingston, 2006; Simons et al., 2009). The generalist theory of crime (Gottfredson & Hirshi, 1990) has also been examined in sexual offender research (e.g., Lussier, Proulx, & LeBlanc, 2005). **Similar to crossover findings, studies have shown that few sexual offenders "specialize" in sexual offending** (Harris, Mazerolle, & Knight, 2009; Lussier, Proulx, & LeBlanc, 2005). Specialization has been associated with child sexual abusers who sexually prefer children, while rape has been associated with criminal versatility (Harris, Mazerolle, & Knight, 2009). This section reviews models that may ultimately replace traditional typologies to inform treatment and management of sexual offenders. (For more on "Sex Offender Management Strategies," see chapter 8 in the Adult section.)

Developmental Histories of Sexual Offenders

Due to advanced statistical methods that evaluate the unique and combined contributions of risk factors, more comprehensive descriptions of the psychological processes, developmental histories, and offense patterns have been devised to explain sexual deviance. Although they are not described as typologies, they have been shown to be related to different trajectories of offending and they are able to identify criminogenic needs, which have been shown to be predictive of sexual recidivism (Craissati & Beech, 2006).

Etiological research has suggested that it is the interaction of biological and social learning factors that influences the development of sexual offending behaviors (Ward & Beech, 2008). Researchers explain that genetic factors may predispose an individual to pursue a specific human need (e.g., sex or intimacy), but it is the environmental experiences that provide the methods through which these needs are met—either appropriately through the development of relationships or inappropriately through the use of violence (Ward & Beech, 2008). Negative developmental experiences figure prominently in many models of sexual offending behavior. Indeed, a recent meta-analysis has confirmed the association between the experience of sexual abuse and subsequent sexual offending against children (Jespersen, Lalumiere, & Seto, 2009). Yet, not all sexual offenders report being sexually victimized during childhood. Recent findings indicate that there may not be only one type of abuse that serves as a developmental risk factor for later sexual offending. Instead, multiple types of abusive experiences, or a pathological family environment, may precede offending behaviors (Dube et al., 2001). **Researchers have also suggested that different types of maltreatment may be associated with different types of sexual offending behaviors** (e.g., Lee et al., 2002; Simons, Wurtele, & Heil, 2002). This section reviews the current research findings that compare the developmental risk factors of various offender characteristics.

Child Sexual Abusers

Researchers have found that child sexual abusers exhibited heightened sexuality in childhood. Meta-analysis results indicate that juveniles who commit sexual offenses were more likely than non-sex offenders to have been exposed to sexual violence, sexual abuse, emotional abuse, and neglect (Jespersen, Lalumiere, & Seto, 2009). Within the adult sex offender population, Simons, Wurtele, and Durham (2004) found that child sexual abusers, as compared to rapists, reported more experiences of child sexual abuse, early exposure to pornography, sexual activities with animals, and an earlier onset of masturbation.

"Rapists, when compared to child sexual abusers, reported more frequent experiences of physical abuse, parental violence, and emotional abuse."

Rapists

In contrast, the childhood histories of rapists appear more indicative of violence. Simons, Wurtele, and Durham (2004) found that rapists, when compared to child sexual abusers, reported more frequent experiences of physical abuse, parental violence, emotional abuse, and cruelty to animals. Researchers contend that physical abuse, parental violence, and emotional abuse result in externalizing behaviors only when they are considered in combination (Lee et al., 2002; McGee, Wolfe, & Wilson, 1997). As an illustration, Beauregard, Lussier, and Proulx (2004) found that physical and verbal abuse during childhood led to antisocial behavior and callous personality traits, both of which led to aggressive sexual fantasies. Likewise, Salter and colleagues (2003) indicate that the combination of physical violence, domestic violence, emotional abuse, and neglect predicted subsequent sexual offending. Researchers (e.g., Craissati, McClurg, & Browne, 2002a) explain that an individual who has been raised in an emotionally impoverished environment is often unable to identify his emotions in an

accurate manner and, as a result, is likely to become confused when confronted with emotionally charged situations. These individuals often react to confusing situations with overt aggression.

Crossover Offenders

In studies that examined the developmental risk factors of crossover offenders or indiscriminate offenders (e.g., Heil & Simons, 2008; Simons, Tyler, & Heil, 2005), findings indicate that indiscriminate offenders report childhood histories of both violence and heightened sexuality. Indiscriminate offenders, also known as mixed offenders, report sexually abusing both adults and children equivalently. With respect to heightened sexuality, Simons, Tyler, and Heil (2005) found that indiscriminate offenders were less likely than child sexual abusers to be sexually abused, but they were more likely to report early sexual experiences with peers (before age 10), to have witnessed sexual abuse as a child, and to have had more frequent exposure to pornography before age 10. Similar to child sexual abusers (i.e., 62 percent), 58 percent of indiscriminate offenders reported an early onset (before age 11) and high frequency of masturbation. A great majority of indiscriminate offenders (81 percent) disclosed engaging in bestiality during childhood in comparison to fewer child sexual abusers (59 percent) and rapists (30 percent). With respect to childhood violence, both indiscriminate offenders and rapists described childhood experiences consistent with physical and emotional abuse. However, indiscriminate offenders were exposed to domestic violence significantly more frequently than rapists. Results indicated that parental violence and bestiality were strong predictors of crossover offending.

Female Sexual Offenders

Similar to indiscriminate offenders (of both genders), the majority of female sexual offenders report both violent and sexualized childhoods (Heil, Simons, & Burton, 2010). Of a subsample of 42 female sexual offenders, Simons and colleagues (2008) reported that the majority (81 percent) had been sexually abused by multiple perpetrators at a young age with high frequency. Female offenders masturbated later than male offenders (i.e., during adolescence instead of childhood) and with less frequency, but like male offenders who abuse children, they are more likely to masturbate to their abuse experiences and report masturbation to deviant fantasies during adolescence. Likewise, many female offenders were exposed to pornography before age 10, but early exposure is significantly more prevalent among male sexual offenders. Similar to male offenders, females report engaging in bestiality during adolescence, but the prevalence rates for females are significantly lower than for child sexual abusers and indiscriminate offenders of both genders. Similar to indiscriminate offenders, Simons and colleagues (2008) also found that the majority of female sexual offenders reported physical abuse, emotional abuse, and witnessing of domestic violence. Although the frequency of physical abuse among female sexual offenders was less than for males, females were more likely to be abused by both male and female perpetrators. Yet, female sexual offenders were more likely than male offenders to report witnessing violence perpetrated by a female; male rapists and indiscriminate offenders more often witnessed violence by a male perpetrator.

Attachment

In addition to childhood abuse, the majority of sexual offenders (93 percent) exhibited insecure attachment (Marsa et al., 2004). According to researchers, childhood adversities may result in the failure to establish secure attachment bonds to parents (Cicchetti & Lynch, 1995). Marshall (1993) contends that the failure of sex offenders to develop secure attachment bonds in childhood results in their failure to develop sufficient social skills and self-esteem necessary to achieve intimacy with adults. Recent models of sexual deviance suggest that poor parental bonding enhances the effects of child maltreatment and may subsequently initiate the processes that lead to sexual offending by creating vulnerability in the child (Marshall & Marshall, 2000), a lack of empathy for others (Craissati, McClurg, & Browne, 2002b), or intimacy deficits (Ward et al., 1995).

"Poor parental bonding enhances the effects of child maltreatment and may contribute to sexual offending by creating vulnerability, a lack of empathy, and intimacy deficits."

Early attachment research recognized four patterns of attachment: secure attachments that develop when caregivers are consistently responsive to their child's needs; insecure-ambivalent (anxious) attachments that develop when caregivers respond inconsistently to the needs of their child; insecure-avoidant attachments that develop when caregivers are consistently unresponsive to their child's needs; and insecure-disorganized attachment, a category established to describe children who fail to demonstrate a coherent pattern of response to parental separation (Ainsworth & Bowlby, 1991). Recently, attachment style has been associated with different types of offending. Rapists have been shown to exhibit avoidant parental attachments, whereas child sexual abusers display anxious or ambivalent attachment (Simons & Tyler, 2010; Simons, Wurtele, & Durham, 2008; Ward et al., 1995). Studies have found that indiscriminate and female offenders were more likely to exhibit disorganized attachment (Simons, Tyler, & Heil, 2005; Simons, Wurtele, & Durham, 2008).

Etiological Theory

Taken together, these findings support Marshall and Barbaree's (1990) integrated theory of sexual offending, which postulates that individuals who experienced child maltreatment are likely to exhibit distorted internal working models of relationships, which result in poor social skills and emotional self-regulation. The lack of social skills, especially during adolescence, is likely to result in rejection by others, which in turn will decrease self-esteem, increase anger, and produce cognitive distortions about peers and relationships. Negative emotions combined with cognitive distortions may increase the intensity of sexual desire and deviant sexual fantasies (e.g., those about children, whom they perceive as less threatening). Masturbation to these fantasies may serve as a coping mechanism from stress, as a means to exert control, and ultimately,

as a behavioral rehearsal to sexual offending. These developmental factors interact with disinhibiting factors (e.g., intoxication, stress, negative affect) and the presence of a potential victim to impair an individual's ability to control their behaviors, which in turn may result in a sexual offense. The emotional and psychological reinforcement of the behavior may be approach oriented (i.e., to achieve a goal directly) or avoidant oriented (i.e., to avoid an unpleasant result). The actual sexual offense combined with cognitive distortions serves to maintain sexual offending behaviors.

The assessment of developmental risk factors is important to determine the criminogenic needs of the individual offender; the assessment also contributes to static predicting (Craissati & Beech, 2006). Consistent with Marshall and Barbaree's (1990) integrated theory of sexual offending, bestiality and masturbation to abuse experiences contribute to the development of deviant sexual interest, and frequent masturbation suggests problems with emotional self-regulation. Frequent masturbation coupled with frequent pornography use increases the likelihood of sexual compulsivity. Likewise, insecure attachments suggest intimacy deficits, empathy deficits, antisocial lifestyle, and social difficulties. Violence in the home has been shown to be predictive of antisocial lifestyle, hostile attitudes toward women, emotional callousness, and hostile masculinity (Malamuth et al., 1991), all of which suggest pro-offending attitudes toward rape. In addition to difficulties with self-regulation, a heightened sexual childhood may lead to the development of child sexual abuse-supportive beliefs (e.g., sexual entitlement, sex with a child is beneficial). As summarized by Craissati and Beech (2006), developmental experiences (sexual and violent experiences and insecure attachment) predict dynamic risk that, when combined with static markers (e.g., male victims, single status), increase the likelihood of reoffense.

Self-Regulation Model

Ward and Hudson (1998, 2000) developed a nine-stage model of the sex offense process, which takes into account the heterogeneity of sexual offending. The self-regulation model (SRM) summarizes the offense process by examining situational precipitants

(e.g., desire for deviant sex), cognitive distortions (whether entrenched or function to justify the offense), degree of control over behavior (i.e., impulsiveness or extensive planning), evaluation of sexual assault after the offense, and attitude with respect to future offending (positive or negative). SRM contends that individuals are goal-directed as sexual abusers and offend to achieve a desired state—either to satisfy or to avoid offending.

This model proposes that four pathways lead to sexual offending. Two pathways characterize offenders who attempt to avoid offending (avoidance oriented) but do not have adequate strategies (i.e., they have either underregulation or misregulation of self-control) to avoid the undesired behavior (the sexual offense). The two remaining pathways characterize individuals who seek to achieve goals associated with sexual offending (approach oriented) and experience positive feelings as a result. These approach-oriented individuals vary with respect to self-regulation; some of them exhibit deficient self-regulation (i.e., impulsivity), whereas others display intact, effective self-regulation. Thus, the assessment of SRM offense pathways depends on whether the offender attempted to avoid (indirect) or to engage (direct) in the sexual offense, the ability to self-regulate (underregulation, misregulation, effective regulation), and the degree of awareness associated with the sexual offense (implicit or explicit).

The avoidant-passive pathway consists of an offender who attempts to prevent offending (indirect route) but does not have the ability or awareness to prevent the offense (underregulation, implicit awareness). Similarly, the avoidant-active pathway is characterized by the desire to avoid offending (indirect), but the offender uses counterproductive strategies to control deviant thoughts and fantasies (misregulation, explicit awareness). For example, an individual who follows the avoidant-active pathway masturbates to deviant fantasies as an alternative to acting on these fantasies, but this behavior inadvertently increases his/her likelihood to offend. In contrast, the approach-automatic pathway is characterized by the impulsive desire to sexually offend and assault (direct route). Indeed, approach-automatic pathway offenders fail to control their behavior as they

respond to situational cues on the basis of well-entrenched cognitive-behavioral scripts that support sexual offending. Individuals on the approach-explicit pathway desire to sexually offend (direct), but they carefully plan their offenses (effective regulation, explicit). Individuals on the approach pathways experience positive emotional states from offending; cognitive dissonance is absent. These offenders do not experience an internal conflict after the offense because they achieved their goal to sexually offend.

Research on SRM supports the validity of the model and its use in classification and treatment. Specifically, SRM pathways have been shown to differentiate offense characteristics and static and dynamic risk. With respect to offense pathways, incest offenders have been shown to follow the avoidant-passive pathway (Bickley & Beech, 2002, 2003). Rapists are more likely to follow the approach-automatic pathway because their goal is to offend, but they offend impulsively to situational cues (Yates, Kingston, & Hall, 2003). Child sexual abusers who offend against male victims are more likely to follow the approach-explicit pathway (Simons & Tyler, 2010). Their goal is to offend and they carefully plan their offenses by establishing relationships with their victims. The indiscriminate (or crossover) offenders who sexually assault both children and adults of both genders and from multiple relationships are more likely to follow the approach-automatic pathway (Simons, McCullar, & Tyler, 2008; Simons & Tyler, 2010).

Specialist vs. Generalist Model

The specialist vs. generalist model is another theory that explains the sexual offense process, taking into account the risk and needs of offenders. Although the implicit assumptions about sexual offenders are that they engage in distinct types of crimes and differ significantly from nonsexual offenders, some sexual offenders have been shown to be more versatile in their criminal behaviors and to share attributes with nonsexual offenders. (Lussier, Proulx, & LeBlanc, 2005). According to this model, sexual offenders may be characterized as specialists who commit **sexual crimes persistently or as generalists who do not restrict themselves to one type of crime; they commit different crimes over time** (Lussier, 2005).

One of the assumptions of the traditional explanatory models of sex offending (i.e., the specialist) is that offenders who sexually abuse children engage in sexual offending exclusively. This model has been shown to have a distinct etiology—specifically, a history of childhood sexual abuse (Burton, 2003; Marshall & Marshall, 2000). As previously discussed, developmental studies have demonstrated the association between childhood sexual experiences and sexual abuse of children (Jespersen, Lalumiere, & Seto, 2009). Child sexual abusers who are specialists are more likely than generalists to exhibit sexual deviance and sexual preoccupation and to have an emotional congruence with children (Groth, 1979; Harris, Mazerolle, & Knight, 2009; Laws & Marshall, 1990).

"Advances in developmental risk factors and offense pathways can assist with risk and need evaluation, but additional research is needed to develop models of sexual deviance."

Similar to rapists, generalist (versatile) offenders resemble violent nonsexual offenders (Craissati, 2005; Langstrom, Sjostedt & Grann, 2004; Simon, 2000). The generalist theory contends that offenders participate in a broad array of activities that are manifestations of low self-control and impulsivity, such as excessive alcohol use, unprotected sex, and reckless driving (Gottfredson & Hirschi, 1990). Hanson (2002) concluded that, in addition to sexual deviance, variables such as low self-control, criminal lifestyle, impulsivity, and opportunity are important factors associated with sexual offending. Sexual offenders (the majority of rapists and a subset of child sexual abusers) have demonstrated substance abuse and relationship problems, antisocial behavior in adolescence, employment instability, and evidence of psychopathy (Harris, Mazerolle, & Knight, 2009; Lussier, Proulx, & LeBlanc, 2005).

Lussier, Proulx, and LeBlanc (2005) examined whether sexual offending among 388 convicted sexual offenders could be explained by a generalist theory of crime using structural equation modeling. They reported differences among child sexual abusers and rapists and concluded that, similar to traditional typologies, the offense patterns of rapists were versatile and that rapists displayed extensive antisocial tendencies. In contrast, child sexual abusers were more likely than rapists to specialize in sexual offending.

Harris, Mazerolle, and Knight (2009) examined 374 male sexual offenders to compare these models of sexual offending. The researchers found that the majority of sexual offenders followed the generalist model. Rapists and child sexual abusers exhibited extensive criminal histories, substance abuse issues, antisocial tendencies, and psychosis. In addition, few rapists specialized in sexual crimes. Those who did specialize in sexual crimes were more likely to exhibit characteristics similar to child sexual abusers, such as sexual deviance and sexual preoccupation. As Lussier, Proulx, and LeBlanc (2005) found, the specialist model was evident in child sexual abusers. Child sexual abusers assessed as specialists were more likely than nonspecialists to know the victim, exhibit sexual preoccupation, and display emotional congruence with children.

These findings are consistent with many traditional typologies of rapists and child sexual abusers; however, the results suggest that the generalist vs. specialist model is a better way to assess sexual offenders, regardless of victim type. Future research in this area is needed to further identify factors that characterize specialist offenders from generalist offenders.

Summary

The prevention of sexual violence requires a balance of community safety with effective resource allocation. Recent advances in our knowledge of developmental risk factors and offense pathways can assist with risk and need evaluation, but additional research is needed to develop more extensive models to explain sexual deviance. Nonetheless, through a comprehensive understanding of treatment needs and subsequent effective intervention, an offender can attend to the process, learn skills and alternative strategies to sexual violence and, ultimately, strive to live a healthy lifestyle without offending.

Chapter 4: Internet-Facilitated Sexual Offending

by Michael Seto, Ph.D.

Introduction

There is increasing public and professional concern about Internet-facilitated sexual offending, reflected in a greater number of prosecutions and clinical referrals for these crimes (Middleton, Mandeville-Norden, & Hayes, 2009; Motivans & Kyckelhahn, 2007; U.S. Department of Justice, 2010). Internet sexual offending comprises a range of crimes, including possession or distribution of child pornography; production of child pornography; sexual solicitations[1] (online interactions with minors for sexual purposes, including plans to meet offline); and conspiracy crimes (e.g., collaborating with others to distribute or produce child pornography or to solicit minors). The large majority of online offenses involve possession or distribution of child pornography.

It is hard to obtain precise estimates of Internet sexual offending in the United States, as there is no national system for integrating information about Internet offenders at the state level and there are state-by-state variations in the applicable laws. However, the National Juvenile Online Victimization Study, conducted in 2000 and again in 2009, indicates that the number of arrests in the United States for Internet sex crimes has tripled over that time (Wolak, 2012; Wolak, Finkelhor, & Mitchell, 2011). Average sentences are getting longer for comparable child pornography offenses, indicating that Internet offenders will occupy custodial beds longer and will require longer terms of supervision if they become eligible for probation/parole (Wolak, Finkelhor, & Mitchell, 2009).

Given the nature of the Internet, this type of sexual offending is clearly an international problem, with political, legal, and geographic complexities. Many

FINDINGS

- The different types of Internet-facilitated crime are—
  - Possession, distribution, and production of child pornography.
  - Sexual solicitation.
  - Conspiracy crimes.
- The characteristics of Internet offenders are—
  - One in eight had an official record for contact sexual offending.
  - Fifty-five percent admitted to a history of contact sexual offending.
  - Offenders were relatively low risk compared to contact sex offenders.
  - Child pornography offenders are likely to be pedophiles.
  - Solicitation offenders are primarily interested in adolescent girls.

child pornography sites are based outside the United States (e.g., Eastern Europe, Southeast Asia), where laws differ substantially. The International Centre for Missing & Exploited Children (2010) reviewed laws in 196 countries and found that almost half (89 countries) did not have specific child pornography laws. Some of the remaining countries prohibited child pornography under more general obscenity laws, but some countries had no legal prohibitions. There is also variation in prohibitions of child pornography; for example, some countries (such as the United States) prohibit only visual depictions of real children, whereas other countries (such as Canada) prohibit depictions of fictional children (e.g., anime) or nonvisual depictions (e.g., audio recordings or stories).

The increase in Internet sexual offending has been paralleled by a decrease in the number of reported child sexual abuse cases, and a decrease in violent crime more broadly (Mishra & Lalumière, 2009; Finkelhor & Jones, 2006). This indicates that Internet sexual offending is a new phenomenon that may not be influenced by the same contextual factors as other kinds of sexual or violent crime. An important research question is the extent to which Internet sex offenders represent a new type of sex offender, or whether they reflect the transformation of conventional sexual offending through the adoption of new technologies (Seto & Hanson, 2011).

Whatever the explanations for this increasing demand, it is clear that the number of potential Internet offending investigations already greatly exceeds law enforcement resources. For example, two programs (Fairplay and Roundup) have identified millions of computers involved in peer-to-peer sharing of child pornography files in the United States (U.S. Department of Justice, 2010). Many law enforcement agencies are still dealing with a backlog of cases arising from Operation Avalanche (an investigation that began after the discovery of Landslide Productions in Texas and its large database of members purchasing access to child pornography Web sites) and other, more recent international police operations that have identified very large numbers of online offending suspects. Although more resources are being devoted to peer-to-peer investigations, many police investigators continue to conduct proactive, undercover investigations—in which they pretend to be a minor online—in anticipation of solicitation attempts by adults (Mitchell, Wolak, & Finkelhor, 2005; Briggs, Simon, & Simonsen, 2011). Although resources for law enforcement in this area are increasing, the reality is that only some cases will be fully investigated and prosecuted.

Prioritization of Cases

Faced with more cases than they can handle in a timely fashion, law enforcement and other professionals who deal with these offenders need to prioritize their resources. But how should they assign priority? Given an overarching goal to protect children from sexual exploitation and abuse, it makes sense to prioritize and triage child pornography cases involving production or high-level distribution over possession alone or "passive" distribution (e.g., uploading images to file-sharing programs but not actively trading with others); solicitation cases involving attempts to meet in real life over online fantasy activities (e.g., sexually explicit chat); and cases involving Internet offenders who have already sexually assaulted children or are currently doing so over those with no known contact offending history. High-priority cases, in which children are suspected to already be victims or are at imminent risk, should receive the most attention. The scientific and practical challenge is determining how investigators can distinguish, with relatively limited initial evidence, which cases are more likely to involve production, solicitation of minors, and/or contact offending.

Summary of Research Findings
Offender Motivations

Sexual Interest in Children

Many, but not all, Internet offenders are motivated by a sexual interest in children. This has been demonstrated in a recent study showing that the majority of Canadian child pornography offenders assessed at a sexual behavior clinic showed more sexual arousal (assessed through penile plethysmography responses in the laboratory) to children than to adults, and in fact show a stronger relative response than do offenders with contact victims (Seto, Cantor, & Blanchard, 2006). As well, one-third to one-half of child pornography offenders interviewed by police or by clinicians admitted they were sexually interested in children or in child pornography content (e.g., Seto, Reeves, & Jung, 2010). Other studies have also demonstrated a link between sexual interest in children and child pornography use through self-report surveys (e.g., Buschman et al., 2010; Riegel, 2004).

These results are consistent with what we know about the modal child pornography image seized

by police, which depicts young girls who appear to be younger than age 12 and often depicts children in sexually explicit conduct (Collins, 2012; Quayle & Jones, 2011). It is a reasonable assumption that individuals will seek out pornography content that reflects their sexual interests (Seto, Maric, & Barbaree, 2001). Thus, pedophilic individuals will tend to seek out content depicting young children, while nonpedophilic individuals who are involved with child pornography will tend to seek out content depicting underage adolescents. The relationship between child pornography offending and pedophilia is sufficiently robust that child pornography use has been included as specific behavioral evidence in the proposed revision of the psychiatric diagnostic criteria for pedophilia, defined clinically as "persistent sexual attraction to prepubescent children" (American Psychiatric Association, 2013; Seto, 2010).

However, pedophilia is not the sole motivation for Internet offending involving children; that is, not all child pornography offenders show a sexual preference for children over adults. The offenders in Seto, Reeves, and Jung (2010) gave other explanations for their child pornography offending, including indiscriminate sexual interests, an "addiction" to pornography, and curiosity (see also Merdian et al., 2013). These explanations are based on self-report alone and should be interpreted cautiously because offenders may have offered alternative explanations (other than pedophilia) for their crimes in response to the stigma associated with the pedophilia label.

Sexual Interest in Adolescents

In addition, research by the Crimes against Children Research Center suggests that solicitation offenders target young adolescents, typically between ages 13 and 15, which would not be consistent with the clinical diagnosis of pedophilia (because many of the adolescents involved would be showing some signs of sexual and physical maturation) (Wolak et al., 2008). Although it is illegal and is a contravention of social norms about sexual behavior, a sexual interest in young to mid-teen adolescents is not indicative of pedophilia.

"Solicitation offenders primarily target young adolescent females."

Briggs, Simon, and Simonsen (2011) have suggested that there is a distinction between fantasy-driven and contact-driven solicitation offenders. The former group engages in online activities (such as sexual chat, exchange of pornographic images, or exhibitionism via Webcam) that are gratifying in and of themselves, often resulting in orgasm while online. These activities appear to reflect the sexual fantasies of the offenders and likely fuel those same fantasies by providing experiences and images for future occasions. Briggs, Simon, and Simonsen (2011) suggest that this fantasy-driven group is not interested in or likely to commit contact sexual offenses against children. The latter group, in contrast, engages in online activities to arrange real-world meetings; their online activity is more directed toward meeting offline and shorter in duration than the online interactions of fantasy-driven offenders. Briggs, Simon, and Simonsen (2011) identified 30 offenders who were considered to be contact driven and 21 who were deemed to be fantasy driven. Given the small sample size and exploratory nature of this study, more research is needed to determine if this distinction between solicitation offenders is valid and meaningful.

For cases resulting in actual meetings between an adult and a minor, sexual contact typically occurred on multiple occasions (Wolak et al., 2008). Use of threat or physical force was rare (4–5 percent of cases). Wolak and colleagues (2008) concluded that solicitation offenders may have more in common with statutory sex offenders—who have sexual contacts with minors who agree to the interactions but are below the legally defined age of consent—than they do with pedophilic offenders, who target prepubescent children or seek child pornography depicting prepubescent children. It is rare for solicitation offenders to target young children, stalk or abduct unsuspecting minors, or use physical coercion or force to engage in sex with minors. However, only cases involving contacts with real minors that were subsequently reported to police were included in this research. It is possible that unreported cases, or cases involving online contacts

but no real-world meetings, do involve younger children and/or more violent behavior.

Krueger, Kaplan, and First (2009) compared 22 solicitation offenders and 38 child pornography-only offenders. Although this study was limited because of the small sample size, there were no significant group differences in the prevalence of paraphilia diagnoses, anxiety or mood disorder diagnoses, or substance abuse disorder diagnoses. As one might expect given the nature of their offenses, solicitation offenders were more likely to be identified as having a hypersexuality disorder (a proposed psychiatric diagnosis for individuals with an excessive interest or involvement in sexual behavior) in terms of excessive online sexual activity, whereas child pornography-only offenders were more likely to be identified as having a hypersexuality disorder in terms of dependence on pornography.

Seto and colleagues (2012) compared 70 solicitation offenders to 38 child pornography offenders and 38 contact sex offenders on demographic variables; self-reported and self-rated sexual deviance; dynamic risk factors assessed using the Stable-2007; and risk estimated on two modified actuarial risk measures, the Static-99 and the VASOR (Seto et al., 2012). (For a discussion of adult "Sex Offender Risk Assessment," see chapter 6 in the Adult section.) They found that solicitation offenders were similar or lower in potential risk to reoffend than child pornography offenders, with fewer men in the former group disclosing undetected sexual offenses, fewer admitting sexual interest in prepubescent or pubescent children, and lower scores on ratings of sexual deviance. This was surprising because most of the solicitation offenders had actually attempted to meet with someone they thought was a minor (usually an undercover police officer), whereas child pornography offenders might never have approached a minor directly.

Contact Offending History

In a recent meta-analysis, Seto, Hanson, and Babchishin (2011) reviewed available studies and identified 21 samples of Internet offenders (a total of 4,464 mostly child pornography offenders, although some samples also included solicitation

offenders) with information about their contact offending histories.[2] On average, one in eight online offenders had an official criminal record for contact sexual offending. In the six samples with self-report data, a little more than half (55 percent) admitted to a history of contact sexual offending,[3] usually as a result of clinical involvement and/or polygraph examination.

"One in eight Internet offenders has a history of contact sexual offending in their official criminal records."

Seto, Hanson, and Babchishin's (2011) meta-analysis produced several important findings:

◆ Many Internet offenders have no known prior contact offending history (identifying a major gap in the literature, as the established risk measures that are available for contact sex offenders may not apply to the Internet population.

◆ There is a sizable difference between undetected and detected offenses, when comparing the self-report prevalence rates with the official record rates.

◆ Though some of the offenders who deny any history of contact offending may be lying, despite being in treatment or undergoing a polygraph examination, it does not appear that most or all Internet offenders have committed a contact sexual offense. (For more on treatment, see chapter 7, "Effectiveness of Treatment for Adult Sex Offenders," in the Adult section.)

"More than half of Internet offenders self-reported a history of contact sexual offending."

Buschman and Bogaerts (2009) noted that polygraph examination can increase disclosures not only of prior contact sexual offenses but also of sexual interest in young children, including admissions of masturbating to sexual fantasies of children and seeking opportunities to have sexual contacts with children.

> *"Online-only Internet offenders have a relatively low risk for sexual recidivism compared to offline contact sexual offenders."*

Further research is needed to identify the factors that distinguish those who have committed hands-on offenses against a child from those who do not commit such offenses. This empirical knowledge would advance the understanding of risk of recidivism and the relationship between online and offline offending. (For information on "Adult Sex Offender Recidivism," see chapter 5 in the Adult section.) For example, it has been hypothesized that Internet offenders who are lower in self-control (e.g., more impulsive, higher in risk-taking) will be more likely to commit hands-on offenses than those who are higher in self-control (Seto, 2008). Consistent with this idea, Lee and colleagues (2012) found that online offenders who had committed contact offenses scored higher on a measure of antisocial behavior and traits than online offenders who had no known history of hands-on victims. McCarthy (2010) found that "dual" offenders (i.e., individuals who had committed both contact and online sexual offenses) were more likely to be diagnosed with pedophilia and more likely to have prior sexual offenses in their histories.

Contact Offending in the Future

Seto, Hanson, and Babchishin (2011) also reviewed recidivism rates from 9 samples of Internet offenders (a total sample size of 2,630 online offenders) followed for an average of slightly more than 3 years (ranging from 1.5 to 6 years at risk). Approximately 1 in 20 (4.6 percent) Internet offenders committed a new sexual offense of some kind during this time period, with 2 percent committing a contact sexual offense and 3.4 percent committing a new child pornography offense; some offenders committed both types of crimes. Although the followup times are relatively short for this kind of research, and recidivism rates are expected to increase with more opportunity, these recidivism rates are lower than those observed in recidivism studies of offline offenders (Hanson & Morton-Bourgon, 2005) and belie the idea that all Internet offenders pose a high risk of committing

contact offenses in the future. Indeed, there may be a subgroup of online-only offenders who pose relatively little risk for a contact sexual offense.

In a recent preliminary analysis of data from 101 federal child pornography offenders in the United States, using data obtained from the U.S. Sentencing Commission, Burgess, Carretta, and Burgess (2012) noted that a majority of the offenders were employed (68 percent), had some college education (58 percent), were married or had previously been married (59 percent), and had no prior criminal offenses (53 percent). Offenders with these kinds of characteristics are relatively unlikely to criminally offend again (compared to those who are unemployed, did not complete high school, had never married, and had prior offenses).

Internet offenders are not homogeneous with regard to risk. Some of them pose a relatively high risk of directly victimizing children (or indirectly victimizing children by again accessing child pornography), and an important task for law enforcement and for clinicians is to identify those higher risk individuals in order to prioritize cases and make more efficient decisions about resources.

Recidivism Risk Factors

Research is beginning to emerge on the factors that predict recidivism among Internet sex offenders, although more studies using large samples, a set of theoretically or empirically plausible risk factor candidates, longer followup times, and comprehensive criminal records are clearly needed. These initially identified risk factors appear to be the same kinds of risk factors seen in decades of research on contact sex offenders, and in research on all kinds of offenders generally. For example, recent studies have shown that well-established nonsexual criminological factors such as offender age at time of first arrest, prior criminal history, and failure on prior conditional release (such as bail or parole) can predict sexual recidivism among child pornography offenders (Seto & Eke, 2005; Eke, Seto, & Williams, 2011). Unpublished data suggest that other factors (such as substance use problems and admissions of sexual interest in children) can also predict contact sexual offending (e.g., Eke & Seto, 2012). Among child pornography offenders, the

ratio of content depicting boys compared to girls predicts child pornography recidivism (Eke & Seto, 2012), which is in line with much research showing that contact sex offenders who target boys are more likely to be pedophiles and more likely to sexually reoffend than those who target girls (Seto, 2008).

Other researchers are finding similar results. Faust, Renaud, and Bickart (2009) examined predictors of recidivism in a sample of 870 child pornography offenders assessed by the Federal Bureau of Prisons between 2002 and 2005. The average length of followup was almost 4 years, with a sexual offense rearrest rate of 5.7 percent for contact or noncontact offenses, including child pornography. Of the 30 predictors examined, 5 were significant predictors of sexual rearrest: lower education level, being single, possessing non-Internet child pornography, prior sex offender treatment (likely a proxy for having a prior sexual offending history), and **not** possessing depictions of adolescent minors (suggesting that those who show a preference for depictions of prepubescent children are at greater risk).

As well, Wakeling, Howard, and Barnett (2011) showed that a modified version of an established risk measure (the Risk Matrix 2000; Thornton, 2007) could predict sexual recidivism in a large sample of Internet offenders in the United Kingdom. Risk Matrix items include offender age, sexual and any other sentencing history, having a male victim, having a stranger victim, ever having a live-in romantic relationship, and having any noncontact offenses. Wakeling and her colleagues obtained recidivism data on 1,326 offenders followed for 1 year (2.1 percent recidivism rate) and 994 of these offenders followed for 2 years (3.1 percent recidivism rate). Although the base rate of sexual recidivism was relatively low after 1 or 2 years, making it more statistically difficult to identify significant predictors, the measure was nonetheless significantly predictive—to a similar degree as established risk measures with contact offenders. Three-quarters of the new sexual offenses were for Internet crimes.

If this research—showing that the same risk factors that are useful in predicting recidivism among conventional contact sex offenders operate similarly for Internet offenders—holds up in subsequent replications, then clinicians will be empirically justified to use modified versions of existing risk measures to assess Internet offenders, such as the Static-99 (Harris et al., 2003) or Risk Matrix 2000. This research is at an early stage and thus it is too soon to confidently conclude that existing risk measures (modified or not) will accurately predict sexual recidivism by Internet offenders who have no history of contact sexual offending. The applicability and validity of risk measures to Internet offenders who do have a history of contact sexual offending is not in question. Clinicians and others are clearly justified in using existing risk measures to assess the risk of Internet offenders who are known to have a history of contact sexual offending.

Intervention

There is relatively little literature on the treatment of Internet offenders. Typically, knowledge about characteristics and risk of recidivism is established before knowledge about treatment approaches and outcomes because of the time it takes to develop and implement programs and then evaluate them for recidivism. Sex offender treatment and supervision professionals are struggling to respond to the increasing influx of Internet offenders. Key questions have yet to be addressed regarding intervention, including what the priority treatment targets are, how they should be targeted, and whether interventions can reduce recidivism.

The most clearly articulated program at this time appears to be the Internet Sex Offender Treatment Programme (i-SOTP) developed by Middleton and Hayes (2006). This program was created as a result of treatment provider concerns about mixing Internet and contact offenders in group therapy as well as questions about the applicability of some treatment components and targets of conventional contact sex offender treatment programs (McGrath et al., 2009). The program is based on contemporary models of contact sexual offending that emphasize cognitive-behavioral principles, but it also draws in elements of positive psychology, 12-step, and self-help approaches (which is also common among conventional contact sex offender programs). The program is intended to be less intense than the standard conventional sex offender program

available in the United Kingdom; it involves fewer (20 to 30) sessions in either individual or group format and more Internet-relevant content. The evidence available so far on risk of recidivism suggests that more intensive interventions are required only by a minority of Internet offenders (Seto, Hanson, & Babchishin, 2011). A substantial number of Internet sex offenders (e.g., child pornography possession-only offenders with no prior criminal history) are likely to be served well by less intensive interventions (Andrews & Bonta, 2006).

The i-SOTP content is organized into six modules corresponding to major dynamic risk factors identified in contact sex offender research, including general self-regulation problems (e.g., difficulties in controlling impulses), sexual self-regulation problems (e.g., specific difficulty controlling sexual urges), offense-supportive attitudes and beliefs (e.g., believing that children depicted in child pornography images are not crime victims), and interpersonal deficits (e.g., poor social skills). These factors are dynamic because they can change over time (e.g., after consuming alcohol) and any such changes are associated with fluctuations in risk to reoffend. Dynamic risk factors can be distinguished from static risk factors that do not or cannot change (e.g., history of alcoholism) and are typical of well-validated and commonly used sex offender risk measures such as the Static-99. Static risk factors provide the best long-term prediction of recidivism but they do not identify potential treatment and supervision targets. Treatments and other interventions that can successfully target dynamic risk factors are more likely to lead to reductions in recidivism.

Middleton, Mandeville-Norden, and Hayes (2009) reported preliminary results from a pre-/post-treatment evaluation of 264 Internet offenders. There were significant changes on 10 of 12 psychological measures, many corresponding to the treatment targets just described. However, there was no comparison group, so it is not clear how much of these changes can be attributed to the treatment as opposed to the passage of time, probation involvement, or participation in other programs. Another more rigorous evaluation is needed with either a no-treatment (e.g., waiting list) or treatment-as-usual comparison group in order to

know if changes over time can be attributed to the i-SOTP program. Continuing followup is also needed to determine if treatment participation (especially treatment-related changes on specific targets) are related to changes in recidivism in the desired direction.

Another interesting self-help treatment approach is provided by the Croga.org Web site. Also adopting a blend of cognitive-behavioral, 12-step, and self-help techniques, this Web site includes many of the topics covered by i-SOTP but is available to anyone with an Internet connection. The main aim of this Web site is to reach individuals who are engaging in problematic online behaviors before they commit contact offenses. Given that many such individuals are undetected by authorities (U.S. Department of Justice, 2010), any comprehensive response to Internet offending will need to include a self-help component. A similar service is provided by nongovernmental organizations such as Stop It Now!, which provides a free, confidential, toll-free helpline along with access to online resources for individuals who are concerned about their sexual interests or behavior involving children. One benefit of self-help and confidential approaches is that a larger group of at-risk individuals can be reached, especially in light of evidence that many online offenders go undetected. Another benefit is the relatively low cost of such interventions. A disadvantage is the likelihood that the highest risk individuals (those who have an antisocial orientation and already engage in contact sexual offending) are probably less likely to seek self-help options. Another disadvantage is that followup data will not be available to evaluate the efficacy of these services.

Undetected Internet offenders are unlikely to seek help given the severe stigma associated with self-identifying as being sexually interested in children or engaging, directly or indirectly, in the sexual exploitation of children. Undetected offenders are also likely to be inhibited by mandatory reporting requirements, as they cannot talk honestly about illegal acts they have committed. A research and treatment project (the Dunkelfeld Project) currently underway in Berlin, Germany, was able to recruit a large sample of self-identified individuals who were sexually interested in children (Beier et al., 2009;

Neutze et al., 2011). Most individuals in the sample (95 percent) had engaged in illegal behavior at some time in their lives, but some had been inactive and had not committed a sexual offense in the previous 6 months. These men were reached through a mass media campaign involving billboard and other public advertisements as well as television and radio spots. An evaluation of the project is currently underway.

Summary

It is clear from this review that research on Internet offending is relatively new and that there are substantial gaps in our knowledge about Internet offenders and the crimes they commit. At the same time, research conducted over the past 10 years (paralleling the emergence of the Internet in everyday life) sheds some helpful light on some key issues.

Increasing Demand

There is consistent evidence that the number of Internet sexual offending cases is increasing rapidly, with major implications for law enforcement, criminal justice, correctional, and clinical agencies. More precise state-by-state data are needed, however, to better understand the breadth and depth of this increasing demand in order to allocate resources wisely and to determine if there are meaningful geographic differences that might suggest solutions to this demand (e.g., states with sex offender management boards may be better able to cope with the demand than states that do not have this integration of systems and services). (For more on "Sex Offender Management Strategies," see chapter 8 in the Adult section.)

Solicitation Offenders

Most of the research on Internet offenders has focused on child pornography offenders. Less is known about the characteristics, contact offending history, and risk of recidivism posed by solicitation offenders and the extent to which they differ from child pornography offenders (who also use online technologies to commit their crimes) and contact sex offenders (who have actually attempted to make or have made physical contact with a victim). Also, little is known about offenders who use the Internet to commit sex crimes against adults (e.g., using Craigslist or other online services to meet women whom they intend to sexually assault) or to commit conspiracy crimes (e.g., organizing child sex tourism to other jurisdictions, child pornography trading rings, "abuse on demand" via live streaming of images or video).

Internet Offending Types

Emerging research suggests that solicitation offenders are different from child pornography offenders in meaningful ways. In particular, child pornography offenders are likely to be pedophiles, whereas solicitation offenders appear to be predominantly interested in adolescent girls. This apparent difference might result from two different selection effects. First, individuals who are primarily interested in images of underage but sexually mature minors (e.g., girls between ages 15 and 17) are less likely to be prosecuted because of the challenges in establishing the ages of the depicted minors, in contrast to the relatively straightforward prosecution of someone in possession of images depicting prepubescent or pubescent children. Second, there may indeed be individuals interested in sexually soliciting younger children, but younger children are less likely to be on social networking and similar sites (many of which have age restrictions; e.g., Facebook has a minimum age criterion of 13, although this may be flouted by some younger children). This apparent difference in Internet offender motivations may translate to differences in contact offending history, risk of recidivism, and the likely targets of other criminal sexual behavior (young children versus adolescent minors).

"Internet-facilitated sexual offending includes various types of crimes, including possession, distribution, and production of child pornography; sexual solicitations; and conspiracy crimes."

Overlap With Contact Offending

Only one in eight Internet offenders has an official record for contact offending, based on available studies (Seto, Hanson, & Babchishin, 2011). The proportion goes up to approximately four in eight when self-reported offending is added, but this still falls short of the idea that most or all Internet offenders have already committed contact offenses. Internet offenders and conventional sex offenders are not synonymous groups.

> *"Child pornography offenders are likely to be pedophiles."*

An important area for future research is to explore the relationship between Internet and contact offending. This encompasses multiple research questions, including: What predicts the onset of online offending? How do dual offenders (those who commit both online and offline offenses) differ from online-only or offline-only offenders? What predicts the progression from Internet to contact offending? Related questions are whether child pornography and solicitation offenders differ in their contact offending histories and the trajectories leading to these different forms of Internet crime.

Risk of Reoffending

More research is needed, but an analysis of nine available followup studies suggests that Internet offenders, as a group, have a relatively low risk of reoffending compared to conventional contact sex offenders (based on official records, which are conservative estimates of recidivism because of reporting biases and other factors). This has implications for how we respond to Internet offending, given that the risk principle of effective corrections would suggest that legal, policy, and clinical responses to Internet offenders should be proportional to risk. The minority of offenders who have a higher risk of reoffending—based on age, criminal history, and other factors that are being identified in ongoing research—require different responses than offenders with no prior criminal history and clear evidence of stability and prosocial conduct in all other domains of their lives. Research

distinguishing between different types of Internet offenders will likely be helpful in this regard.

Intervention

More research on the onset and maintenance of Internet sexual offending is needed to design effective interventions for those who require it. Existing interventions represent adaptations of current sex offender treatment models, which may or may not work for Internet offenders. Although other areas require research attention, intervention is the area with the largest gaps in knowledge.

Notes

1. Solicitation offenders have also been called "travelers" in previous research on this population, while child pornography offenders have been called "traders." Briggs, Simon, and Simonsen (2011), discussed in more detail later in the chapter, have distinguished between solicitation offenders who appear to be fantasy driven (restricting their sexual interactions to online behavior such as sexually explicit chat, exhibitionism via Webcam, and/or transmission of pornography) and those who appear to be contact driven (whose online interactions are directed at arranging face-to-face meetings where sexual activities might take place).

2. A meta-analysis combines the results of many evaluations into one large study with many subjects.

3. The Butner Redux study by Bourke and Hernandez (2009), which is often cited in court proceedings pertaining to online offenders, was a statistical outlier in the Seto, Hanson, and Babchishin (2011) meta-analysis. This indicates that the study found an unusually high prevalence of contact offending history: 24 percent of the sample of 155 child pornography offenders had a known history of contact offending prior to treatment; however, following treatment (and polygraph examination for approximately half of the sample), 85 percent admitted to contact offenses or had an official contact offense history.

Chapter 5: Adult Sex Offender Recidivism
by Roger Przybylski

Introduction

Recidivism has been conceptually defined as the reversion to criminal behavior by an individual who was previously convicted of a criminal offense (Maltz, 2001). It reflects both the individual's recurrent failure to abide by society's laws and the failure of the criminal justice system to "correct" the individual's law-breaking behavior (Maltz, 2001). While the etiology of criminal behavior is complex (see chapter 2, "Etiology of Adult Sexual Offending," in the Adult section) and recidivism results from a range of personal and social factors, it is important to recognize that recidivism is not simply another term for repeat offending. Rather, it refers to the recurrence of illegal behavior after an individual experiences legal consequences or correctional interventions imposed, at least in part, to eliminate that behavior or prevent it from occurring again (Henslin, 2008).[1]

While recidivism has long been a concern of criminal justice practitioners and policymakers, it has received renewed attention in recent years due to the record number of convicted offenders living in our communities.[2] Research has demonstrated that repeat offenders account for a disproportionate amount of crime and that offenders released from prison are arrested at rates 30 to 45 times higher than the general population (Rosenfeld, Wallman, & Formango, 2005). As a result, there is widespread recognition today that recidivism has a direct impact on public safety and that recidivism reduction should be a key goal of the criminal justice system. This is particularly true with regard to crimes that are sexual in nature, given their impact on individual victims and the larger community (see chapter 1, "Incidence and Prevalence of Sexual Offending," in the Adult section).

Unfortunately, recidivism remains a difficult concept to measure, especially in the context of sex offenders. The surreptitious nature of sex crimes, the fact that few sexual offenses are reported to authorities, and variation in the ways researchers calculate recidivism rates all contribute to the problem.

The measurement problems found in sex offender recidivism research no doubt have contributed to a lack of consensus among researchers regarding the proper interpretation of some research findings and the validity of certain conclusions. While there is broad agreement that observed recidivism rates are not true reoffense rates, the magnitude of the gap between observed and actual reoffending, the propensity of sex offenders to reoffend over the life course, and whether it is valid to characterize sex offender recidivism rates as low or high are examples of key issues that are subject to divergent viewpoints.[3] While debate concerning the interpretation and policy implications of research

findings occurs in many public safety areas, it is both pronounced and ongoing in the context of sex offender recidivism.

Despite the limitations and controversies outlined above, research findings on the extent of sex offender recidivism can help policymakers and practitioners in several meaningful ways: (1) they can provide an empirical basis for better understanding the differential public safety risks posed by different types of convicted sex offenders; (2) they can help identify the risk factors that are related to recidivism; and (3) they can help policymakers and practitioners design and deliver more tailored and effective recidivism reduction strategies. (For a discussion of adult "Sex Offender Risk Assessment," see chapter 6 in the Adult section.)

Knowledge about general recidivism, in addition to sexual recidivism specifically, is important because **many sex offenders engage in both sexual and nonsexual criminal behavior.** Research has shown that sex offenders are more likely to recidivate with a nonsexual offense than a sexual offense (see, e.g., Hanson & Bussière, 1998). Studies have also shown that some crimes legally labeled as nonsexual in the criminal histories of sex offenders may indeed be sexual in their underlying behavior (Doren, 2010; Rice et al., 2006; Heil et al., 2009). Rice and colleagues, for example, reported that "Murder and kidnapping are clear examples of apparently nonsexual violent crimes that, when perpetrated by sex offenders, are usually sexually motivated" (2006, p. 526). In addition, a charge or conviction that appears in a criminal history record might not reflect underlying sexual motivation for the crime due to plea bargaining.

> *"Measurement variation across studies can produce disparate findings regarding the recidivism rates of sex offenders."*

Information about the recidivism rates of different types of sex offenders is equally important. Although sex offenders are often viewed as a homogenous group by the public, they are in reality a diverse mixture of individuals who have committed an array of illegal acts, ranging from noncontact offenses such as exhibitionism to violent sexual assaults (Center for Sex Offender Management [CSOM], 2001). Disaggregating sex offenders in recidivism research unmasks important differences in both the propensity to reoffend and the factors associated with reoffending for different types of individuals who have committed sexual crimes.

Issues To Consider

Numerous scholars have described the key measurement issues that can affect findings from sex offender recidivism research. Rather than reviewing these issues in their entirety or discussing them indepth, the most important matters that policymakers and practitioners should be concerned with are briefly summarized below.

Recidivism Rates Are Not True Reoffense Rates

Recidivism rates are typically based on officially recorded information, such as an arrest, criminal conviction, or incarceration. Because these official statistics reflect only offenses that come to the attention of authorities, they are a diluted measure of reoffending. **Research has clearly demonstrated that many sex offenses are never reported to authorities.** For example, Bachman (1998) found that only about one in four rapes or sexual assaults were reported to police. More recently, Tjaden and Thoennes (2006) found that only 19 percent of women and 13 percent of men who were raped since their 18th birthday reported the rape to the police. Several studies of victims have shown that the likelihood that a sexual assault will be reported to law enforcement decreases with the victim's age (Kilpatrick, Saunders, & Smith, 2003; Sorenson & Snow, 1991).[4]

It is also important to recognize that, once reported to law enforcement, only a subset of sex offenses result in the arrest of the perpetrator. Grotpeter and Elliot (2002) found that only 2.5 percent of sexual assaults and 10 percent of serious sexual assaults resulted in an arrest, and Snyder (2000) found that an arrest was made in only 29 percent

of reported juvenile sexual assaults. In addition, a number of studies have found that sex offenders disclose in treatment or in surveys that they had committed a large number of sex crimes before they were first caught or arrested. Abel and his colleagues interviewed paraphiliacs (i.e., those with a diagnosed psychosexual disorder) under conditions of guaranteed confidentiality and found that only 3.3 percent of their self-admitted hands-on sex offenses, such as rape and child molestation, resulted in an arrest (Abel et al., 1988). Simons, Heil, and English (2004) found that only 5 percent of rapes and child sexual assaults self-reported during prison treatment were identified in official records. Likewise, another study found that only 1 percent of contact and noncontact sexual offenses self-reported during treatment were identified in official records (Ahlmeyer et al., 2000).

Studies also have demonstrated a "disproportionate and patterned attrition of sexual offenses and sexual offenders from the criminal justice process" (Larcombe, 2012, p. 482). While case attrition (the dropping of a legal case by authorities, for various reasons) occurs for all types of offenses, it appears to be particularly pronounced for sexual crime and offenders (Gelb, 2007). Moreover, certain types of sexual crimes and offenders are more likely to be subject to criminal justice system processing and ultimately conviction, and these cases are not representative of sexual offenses or sexual offenders overall (Lievore, 2004; Kelly, Lovett & Regan, 2005). As Larcombe (2012, p. 482) points out, police, prosecutors, jurors, and the community tend to take more seriously those assaults that are "clearly interpretable as violence" and "least similar to potentially appropriate sex." Further, among all sexual offenders, those who have had "prior contact with the police" and those who have assaulted "children, male victims, and female victims who are strangers" are most likely to be arrested, charged, and prosecuted (Larcombe, 2012, p. 493; SSCRSA, 2006; Kelly, Lovett, & Regan, 2005; Temkin & Krahé, 2008). Research indicates that victim characteristics can also play a role in attrition. For example, females who are young, who have disabilities, or who are members of other vulnerable populations have been found to be "proportionally overrepresented as victims of rape" yet underrepresented among rape cases processed in the criminal justice

system (Larcombe, 2012, p. 489; SSCRSA, 2006). This systematic and patterned attrition of sexual offenses within the criminal justice system ensures that the relatively small number of sex crimes that are reported, prosecuted, and ultimately result in conviction do not reflect "the most common or injurious forms of sexual violence experienced by women and children" (Larcombe, 2012, p. 483). Hence, findings from recidivism studies need to be interpreted within the context of sexual assault incidence, prevalence, and attrition research.

Due to the frequency with which sex crimes are not reported to police, the disparity between the number of sex offenses reported and those solved by arrest, and the disproportionate attrition of certain sex offenses and sex offenders within the criminal justice system, **researchers widely agree that observed recidivism rates are underestimates of the true reoffense rates of sex offenders.** Hidden offending presents significant challenges for professionals working in sex offender management as it is difficult to know whether offenders who appear to be nonrecidivists based on official records are truly offense free. (For more on "Sex Offender Management Strategies," see chapter 8 in the Adult section.) In addition, perceptions of the public safety risk associated with sex crimes and certain sexual offenders may be distorted when they are based solely on crime and on offender profiles identified in official records.

Recidivism Rate Measurements Vary by Study

Even though the basic meaning of recidivism is rather clear cut, recidivism rates are often measured differently from one study to the next. Different ways of measuring recidivism rates can produce substantially different results, and comparing rates that were derived in different ways can lead to inaccurate conclusions. Some of the most common ways in which measurement variation occurs in recidivism research are summarized below.

Operational Definition of Recidivism

An operational definition states in very concrete terms precisely how something is to be measured. When researchers operationally define recidivism for

a study, they must specify the event that constitutes recidivism—such as an arrest, a conviction, or a return to prison. In some studies, recidivism is defined as an arrest during the followup period; in others, recidivism may be defined as a conviction for a criminal offense or a return to prison for a new crime.[5] There are various reasons why one definition might be employed in lieu of others in a particular study, but it is critically important to recognize that different operational definitions of recidivism will produce different research findings (CSOM, 2001).

Length of Followup Period

The length of time an offender is tracked to determine if recidivism occurred also can vary from one study to the next. Recidivism rates will naturally increase as offenders are followed for longer time periods because there is more time when they are at risk to reoffend and more time for recidivism to be detected. Hence, policymakers and practitioners should always be cognizant of the length of the followup period when interpreting recidivism rate research findings. They also should recognize that analyses that fail to standardize the time at risk for everyone in a given group of offenders being studied may further undercount recidivism because some offenders will not have been at risk for the entire followup period.[6]

Populations Studied

Variation in the types of offenders studied is common in recidivism research, and studies of sex offender recidivism are no exception (Maltz, 2001). For example, some recidivism studies focus on offenders released or paroled from prison, while others may focus on offenders discharged from probation. Because offenders released from prison typically have a more serious criminal history than probationers, and criminal history is related to recidivism, recidivism rates are likely to be higher for prison releasees than for probationers (Przybylski, 1986). In addition, parolees may be subject to more behavioral constraints than probationers, resulting in higher recidivism rates due to technical violations of the conditions of release (Maltz, 2001). Additionally, some prisoners are released without parole supervision. Because differences like these can affect observed recidivism rates, policymakers

and practitioners who use findings from recidivism rate research should exercise caution when comparing the recidivism rates of markedly different populations (Maltz, 2001).

Methods Used

Most recidivism studies search for new recorded criminal events and place offenders without the new events in the nonrecidivism category. Heil and colleagues (2009) conducted a recidivism study that accounted for every offender and excluded from the final calculations those who moved out of state, who died, or whose residence could not be verified. This reduced the sample size by more than 17 percent, all of whom would have been calculated as "nonrecidivists" in traditional studies. Not surprisingly, 1- and 5-year recidivism rates for this group of 1,124 prisoners were higher than those reported in many other studies that used followup periods that were similar in length. The 1- and 5-year recidivism rates found by the researchers were, respectively: 3.9 percent and 10.8 percent for a sex crime rearrest, 26.3 percent and 38.1 percent for a violent crime rearrest, and 52.6 percent and 77.7 percent for any arrest.

Recidivism Research Findings

Empirical data on the recidivism rates of sex offenders come from two broad categories of research—single studies and meta-analysis. Single studies typically track one or more cohorts of sex offenders following an arrest, discharge from probation, or release from prison to determine the proportion rearrested, reconvicted, or returned to prison within a specified period of time.[7] Meta-analysis is fundamentally different. It employs statistical procedures that combine the results of many single studies into one large study with many subjects. By pooling the original studies, meta-analysis counteracts a common methodological problem in research—small sample sizes—thereby helping the analyst to draw more accurate conclusions. Meta-analysis is especially useful when synthesizing the results of studies that use different types of measures, which is a common

occurrence in recidivism research, because one of the summary statistics meta-analysis can generate in recidivism research is the average recidivism rate across studies. This can help make sense of single-study findings derived from different operational definitions of recidivism or different followup period lengths. While these two types of research—individual studies and meta-analysis—are fundamentally different, they both have produced useful information on the recidivism rates of sex offenders, and findings from both types of research are presented below.[8]

Recidivism Rates: All Sex Offenders

Perhaps the largest single study of sex offender recidivism conducted to date was carried out by Langan, Schmitt, and Durose (2003). The study, which was published by the U.S. Department of Justice, Bureau of Justice Statistics, examined the recidivism patterns of 9,691 male sex offenders released from prisons in 15 states in 1994. These offenders accounted for about two-thirds of all male sex offenders released from state prisons in the United States that year. Using a 3-year postrelease followup period, rearrest and reconviction rates for sexual and other crimes were reported for the entire sample of sex offenders as well as for different categories of sex offenders.

The researchers found a sexual recidivism rate of 5.3 percent for the entire sample of sex offenders based on an arrest during the 3-year followup period. The violent and overall arrest recidivism rates for the entire sample of sex offenders were much higher; 17.1 percent of sex offenders were rearrested for a violent crime and 43 percent were rearrested for a crime of any kind during the followup period. Of the 9,691 sex offenders released from prison in 1994, 3.5 percent were reconvicted for a sex crime and about one-quarter (24 percent) were reconvicted for an offense of any kind during the followup period. Nearly 4 out of every 10 (38.6 percent) sex offenders in the study were returned to prison within 3 years of their release due to the commission of a new crime or a technical violation of their release conditions.

As part of their study, Langan, Schmitt, and Durose (2003) conducted a comparative analysis of recidivism among sex offenders and non-sex offenders. Findings were based on the 3-year postrelease offending of 9,691 sex offenders and 262,420 non-sex offenders released from prison in 1994. The analysis revealed that once released, the sex offenders had a lower **overall** rearrest rate than non-sex offenders (43 percent compared to 68 percent), but their **sex crime** rearrest rate was four times higher than the rate for non-sex offenders (5.3 percent compared to 1.3 percent). Similar patterns are consistently found in other studies that compare sex offender and non-sex offender recidivism (see, e.g., Sample & Bray, 2003; Hanson, Scott, & Steffy, 1995).

Another important study, because of its large sample size, was conducted by Sample and Bray (2003). The researchers examined the arrest recidivism of 146,918 offenders who were originally arrested in Illinois in 1990. Arrestees categorized as sex offenders (based on their most serious charge in 1990 being a sex offense) had 1-year, 3-year, and 5-year rearrest rates for a new sexual offense of 2.2 percent, 4.8 percent, and 6.5 percent, respectively.[9] The 3-year sexual recidivism rate of 4.8 percent for these sex offender arrestees was similar to the 3-year rate (5.3 percent) that Langan, Schmitt, and Durose (2003) reported for sex offenders released from prison in 1994.

Sex offenders in the Sample and Bray study had 1-year, 3-year, and 5-year rearrest rates for any new offense of 21.3 percent, 37.4 percent, and 45.1 percent, respectively. These overall recidivism rates were lower than those found for all other categories of offenders in the analysis, except homicide and property damage offenders. But like Langan, Schmitt, and Durose (2003), Sample and Bray found that sex offenders had a higher sexual recidivism rate than all other categories of offenders. Sample and Bray (2003, p. 72) concluded:

> Sex offenders in Illinois do not appear to commit future offenses, in general, at a higher rate than do other offenders. However they may have higher levels of recidivism for their crimes than other types of offenders exhibit for their particular offenses.

Another important study because of its large sample size **and** extended followup period was conducted by Harris and Hanson (2004). The research employed a combined sample of 4,724 sex offenders drawn from 10 prior studies; 7 of the studies involved sex offenders in Canada, 2 involved sex offenders in the United States, and 1 involved sex offenders in the United Kingdom. All of the 4,724 sex offenders in the Harris and Hanson analysis were released from correctional institutions, except for 202 Canadian sex offenders who were placed on probation and 287 American sex offenders who received community-based sentences in Washington State.

Harris and Hanson generated recidivism estimates based on new charges or convictions for sexual offenses using 5-, 10-, and 15-year followup periods for several categories of sex offenders. The 5-year sexual recidivism estimate for all sex offenders in the analysis was 14 percent. The 10-year and 15-year sexual recidivism rate estimates for all sex offenders were 20 percent and 24 percent, respectively. Using the same data set, Hanson, Morton, and Harris (2003) reported that the 20-year sexual recidivism rate for the sample was 27 percent.

One of the most important findings that emerged from the Harris and Hanson (2004) analysis was that the 15-year sexual recidivism rate for offenders who already had a prior conviction for a sexual offense was nearly twice that for first-time sex offenders (37 percent compared to 19 percent). Another important finding was that the rate of reoffending decreased the longer offenders had been offense-free. While 14 percent of the offenders in the analysis were sexual recidivists after 5 years of followup, only 7 percent of the offenders who were offense-free at that time sexually recidivated during the next 5 followup years. For offenders who were offense-free after 15 years, the observed sexual recidivism rate was only 4 percent over an additional 5 years of followup.

Hanson and colleagues (2009) conducted a meta-analysis of 23 recidivism outcome studies to determine whether the risk, need, and responsivity principles associated with effective interventions for general offenders also apply to sex offender treatment.[10] (For more on intervention principles, see chapter 7, "Effectiveness of Treatment for Adult

Sex Offenders," in the Adult section.) This meta-analysis produced an average sexual recidivism rate of 10.9 percent for treated offenders and 19.2 percent for untreated comparison offenders, based on an average followup period of 4.7 years.[11] The average overall recidivism rate (for any crime) was 31.8 percent for treated sex offenders and 48.3 percent for untreated comparison subjects.

An earlier meta-analysis of 43 sex offender treatment effectiveness studies found somewhat similar results (Hanson et al., 2002).[12] The average sexual recidivism rate based on an average followup period of 46 months was 12.3 percent for treated sex offenders and 16.8 percent for untreated sex offenders. The average overall recidivism rate was 27.9 percent for treated sex offenders and 39.2 percent for untreated sex offenders.

One of the largest meta-analyses of studies of the effectiveness of sex offender treatment was conducted by Lösel and Schmucker (2005). The analysis included 69 independent studies and a combined total of 22,181 subjects.[13] The researchers found an average sexual recidivism rate of 11.1 percent for treated sex offenders and 17.5 percent for untreated sex offenders based on an average followup period of slightly more than 5 years.[14] The average recidivism rate for any crime was 22.4 percent for treated sex offenders and 32.5 percent for untreated sex offenders.

Each of the meta-analyses highlighted above was undertaken to assess the effectiveness of sex offender treatment. (For a discussion of "Effectiveness of Treatment for Adult Sex Offenders," see chapter 7 in the Adult section.) All three studies found positive treatment effects, but what is most relevant is the consistent finding across studies that sex offenders are far more likely to recidivate with a nonsexual rather than a sexual crime. Several single studies that have been undertaken to evaluate treatment effectiveness, and several meta-analyses that have been undertaken for other reasons, have produced similar findings.

For example, McGrath and colleagues (2007) compared a group of 104 adult male sex offenders who received treatment, supervision, and periodic polygraph exams with a matched group of 104 sex

offenders who received the same type of treatment and supervision services but no polygraph exams. Based on a 5-year followup period, 5.8 percent of the offenders in the group that received polygraph testing and 6.7 percent of the offenders in the group that did not receive polygraph testing were charged with a new sex offense. The general recidivism rates for the polygraph and nonpolygraph groups (39.4 percent and 34.6 percent, respectively) were more than 5 times higher than each group's sexual recidivism rate.

In a study employing an even larger sample (403 treated and 321 untreated sex offenders) and an average followup period of 12 years, Hanson, Broom, and Stephenson (2004) reported sexual recidivism rates of 21.1 percent for the treated offenders and 21.8 percent for the untreated offenders. The general and violent recidivism rates for both groups were more than double their sexual recidivism rates. Treated sex offenders had a violent crime recidivism rate of 42.9 percent and an overall recidivism rate of 56.6 percent. Untreated sex offenders in the study had a violent crime recidivism rate of 44.5 percent and an overall recidivism rate of 60.4 percent.

Oliver, Wong, and Nicholaichuk (2008) conducted a treatment outcome study that examined the sexual recidivism rates of 472 treated and 282 untreated sex offenders. Sexual reconviction rates were examined across various followup periods. For the treated sex offenders, the researchers found sexual reconviction rates of 11.1 percent after 3 years of followup, 16.9 percent after 5 years of followup, and 21.8 percent after 10 years of followup. Sexual reconviction rates for the untreated sex offenders were 17.7 percent after 3 years, 24.5 percent after 5 years, and 32.3 percent after 10 years of followup.

Findings from the study conducted by Oliver, Wong, and Nicholaichuk (2008), like those from the Harris and Hanson (2004) analysis, demonstrate how the **recidivism rates of sex offenders increase as followup periods become longer.** In the study conducted by Harris and Hanson (2004), sexual recidivism rates increased from 14 percent after 5 years of followup to 24 percent after 15 years of followup. In the study conducted by Oliver, Wong, and Nicholaichuk (2008), sexual recidivism rates for

treated offenders increased from 11.1 percent after 3 years of followup to 21.8 percent after 10 years of followup. In a somewhat older study, Hanson, Scott, and Steffy (1995) found that first-time recidivism for a sexual/violent crime occurred between 10 and 31 years into followup for 10 percent of a sample of 191 child molesters released from a Canadian prison.[15] While higher recidivism rates should be expected with longer followup periods because there is more time for reoffending to occur and to be detected, these findings illustrate how important followup periods of longer than 3 or 5 years are for understanding the absolute risk of reoffending in sex offender populations.

Findings from two other large-scale studies of sex offender recidivism are reported below. Both studies are meta-analyses that were undertaken specifically to identify factors related to the recidivism of sex offenders, and their findings regarding recidivism rates are quite consistent.

Hanson and Bussière's (1998) meta-analysis involved 61 studies and a combined sample of 28,972 sex offenders. The researchers found an average sexual recidivism rate of 13.4 percent based on an average followup period of 4 to 5 years, and an average overall recidivism rate of 36.3 percent.[16] More recently, Hanson and Morton-Bourgon (2004) conducted a meta-analysis of 95 studies involving a combined sample of 31,216 sex offenders. The average sexual recidivism rate found was 13.7 percent and the average overall recidivism rate was 36.9 percent, based on an average followup period of 5 to 6 years.[17]

Recidivism Rates: Female and Male Sex Offenders

Recent research has begun to shed light on the differential rates of recidivism displayed by female and male sex offenders. **While the vast majority of known sex offenders are male, estimates suggest that females commit between 4 and 5 percent of all sexual offenses** (Sandler & Freeman, 2009; Cortoni & Hanson, 2005).[18]

Cortoni and Hanson (2005) conducted a study involving 6 sources of recidivism data and a combined sample of 380 female sex offenders.

Based on an average followup period of 5 years, the researchers found an average sexual recidivism rate for female sex offenders of 1 percent. The observed violent recidivism rate was 6.3 percent and the overall recidivism rate was 20.2 percent.[19] The researchers compared these recidivism rates for female sex offenders to 5-year sexual, violent, and overall recidivism estimates for male sex offenders derived from other studies.[20] The comparison revealed statistically significant differences between the recidivism rates for male and female sex offenders for each type of recidivism measure.[21] Table 1 presents a summary of the differential male and female recidivism rates reported in the analysis.

More recently, Sandler and Freeman (2009) examined the recidivism patterns of female sex offenders using a sample of 1,466 females convicted of a sexual offense in New York State. They found sexual recidivism rates (based on rearrest) of 0.8 percent, 1.3 percent, and 1.8 percent, based on followup periods of 1, 3, and 5 years, respectively. The 5-year rearrest rate found for a violent felony offense was 5.2 percent and the 5-year rearrest rate found for any offense was 26.6 percent.[22] Sandler and Freeman compared the recidivism rates found for female sex offenders after 5 years of followup with 5-year recidivism rates for male sex offenders drawn from other studies. The comparison indicated that female sex offenders had far lower rates of sexual recidivism (1.8 percent compared to 10–15 percent), violent recidivism (5.2 percent compared to 25 percent), and overall recidivism (26.6 percent compared to 36 percent) than male sex offenders.[23]

"Research indicates that female sex offenders reoffend at significantly lower rates than male sex offenders."

Further evidence that female sex offenders reoffend at significantly lower rates than male sex offenders comes from a recent meta-analysis of 10 studies conducted by Cortoni, Hanson, and Coache (2010).[24] The study included a combined sample of 2,490 female sex offenders. The researchers found an average sexual recidivism rate of about 3 percent for female sex offenders based on an average followup period of 6.5 years.[25] These findings led Cortoni, Hanson, and Coache (2010, p. 387) to conclude that "female sex offenders have extremely low rates of sexual recidivism" and that "distinct policies and procedures for assessing and managing the risk of male and female sex offenders" are needed.

Recidivism Rates: Different Types of Sex Offenders

While researchers have identified a variety of sex offender typologies (see chapter 3, "Sex Offender Typologies," in the Adult section), sex offenders are often classified by their crime type or victim age preference in recidivism research. Individuals involved in rape behavior and those involved in child molesting behavior are the two principal categories of sex offenders that emerge from this approach, and studies that examine the recidivism of specific types of sex offenders frequently report recidivism rates for one or both of these categories. Incest offenders are sometimes distinguished from other child molesters in recidivism research. A limited

TABLE 1. RECIDIVISM RATES FOR MALE AND FEMALE SEX OFFENDERS

	Percentage of Offenders Who Recidivate (5-Year Followup)		
	Sexual Recidivism	Violent Recidivism	Any Recidivism
Male sex offenders	13–14	25	36–37
Female Sex Offenders	1	6.3	20.2

Note: The recidivism rate differences between male and female sex offenders were statistically significant for each type of recidivism ($p < .001$).

Source: Cortoni & Hanson (2005).

body of research has also examined the recidivism rates of "hands off"—or noncontact—sex offenders, such as exhibitionists. When reviewing recidivism rates for different types of sex offenders, however, it is important to keep in mind that research has documented a significant amount of crossover offending among sex offenders. Estimates suggest that 32–64 percent of rapists have molested children and that many child molesters have assaulted adults (English and colleagues, 2000; Heil, Ahlmeyer, & Simons, 2003); Wilcox and colleagues, 2005).

While the knowledge base regarding recidivism rates is less extensive for specific types of sex offenders than it is for sex offenders overall, several important studies on the recidivism rates of rapists and child molesters have been published in recent years. Key findings from these studies—and from studies on recidivism among exhibitionists—are presented below.

Rapists

Researchers studying the recidivism of sex offenders are increasingly reporting recidivism rates specifically for rapists. Two studies previously discussed in this report—Langan, Schmitt, and Durose (2003) and Harris and Hanson (2004)—examined the recidivism of rapists using a relatively large sample size. The Harris and Hanson analysis included a sample of 1,038 rapists. Recidivism estimates were reported for three distinct followup periods: 5 years, 10 years, and 15 years. Sexual recidivism rates for rapists, based on new charges or convictions, were 14 percent at 5 years, 21 percent at 10 years, and 24 percent at 15 years.[26]

The Langan, Schmitt, and Durose (2003) study of male sex offenders released from state prisons in 1994 is arguably one of the largest individual recidivism studies of rapists undertaken to date. The study included a sample of 3,115 rapists.[27] The researchers found that 5 percent of the 3,115 rapists released from state prison in 1994 were arrested for a new sex offense during the 3-year followup period. Of these 3,115 rapists, 78 (2.5 percent) were charged specifically with another rape. The violent crime and overall recidivism rates found for rapists were 18.7 percent and 46 percent, respectively. Like sex offenders overall, rapists had a lower overall

recidivism rate than non-sex offenders in the study (46 percent compared to 68 percent), but a higher sexual recidivism rate (5 percent compared to 1.3 percent). One of the important findings that emerged from the study was that about half of the rapists with more than one prior arrest were rearrested within 3 years of their release, a rearrest rate nearly double (49.6 percent compared to 28.3 percent) that of rapists with just one prior arrest.

Another important study because of its lengthy followup period—25 years—was conducted by Prentky and colleagues (1997). Generalizing some of the study's findings to offenders engaged in rape behavior today is problematic because the study period began in 1959 and ended in 1985, and sex offender treatment and management practices were far different then than they are today. In addition, the study sample consisted of individuals who were sexually dangerous and civilly committed, so the sample is not representative of all rapists or all sex offenders. Still, the 25-year followup period employed in the research is arguably one of the longest used to examine the recidivism of rapists,[28] and certain findings concerning the variability of recidivism rates over time may have significance for the measurement and interpretation of recidivism rates today.[29]

The study conducted by Prentky and colleagues (1997) examined both short-term and long-term sexual and general recidivism within a population of 136 rapists who had been committed to the Massachusetts Treatment Center for Sexually Dangerous Persons. The researchers found sexual recidivism rates (based on a new charge) of 9 percent after 1 year of followup, 19 percent after 5 years of followup, and 31 percent after 15 years of followup.[30] Based on the 25-year followup period, the researchers found a sexual recidivism rate of 39 percent. The overall recidivism rate for any charge by the end of the 25-year followup period was 74 percent. Prentky and colleagues (1997, p. 656) acknowledged that generalizing the recidivism rates found in the study to other samples of sex offenders was problematic due to the "marked heterogeneity of sex offenders," but they also suggested that the "crucial point to be gleaned from this study is the potential variability of the rates" and not the specific rates themselves. Thus, it is worth noting

that despite the study's inherent limitations, some rapists remain at risk to reoffend long after their discharge and that conventional followup periods of 3 years or 5 years would have missed roughly half of the first-time recidivists identified after 25 years of followup (Prentky et al., 1997).

The long-term propensity for convicted rapists to sexually reoffend also has been examined by Doren (1998). His analysis, which aimed at estimating the true base rate for sexual recidivism among rapists, led him to conclude that the 39-percent long-term sexual recidivism rate for rapists found by Prentky and colleagues (1997) was consistent with findings from other research. Doren (1998, p. 107) further suggested that "rapist sexual recidivism should be considered to have a conservative approximation of its true base rate at about 39 percent."

The accuracy of Doren's (1998) estimate regarding the long-term propensity of rapists to reoffend, and the contention that any nontrivial proportion of sex offenders may show first-time recidivism 20 years or more following release from incarceration or discharge from probation, both remain subject to debate. Harris and Hanson (2004, p. 11), for example, in discussing their findings concerning the long-term sexual recidivism rates of rapists and child molesters, stated that "the decreasing rate of offending with age suggests that the rates observed after 15 to 20 years are likely to approximate the rates that would be observed if offenders were followed for the rest of their lives." While a review of the literature on the relationship between age and sexual recidivism is beyond the scope of this chapter, it is worthwhile noting that findings from several recent studies support the conclusion that age is inversely related to sexual recidivism (Prentky & Lee, 2007; Thornton, 2006); that is, as the age of the offender increases, the likelihood of sexual recidivism tends to diminish (Prentky & Lee, 2007).[31] Doren (2010), however, has suggested that drawing meaningful conclusions from the available data about an **age threshold for low risk** is difficult. While the type of offender may matter, the data are too few and too conditional to arrive at a valid conclusion (Doren, 2010).

Child Molesters

A relatively large body of research exists on the recidivism rates of child molesters. While unreported crime affects all recidivism research, it is particularly problematic in recidivism studies of child-molesting offenders as several studies have demonstrated that the likelihood that a sexual assault will be reported to law enforcement decreases with the victim's age (Kilpatrick, Saunders, & Smith, 2003; Smith et al., 2000; Sorenson & Snow, 1991).

The study of sex offenders released from state prisons in 1994 by Langan, Schmitt, and Durose (2003) included a large sample (4,295) of child molesters. The researchers reported that 5.1 percent of the 4,295 child molesters released from prison in 1994 were rearrested for a new sex crime within 3 years of their release, 14.1 percent were rearrested for a violent crime, and 39.4 percent were rearrested for a crime of any kind. Similar to the pattern for rapists in the study, child molesters with more than one prior arrest had an overall recidivism rate nearly double (44.3 percent compared to 23.3 percent) that of child molesters with only one prior arrest.

As might be expected, child molesters were more likely than any other type of offender—sexual or nonsexual—to be arrested for **a sex a crime against a child** following release from prison. During the 3-year postrelease followup period, 3.3 percent of the child molesters, 2.2 percent of all sex offenders, and less than one-half of 1 percent of the non-sex offenders were arrested for child molestation.[32] Released child molesters with more than one prior arrest for child molesting were three times more likely to be rearrested for child molesting than released child molesters with no more than one prior arrest (7.3 percent compared to 2.4 percent).

Two other studies mentioned in the prior discussion about the recidivism of rapists also make important contributions to the knowledge base about the recidivism patterns of child molesters. Findings from Harris and Hanson's (2004) analysis are particularly compelling because they document differential rates of recidivism for different types of child molesters based on followup periods of 5, 10, and 15 years. For all child molesters in the analysis, the researchers

found 5-year, 10-year, and 15-year sexual recidivism rates based on new charges or convictions of 13 percent, 18 percent, and 23 percent, respectively. Table 2 presents the study's recidivism estimates (based on new charges or convictions) for 5-year, 10-year, and 15-year followup periods for molesters of boys, molesters of girls, and incest offenders.

Table 2 shows that molesters of boys had the highest rates of sexual recidivism. Different patterns of reoffending within child molester populations have been found in other studies as well, with molesters of boys having higher recidivism rates than other types of child molesters (see, e.g., Seto, 2008). It is important to keep in mind that the recidivism rates observed for child molesters, and for incest offenders particularly, are impacted by underreporting even more so than recidivism rates for other types of sex offenders, as research has shown that child victims who knew their perpetrator were the least likely to report their victimization (Smith et al., 2000).

In a study that examined the recidivism of 191 child molesters and 137 non-sex offenders 15 to 30 years after their release from a Canadian prison, Hanson, Scott, and Steffy (1995) found that child molesters had lower rates of overall recidivism (based on reconviction) than non-sex offenders (61.0 percent compared to 83.2 percent), but much higher rates of sexual recidivism (35.0 percent compared to 1.5 percent). Not all child molesters in the study, however, recidivated at the same rate. The highest rate of recidivism among child molesters in the study (77 percent) was found for child molesters with

previous sexual offenses, those who were never married, and those who selected extrafamilial boy victims. In contrast, the long-term recidivism rate for child molesters categorized as low risk was less than 20 percent.

One study that did not find different rates of recidivism for child molesters based on victim gender was Prentky and colleagues' (1997) analysis of child molesters who were civilly committed in Massachusetts. The researchers cautioned, however, that this specific departure in their findings from other research may have been an artifact of the study sample's extensive prior criminal history for sexual offenses. The sample consisted of 115 child molesters who were discharged from civil commitment in Massachusetts between 1960 and 1984. Again, generalizing certain findings from the analysis to other samples of sex offenders could be problematic because the offenders in the study were very high risk and the study period ended more than 25 years ago. Nonetheless, the research is still important because of its lengthy followup period. Based on the 25-year followup period, Prentky and his colleagues (1997) found a sexual recidivism rate of 52 percent (defined as those charged with a subsequent sexual offense) for the 115 child molesters in the study. The overall new crime recidivism rate found after 25 years of followup was 75 percent.[33]

While the difference between the sexual recidivism rates for child molesters found by Prentky and colleagues (1997) using a 25-year followup period (52 percent) and Harris and Hanson (2004) using a

TABLE 2. SEXUAL RECIDIVISM RATES OF CHILD MOLESTERS

	Recidivism Rate, by Followup Period (%)		
	5 years	10 years	15 years
Male sex offenders	23.0 (N=315)	27.8 (N=105)	35.4 (N=95)
Female Sex Offenders	9.2 (N=766)	13.1 (N=218)	16.3 (N=208)
Committed incest	6.4 (N=416)	9.4 (N=73)	13.2 (N=69)

Recidivism estimates are based on new convictions and charges.

Source: Harris & Hanson (2004).

15-year followup period (23 percent) is striking, the nature and substantive significance of the difference can be interpreted in fundamentally different ways. One interpretation is that first-time recidivism may occur for some child molesters 20 or more years after criminal justice intervention, and that recidivism estimates derived from shorter followup periods are likely to underestimate the lifetime risk of child molester reoffending (Doren, 1998). Analyzing data from Prentky and colleagues (1997) and other studies, Doren (1998, p. 105) concluded that the lifetime prevalence of sexual recidivism for extrafamilial child molesters "should be thought of as having a conservative approximation of about 52 percent." An alternative interpretation is that the difference between Prentky and colleagues' 25-year estimate and Harris and Hanson's 15-year estimate is primarily an artifact of sampling—Harris and Hanson's findings are based on a larger, more diverse sample of child molesters, including some serving community sentences—and that the lifetime prevalence of sexual recidivism for child molesters overall is lower than the 52 percent suggested by Doren and based, at least in part, on the findings of Prentky and colleagues. **While the rate at which child molesters are likely to sexually recidivate over the life course may be subject to further debate, current empirical evidence suggests that molesters of boys have higher short- and long-term recidivism rates than other types of sex offenders.** It is important to keep in mind, however, that both gender-crossover and age-crossover offending are not uncommon, and that far more research on the recidivism patterns of crossover offenders is needed (Wilcox et al., 2005; Heil, Ahlmeyer, & Simons, 2003; English et al., 2000).[34] Additionally, recidivism is highly variable even within subtypes of sex offenders, and the propensity of child molesters and other sex offenders to reoffend can best be understood in the context of both historical— or static—and dynamic risk factors empirically associated with recidivism.

Exhibitionists

A limited body of research exists on the recidivism rates of exhibitionists. Marshall, Eccles, and Barbaree (1991) reported recidivism data from two studies that examined the effectiveness of specific treatment approaches for exhibitionists. Both studies were based on samples that were small in size.[35] The first study examined recidivism for 23 exhibitionists who participated in study treatment and 21 exhibitionists who served as comparison offenders.[36] The followup period was just under 9 years for both groups. The researchers found that 9 of the 23 (39.1 percent) treated exhibitionists and 12 of the 21 (57.1 percent) comparison exhibitionists recidivated during the followup period. The second study examined recidivism for 17 males charged with exhibitionism and treated between 1984 and 1987. Based on a followup period of almost 4 years, the researchers found that 4 of the 17 (23.6 percent) exhibitionists recidivated.

Sugarman and colleagues (1994) examined recidivism for exhibitionists with a larger sample (210 exhibitionists) and a followup period of 17 years. The researchers reported a 32-percent recidivism rate based on a conviction for a contact sexual offense during the followup period, and a 75-percent recidivism rate based on a conviction for any type of crime other than exposing. More recently, Rabinowitz-Greenberg and colleagues (2002) examined the recidivism of 221 exhibitionists assessed at the Royal Ottawa Hospital Sexual Behaviors Clinic between 1983 and 1996. Based on an average followup period of 6.8 years, the researchers found a sexual recidivism rate of 11.7 percent (based on a new charge or conviction), a violent crime recidivism rate of 16.8 percent, and an overall recidivism rate of 32.7 percent. Building upon the analysis, Firestone and colleagues (2006) examined recidivism for 208 of the exhibitionists in the analysis conducted by Rabinowitz-Greenberg and colleagues, extending the followup period to an average of 13.2 years. The researchers found that 23.6 percent of the offenders in the study sample were charged with or convicted of a sex crime (based on the 13.2-year average followup period), 31.3 percent were charged with or convicted of a violent crime, and 38.9 percent were charged with or convicted of any criminal offense. Sexual recidivists who were charged with or convicted of a hands-on sex crime during the 13.2-year average followup period were found to have a more extensive prior criminal history for violent crime and any type of crime than the exhibitionists who sexually recidivated with a hands-off offense.

Summary

Drawing firm conclusions about the extent of sex offender recidivism can be difficult due to a number of factors. First, although there is universal agreement that the observed recidivism rates of sex offenders are underestimates of actual reoffending, the magnitude of the gap between observed and actual reoffending remains subject to debate. As a result, conclusions about the extent of sex offender recidivism and the propensity of sex offenders to reoffend over the life course inherently involve some uncertainty. Second, measurement variation across studies often produces disparate findings that can be difficult to interpret. Comparing and corroborating findings can be difficult for the same reason. Third, short followup periods and small sample sizes limit the generalization of certain findings. Drawing firm conclusions about the propensity of specific subgroups of sex offenders to reoffend over the life course is particularly difficult, as sample sizes often fall to unrepresentative levels as followup periods grow longer.[37] Both individually and collectively, these factors present considerable challenges for anyone wanting to synthesize research findings for the purpose of drawing valid, widely accepted conclusions. Still, recent research has produced several trustworthy findings concerning the recidivism rates of child molesters, rapists, and sex offenders overall.

◆ **Official records underestimate recidivism.**
Studies of sexual assault victims and studies of sex offenders in treatment demonstrate that actual offending rates are poorly reflected by official records. Simons, Heil, and English (2004) found that only 5 percent of rapes and child sexual assaults self-reported during prison treatment were identified in official records; Tjaden and Thonnes (2006) found that only 17 percent of victim reports resulted in the perpetrator's conviction. While the magnitude of the difference between observed and actual reoffending needs to be better understood, there is universal agreement in the scientific community that the observed recidivism rates of sex offenders are underestimates of actual reoffending.

◆ **The observed sexual recidivism rates of sex offenders range from about 5 percent after 3 years to about 24 percent after 15 years.**
Relatively low rates of recidivism—particularly sexual recidivism—are reported in studies using followup periods shorter than 5 years. Langan, Schmitt, and Durose (2003), for example, found a sexual recidivism rate of 5.3 percent using a 3-year followup period for a large sample of sex offenders released from prison in 1994. Sample and Bray (2003) reported a sexual recidivism rate of 4.8 percent for a large sample of sex offenders in Illinois based on a 3-year followup period. Studies employing longer followup periods consistently report higher rates of recidivism. Harris and Hanson (2004), for example, reported sexual recidivism rates of 20 percent and 24 percent for a sample of sex offenders based on a 10-year and 15-year followup period, respectively. While observed recidivism rates will naturally increase as the length of the followup period increases, it is important to recognize that recidivism rates derived from followup periods of 5 years or less may mislabel a considerable proportion of repeat offenders as nonrecidivists, resulting in a significant underestimation of the absolute risk to public safety that sex offenders pose.

◆ **Sex offenders—regardless of type—have higher rates of general recidivism than sexual recidivism.** Although this basic reoffending pattern would naturally be expected to occur, the magnitude of the difference found in research is somewhat striking. It suggests that sex offenders are far more likely to reoffend for a nonsexual crime than a sexual crime and, as Hanson and Morton-Bourgon (2004, p. 4) have aptly stated, "policies aimed at public protection should also be concerned with the likelihood of any form of serious recidivism, not just sexual recidivism." It is important to keep in mind, however, that nonsexual offenses are more likely than sexual offenses to be reported to law enforcement, and that some crimes legally labeled as nonsexual in the criminal histories of sex offenders may indeed be sexual in their underlying behavior.

◆ **Sex offenders have lower rates of general recidivism but higher rates of sexual recidivism than non-sex offenders.** Research comparing the recidivism rates of sex offenders with non-sex offenders consistently finds that sex offenders have lower overall recidivism rates than non-sex offenders. Child molesters, rapists, and sex offenders overall, however, are far more likely than non-sex offenders to recidivate sexually. Langan, Schmitt, and Durose (2003), for example, found sexual recidivism rates that are four times higher for sex offenders compared to non-sex offenders in their study of about two-thirds of all sex offenders released from state prisons in 1994.

◆ **Female sex offenders have lower rates of sexual and general recidivism than male sex offenders.** Five- to six-year rates of sexual recidivism for female sex offenders may be as low as 1 to 3 percent. The empirical evidence regarding the differential recidivism rates of female and male sex offenders suggests that intervention and management practices need to differentiate between female and male sex offenders, and that procedures for assessing risk developed for male sex offenders are unlikely to be accurate when applied to female sex offenders (Cortoni, Hanson, & Coache, 2010). In addition, until stronger empirical evidence is assembled concerning the factors associated with female sex offender recidivism, assessment and intervention practices for female sex offenders should be driven by scientific evidence on female offenders overall rather than by knowledge about male sex offenders (Cortoni & Hanson, 2005; Public Safety Canada, 2006).

◆ **Different types of sex offenders have markedly different rates of recidivism.** Research that examines the recidivism of rapists and child molesters indicates that the highest observed recidivism rates are found among child molesters who offend against boys. Harris and Hanson's (2004) analysis, for example, found a 5-year sexual recidivism rate of 23 percent and a 15-year sexual recidivism rate of 35 percent for molesters of boys. Comparatively lower recidivism rates are found for rapists, child molesters who victimize girls, and incest offenders. In the Harris and Hanson (2004) analysis, rapists were found to

have a 5-year sexual recidivism rate of 14 percent and a 15-year sexual recidivism rate of 24 percent. Child molesters who victimize girls were found to have a 5-year sexual recidivism rate of 9 percent and a 15-year sexual recidivism rate of 16 percent. While differential rates of recidivism between opposite-sex and same-sex child molesters have not always been found in research, the weight of the evidence suggests that contact offenders who target boys are more likely to sexually reoffend than those who target girls (Seto, 2008).[38] Incest offenders appear to have lower sexual recidivism rates than rapists or other child molesters. In the Harris and Hanson (2004) analysis, incest offenders were found to have a 5-year sexual recidivism rate of 6 percent and a 15-year sexual recidivism rate of 13 percent. It is important to keep in mind, however, that the recidivism rates observed for child molesters, and for incest offenders particularly, are artificially depressed by underreporting even more so than recidivism rates for other types of sex offenders, as research indicates that child victims who know their perpetrator are the least likely to report their victimization. In addition, both gender-crossover and age-crossover offending are not uncommon, and far more research on the recidivism patterns of crossover offenders is needed.

"Different types of sex offenders have a different propensity to reoffend."

Still, the empirical evidence clearly demonstrates that different types of sex offenders have a different propensity to reoffend. This suggests that different recidivism-reduction policies and practices are needed for different types of sex offenders. Policies and practices that take into account the differential reoffending risks posed by different types of sex offenders are likely to be more effective and cost-beneficial than those that treat sex offenders as a largely homogenous group.

While a sound foundation of knowledge on the extent of sex offender recidivism has been produced in recent years, significant knowledge gaps and unresolved controversies remain. Variations across studies in the operational definition of recidivism,

the length of the followup period employed, and other measurement factors continue to make it difficult to make cross-study comparisons of observed recidivism rates. Interpreting disparate findings and their implications for policy and practice also remains a challenge.

"Research documenting the recidivism patterns of crossover offenders and other specific sex offender subtypes is needed."

While the operational definitions and followup periods employed in sex offender recidivism research will largely be dictated by the available data, studies that produce more readily comparable findings are greatly needed, as are those that employ followup periods longer than 5 years. Analyses that standardize the time at risk for all offenders in a given study using survival analysis also are needed. Future research should also attempt to build a stronger evidence base on the differential recidivism patterns of different types of sex offenders. While important information on the recidivism of rapists and child molesters has been produced, far more evidence regarding the recidivism patterns of crossover offenders and other specific sex offender subtypes is needed.

"We must develop a way to bridge the gap between the perspective that "few sex offenders reoffend" and the evidence that few victims report their victimization."

Finally, far more **policy-relevant** research is needed on the absolute and relative risks that different types of sex offenders pose. The extant literature on sex offender recidivism has thus far been unable to decisively resolve the readily apparent controversy that exists in the field about the proper interpretation of recidivism data and its meaning for public policy. On one hand, some researchers interpret the observed recidivism rates of sex offenders as low, and hence argue for revisions to the current sex offender policy framework. Other researchers are more reticent to interpret recidivism

data in the same way, pointing out that the true reoffense rates of sex offenders remain largely unknown due to underreporting and other factors. There is little question that policies and practices aimed at the reduction of sex offender recidivism would be far more effective and cost-beneficial if they better aligned with the empirical evidence, but bridging the gap is plagued by measurement problems and conflicting interpretations of the existing scientific evidence. Individual and community safety would no doubt be served by a redoubling of efforts to break down victim reporting barriers, improve research, and build more meaningful collaborations between researchers, policymakers, practitioners, and the public.

Notes

1. Also see the definition for recidivism in Public Safety Canada's Glossary of Key Terms in Crime Prevention.

2. This includes offenders returning to the community upon release from incarceration as well as offenders who are serving or who have been discharged from community-based sentences.

3. Some researchers interpret the observed recidivism rates of sex offenders as relatively low or conclude that most sex offenders do not recidivate. Others are more reticent to interpret recidivism data in the same way, arguing that the true reoffense rates of sex offenders are high or unknown or that observed recidivism rates can be misleading because the propensity of sex offenders to reoffend is poorly reflected in officially recorded recidivism, particularly when short followup periods are involved.

4. See Pipe and colleagues (2007) for more information about childhood disclosure of sexual abuse.

5. Some studies that examine the recidivism of offenders on parole or probation include in their definition of recidivism imprisonment that results from a technical violation of the conditions of release or supervision.

6. For example, some offenders found to be nonrecidivists may have moved out of state before the end of the followup period, or some may have spent a portion of the followup period in jail. Had these offenders actually been at risk in the community for the entire followup period, recidivism may have been detected, resulting in a higher observed recidivism rate for the entire group of offenders being studied.

7. Some single studies do not simply calculate the proportion rearrested, reconvicted, or returned to prison; rather, they employ a technique called survival analysis, which standardizes the at-risk time for everyone in the analysis. See endnote 29.

8. Meta-analysis has been criticized by some researchers, primarily for mixing very different studies together or for including studies of questionable quality in the analysis. Advances in methods regarding heterogeneity and methodological variability can successfully address these criticisms. See, for example, Petrosino and Lavenberg (2007); Wilson and Lipsey (2001); and Lipsey (2002). Meta-analyses that are based on prudent exclusionary criteria, incorporate statistical tests of homogeneity, and explore how methodological and contextual variations impact treatment effects are uniquely equipped to provide policymakers and practitioners with highly trustworthy and credible evidence.

9. Sample and Bray (2003) did not report the number of 1990 arrestees who were categorized as sex offenders.

10. Twenty-two of the studies examined sexual recidivism (3,121 treated sex offenders and 3,625 comparison offenders) and 13 studies examined general recidivism (1,979 treated sex offenders and 2,822 comparison offenders).

11. Recidivism was defined as reconviction in 10 studies and rearrest in 12 studies. In one study, the criterion for recidivism was not specified. Average followup periods ranged from 1 to 21 years, with a median of 4.7 years.

12. The 43 studies examined 5,078 treated offenders and 4,376 untreated offenders. Thirty-eight studies

reported sexual recidivism (4,321 treated sex offenders and 3,591 comparison offenders) and 30 studies reported general recidivism (3,356 treated sex offenders and 2,475 comparison offenders). Recidivism was defined as reconviction in 8 studies and rearrest in 11 studies. In 20 studies, broad definitions of recidivism were used, including parole violations, readmissions to institutions, or community reports. Average followup periods ranged from 1 to 16 years, with a median of 46 months.

13. The 22,181 study subjects included 9,512 treated sexual offenders and 12,669 untreated sexual offenders.

14. These recidivism rates are based on the n-weighted average for the treatment and comparison groups. The unweighted average recidivism rates were 12 percent for the treatment group and 24 percent for the comparison group. The average followup period for treated sex offenders was 63.54 months (5.3 years) and the average followup period for untreated offenders was 62.41 months (5.2 years).

15. A handful of other studies have employed followup periods of 20 or more years. Prentky and colleagues (1997), for example, examined the recidivism rates of rapists and child molesters at various followup points; the longest was 25 years after the offenders' release from confinement. The observed sexual recidivism rate after 5 years of followup was 19 percent for both rapists and child molesters. By comparison, the observed sexual recidivism rates after 25 years of followup were 39 percent for rapists and 52 percent for child molesters. These analyses are discussed in greater detail in the "Recidivism Rates: Different Types of Sex Offenders" section in this chapter.

16. The sexual recidivism analysis was based on a combined sample of 23,393 offenders; the general recidivism analysis was based on a combined sample of 19,374 offenders.

17. The sexual recidivism analysis was based on a combined sample of 20,440 offenders; the general recidivism analysis was based on a combined sample of 13,196 offenders.

18. Reliable estimates on the prevalence of female sexual offending are difficult to obtain, as a number of factors can affect the recognition of female perpetrated sex offenses (CSOM, 2007). According to the Federal Bureau of Investigation's Uniform Crime Reports (UCR), only about 1 percent of the offenders arrested for rape in 2009 were female. (For more on UCR, see the "Uniform Crime Report" section of chapter 1, "Incidence and Prevalence of Sexual Offending," in the Adult section.) A recent Safer Society survey of sex offender treatment programs in the United States and Canada found that females accounted for about 5 percent of the clients treated in U.S. programs in 2008 (McGrath et al., 2010).

19. The definition of recidivism varied widely, ranging from arrests to convictions and reports provided by probation officers.

20. Recidivism rates for males sex offenders were derived from Hanson and Bussière (1998) and Hanson and Morton-Bourgon (2004).

21. p < .001.

22. Five-year recidivism rates were based on 1,041 female offenders.

23. The sexual, violent, and overall recidivism rates for male sex offenders were drawn from Hanson and Bussiere (1998) and Hanson and Morton-Bourgon (2004).

24. Recidivism was defined as an arrest, charge, conviction, or incarceration for a new offense.

25. As a comparison, the researchers reported a sexual recidivism rate of 13.7 percent for male sex offenders based on an average followup period of 5.5 years. The average sexual recidivism rate reported for male sex offenders was derived from a previous meta-analysis (Hanson & Morton-Bourgon, 2004) of 84 studies involving 20,440 sex offenders, the majority of whom were males. Hanson and Morton-Bourgon (2004) reported that 1 of the 84 studies in the meta-analysis focused on female sex offenders. Based on the N-size reported in that study of female offenders, fewer than 100 of the 20,440 sex offenders in the Hanson and Morton-Bourgon (2004) meta-analysis were female.

26. The 5-year recidivism rate estimate is based on 514 offenders, the 10-year estimate is based on 261 offenders, and the 15-year estimate is based on 157 offenders.

27. The study conducted by Langan, Schmitt, and Durose (2003) separated "violent sex crimes" into two categories: "rape" and "other sexual assault." The term "rapist" was used to refer to a released sex offender whose imprisonment offense was defined by state law as forcible intercourse with a female or male. The "rape" category excluded statutory rape or any other nonforcible sexual act with a minor or with someone unable to give legal or factual consent. Sex offenders whose imprisonment offense was a violent sex crime that could not be positively identified as "rape" were placed in the "sexual assault" category. The 3-year recidivism rates reported for the 6,576 sex offenders categorized as sexual assaulters follow: 5.5 percent were rearrested for a new sex crime, 16.4 percent were rearrested for a violent crime, and 41.5 percent were rearrested for a crime of any kind.

28. Maletzky and Steinhauser (2002) conducted a study of 7,275 sexual offenders, including 448 rapists, who entered a treatment program between 1973 and 1997. Although the followup period for some offenders was as long as 25 years, the failure rates reported in the study were based on self-admission of covert and/or overt deviant behaviors or the presence of deviant sexual arousal (which is not a crime), in addition to reoffending.

29. Prentky and his colleagues also employed a statistical technique called survival analysis, which takes into account the amount of time each offender has been on the street and is thus able to reoffend. Recidivism is reported as the failure rate, which is the proportion of individuals who recidivated (or failed) based on a standardized time at risk for all study subjects. Determining the simple proportion of individuals who reoffended during the followup period—the most common method of calculating a recidivism rate—can underestimate the rate of recidivism because some of the nonrecidivists may not have been at risk in the community for the entire followup period. Had they been, recidivism may have been detected, resulting in a higher observed recidivism rate for the entire group of

Chapter 6: Sex Offender Risk Assessment

by Kevin Baldwin, Ph.D.

Introduction

Although the desire to predict the risk of future violence posed by individuals is likely centuries old, risk assessment efforts until recently have been relatively unsuccessful in terms of their predictive accuracy. Notwithstanding pseudoscientific methods such as phrenology (which claimed to gauge behavior propensities based on measurements of the skull), risk assessment for many decades has primarily involved individual mental health professionals applying their accumulated experience and clinical acumen to produce a clinical judgment of the degree of risk posed by a particular individual. Scientists have repeatedly questioned the validity of such unstructured clinical judgment as the basis for risk assessments (Grove, 2005; Grove & Meehl, 1996; Meehl, 1954), but it took the publication of John Monahan's *Predicting Violent Behavior: An Assessment of Clinical Techniques* in 1981 to usher in a truly scientific approach to violence risk assessment. In the three decades since the publication of Monahan's book, the relative accuracy of violence risk assessments has increased substantially.

The ability to accurately assess the likelihood of future violent acts—and future criminal behavior more generally—is important to clinicians, policymakers, and the public alike. In this context, risk assessment typically involves arriving at an estimate of the likelihood that an offender will recidivate (that is, revert to illegal behavior) after the individual experiences legal consequences or intervention for a prior criminal act. (For more information on "Adult Sex Offender Recidivism," see chapter 5 in the Adult section.)

Risk assessment serves many purposes throughout the offender adjudication process. It is often undertaken for dispositional purposes to help determine, for example, an appropriate sentence or custody level or the conditions of community supervision. In these situations decisions are often predicated, at least in part, on the assessed likelihood of recidivism, with resources being allocated accordingly to promote community safety (Kingston et al., 2008).

Research has suggested that offenders convicted of sexual offenses have received more attention from policymakers than any other category of offenders over the past 20 years (Ackerman et al., 2011; Levenson, 2009), and that there is consequently a need for methods and tools that can be used to accurately assess the risk to public safety that sexual offenders pose. Indeed, estimates of risk for sex offenders are used in various community corrections, institutional corrections, and civil commitment decision-making contexts. Thus, the scientific and theoretical underpinnings of risk assessment are a

critical component of the successful management of adult sexual offenders (Tabachnick & Klein, 2011). (For more on "Sex Offender Management Strategies," see chapter 8 in the Adult section.)

> *"The purposes of risk assessment span the spectrum of the adjudication process."*

In many respects, the effectiveness of sex offender management policies relies on the ability of criminal justice professionals to accurately differentiate sexual offenders according to their risk for recidivism (Hanson & Morton-Bourgon, 2005). Arguing from a policy standpoint, Tabachnick and Klein (2011) have stated that the results of actuarial risk assessments in particular should inform decision-making at all levels regarding the supervision of adult sexual offenders in order to prevent recidivism.

While much progress has been made regarding the ability of professionals in the field to accurately estimate the likelihood of future sexual reoffense, no one is presently able to estimate either the timing or the severity of such future criminal conduct (J. Levenson, personal communication, May 23, 2011). Therefore, it is critically important to establish a clear understanding of exactly what risk is being assessed and to frame expectations

accordingly. Current methods at present allow, in most cases, only for an estimate of the likelihood of both future sexual and nonsexual offending over a specific timeframe. The accuracy of these estimates depends in part on the degree to which the individual offender being assessed matches a known group of sex offenders and the degree to which the factors included in the risk assessment accurately reflect the known universe of relevant risk factors.

Review of Research

Sex offender risk assessments are most often employed in applied forensic settings for purposes of decision-making (Doren, 2002). The typical venues for sex offender risk assessment include—

◆ Sentencing and criminal adjudications, during which the results of the assessment are used to ascertain appropriate levels and periods of confinement and/or community supervision.

◆ Determinations of treatment needs, settings, and modalities.

◆ Sex Offender Registration and Notification (SORN) proceedings, during which the results of the assessment are used to classify ("level") offenders based on their assessed risk.

FIGURE 1. SEX OFFENDER MANAGEMENT PRACTICES ACROSS THE CRIMINAL JUSTICE SPECTRUM

Case Processing	Corrections	Reentry and Tracking
Arrest and Investigation	Corrections Programming	Supervision
Prosecution and Defense	Treatment	Treatment
Sentencing and Disposition		Registration
		Community Notification

Community Support

Prevention and Education

Victim Services and Outreach

Community Involvement
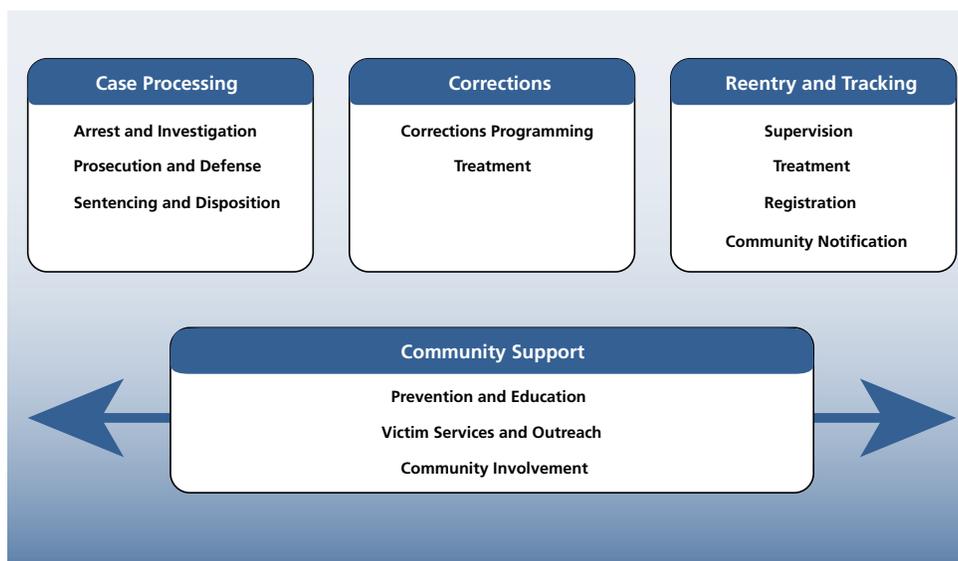
◆ Civil commitment proceedings, during which the results of the assessment are used to argue for and against indefinite confinement based on the assessed risk for sexual recidivism.

"There are three generations of risk assessment methods: Unstructured professional opinion, actuarial methods using static predictors, and methods that include both static and dynamic factors."

Methods of assessing sex offender risk can generally be categorized as follows (Hanson, 1998):

◆ **Unguided (or unstructured) clinical judgment:** The evaluator[1] reviews case material and applies personal experience to arrive at a risk estimate, without relying on a specific list of risk factors or underlying theory to prioritize or weight any of the information used.

◆ **Guided (or structured) clinical judgment:** The evaluator begins with a finite list of factors thought to be related to risk, drawn from personal experience and/or theory rather than from relevant empirical evidence.

◆ **Research-guided clinical judgment:** The evaluator begins with a finite list of factors identified in the professional literature as being related to risk. While these factors are given priority in the risk assessment, they are combined with other factors and considerations using the clinician's judgment.

◆ **Pure actuarial approach:** The evaluator employs an existing instrument composed of a finite, weighted set of factors (generally static, or relatively unchanging and historical in nature) identified in the literature as being associated with risk. The instrument is used to identify the presence or absence of each risk factor, and an estimate of risk is arrived at through a standard, prescribed means of combining the factors. This approach is the only risk assessment method that can be scored using a computerized algorithm or by minimally trained nonclinicians.

◆ **Adjusted actuarial approach:** The evaluator begins with the administration of an existing actuarial instrument and then employs a finite list of considerations that can be used to raise or lower the assessed level of risk.

Comparisons of the above-described approaches to risk assessment have a long and at times contentious history (Grove, 2005; Grove & Meehl, 1996; Grove et al., 2000; Meehl, 1954). While the superiority of structured approaches to unstructured approaches appears to have been settled (Grove, 2005; Hanson & Morton-Bourgon, 2009; A. Phenix, personal communication, May 10, 2011), each of the structured approaches has its merits as well as its supporters and detractors (Doren, 2002; A. Phenix, personal communication, May 10, 2011). Nonetheless, recent research (Hanson & Morton-Bourgon, 2009) suggests that pure actuarial assessments should be favored over other approaches (Hanson, 2009).

Criminologist James Bonta (1996) has identified three generations of risk assessment methods: unstructured professional opinion (corresponding to Hanson's (1998) unstructured clinical judgment), actuarial methods using static predictors (corresponding to Hanson's actuarial approach), and methods that include both static and dynamic factors (referred to by Bonta as criminogenic needs). By including dynamic risk factors in the assessment process, third-generation risk assessments can be used to both guide and evaluate the impact of intervention efforts. The current thinking in the field confirms the promise of third-generation risk assessment methods, as research tells us more about the relationship between specific dynamic factors and risk for recidivism (Hanson, 2011; Mann, Hanson, & Thornton, 2010; A. Phenix, personal communication, May 10, 2011).

For accurate risk assessment to occur, the factors associated with the type of risk being assessed must be known. Knowledge about the risk factors associated with recidivism typically is generated through research in which the recidivism rate for offenders with a particular characteristic is compared to the recidivism rate for offenders without that characteristic, or for offenders possessing other characteristics (Hanson, 2000). To

date, no single characteristic (that is, "risk factor") has been found in isolation to be a robust predictor of recidivism. As a result, the assessment of risk by necessity involves the combination of a number of risk factors in a meaningful manner.

Karl Hanson and his colleagues (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005) have published the results of a series of meta-analyses[2] that together have shed considerable light on the known universe of static risk factors associated with sexual recidivism. The strongest predictors of sexual recidivism are factors related to sexual criminality, such as a demonstrated sexual interest in children, a history of prior sexual offenses, the age of onset of sexual offending behavior, and having committed a variety of sexual offenses. Factors relating to a lifestyle of instability/criminality were also found to be associated with sexual offense recidivism (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). Criminal lifestyle characteristics (e.g., substance abuse, history of rule violation) are also the factors most strongly related to violent and any recidivism among sex offenders, mentally disordered offenders, and offenders in general (Hanson & Morton-Bourgon, 2009). Over the past three decades, numerous studies have examined the factors that are related to sexual offense recidivism, and not a single study has found the specific type of crime an offender is convicted of to be predictive of the likelihood of recidivism (Freeman & Sandler, 2010).

Sex offender risk assessment, while similar in many ways to the assessment of other latent constructs (psychological concepts) within psychology and mental health, differs in at least one significant aspect. The construct being assessed— the commission of a new sexual offense—is unobservable and is likely never to be observed by the assessor. Sex offender risk assessment entails a process of estimating the likelihood of a future event based entirely on secondary, indicator variables (Hanson, 2009). While actuarial risk assessment tools must meet standard criteria for psychological measures (e.g., reliability and validity), the utility of these instruments depends considerably on the selection of relevant risk factors and the methods used to combine these factors to arrive at a meaningful overall assessment of risk (Hanson, 2009). It is important to keep in mind

that for purposes of risk assessment, the utility of a risk factor depends on its empirical relationship to the outcome being predicted (Helmus et al., 2012). The consideration of base rates is also critical (Thornton, Hanson, & Helmus, 2011). The base rate is equal to the proportion of a group that shares a specific characteristic. For purposes of sex offender risk assessment, the relevant base rate is the proportion of convicted sex offenders who commit a subsequent sexual offense, either over a specified timeframe or over the course of their lifetime. **The base rate is arrived at through reference to large meta-analyses of sex offender recidivism, such as Hanson and Bussière (1998) and Hanson and Morton-Bourgon (2005). These studies found the 5-year recidivism rate to be approximately 13 percent. It is important to remember, however, that this figure is an underestimate, given that not all recidivist behavior is detected.**

The accurate assessment of risk involves gaining an understanding of all available, relevant factors associated with the known criterion or outcome behavior. While research findings are quite consistent regarding the historical, relatively unchangeable factors referred to as "static" risk factors (e.g., age at first offense, number of previous convictions), there is less agreement at present regarding more fluid, changeable risk factors referred to as "dynamic" risk factors (e.g., employment status, cooperation with supervision). The utility of a rather fixed set of static variables associated with sex offender risk has been established in numerous studies (Hanson & Bussière, 1998; Hanson & Morton Bourgon, 2005), and empirically identified static risk factors are a primary component of several valid and reliable instruments used in the field today (e.g., Static 99R, Static-2002R, MnSOST-R).

A number of instruments incorporating dynamic factors have appeared in recent years, such as the Stable-2007/Acute-2007 (Hanson et al., 2007) and the Forensic version of the Structured Risk Assessment (Thornton & Knight, 2009). Neither of these instruments, however, has the research backing of the more established instruments of static risk, such as the Static-99R and Static 2002R. A recent meta-analysis (Mann, Hanson, & Thornton, 2010) provides the most complete understanding to

date of the relationship between a host of dynamic factors and sex offender recidivism.

The use of third-generation risk assessment instruments that incorporate both static and dynamic risk factors is becoming more prevalent (Hanson & Morton-Bourgon, 2009; A. Phenix, personal communication, May 10, 2011). These instruments have the potential added benefit of providing targets for intervention. An example of a third-generation instrument is the Level of Service/Case Management Inventory (Andrews, Bonta, & Wormith, 2004), which provides a general assessment of risks and needs for criminal-justice-involved persons. The Violence Risk Scale: Sexual Offender Version (VRS:SO) is a recently developed instrument specifically designed to assess risks and needs among sex offenders. This measure contains 7 static factors and 17 dynamic factors; the dynamic, treatment-change factors are based on the Transtheoretical Model of Change (Beggs & Grace, 2010). (For more on treatment, see chapter 7, "The Effectiveness of Treatment for Adult Sex Offenders," in the Adult section.)

"The use of third-generation risk assessment instruments that incorporate both static and dynamic risk factors is becoming more prevalent. These instruments have the potential added benefit of providing targets for treatment."

A variety of sex offender risk assessment tools possess acceptable, empirically supported psychometric properties (Doren, 2002, 2006; Hanson, 2009; A. Phenix, personal communication, May 10, 2011). While a complete review and analysis of these instruments is beyond the scope of this chapter, a meta-analysis conducted by Hanson and Morton-Bourgon (2009) provides important insights concerning the relative accuracy of different approaches. Their analysis consisted of 536 findings drawn from 118 distinct samples with a total sample of 45,398 sex offenders in 16 different countries. The followup periods ranged from 6 months to

23 years; the average followup period was 5 years and 10 months (standard deviation = 46.6 months). The following types of risk assessment approaches were included in the analysis: empirical actuarial, mechanical (using factors chosen primarily on the basis of theory or literature reviews), adjusted actuarial, structured professional judgment, and unstructured professional judgment.

Hanson and Morton-Bourgon (2009) concluded that empirically derived actuarial approaches were more accurate than unstructured professional judgment in assessing risk of all outcomes (sexual, violent, and any recidivism). The accuracy of structured professional judgment methods fell in between these two methods. For the prediction of sexual recidivism, actuarial instruments designed for assessing the risk of sexual recidivism had the greatest predictive accuracy, followed by mechanical approaches designed for assessing the risk of sexual recidivism and actuarial instruments designed for assessing the risk of general recidivism. Unstructured professional judgment and actuarial instruments for assessing violent recidivism risk were less accurate in assessing the likelihood of sexual recidivism. The predictive accuracy of structured professional judgment fell in between that of actuarial instruments and unstructured professional judgment approaches. In addition, structured professional judgment exhibited a large degree of variability in the few studies that examined this method (Hanson & Morton-Bourgon, 2009).

Hanson and Morton-Bourgon (2009) also found that for assessing the likelihood of sexual recidivism, the best-supported instruments were the—

◆ Static-99 (Hanson & Thornton, 2000).

◆ Static-2002 (Hanson, Helmus, & Thornton, 2010).

◆ MnSOST-R (Epperson et al., 2000).

◆ Risk Matrix-2000 Sex (Kingston et al., 2008).

◆ SVR-20, specifically using the mechanical approach of adding up the item scores (Boer et al., 1997).

For assessing the likelihood of violent (including sexual) recidivism, the best-supported instruments were the—

◆ Violence Risk Appraisal Guide (VRAG) (Webster et al., 1994).

◆ Sex Offender Risk Appraisal Guide (SORAG) (Quinsey et al., 2006).

◆ Risk Matrix-2000 Combined (Thornton, 2007).

◆ Statistic Index of Recidivism (SIR) (Nafekh & Motiuk, 2002).

◆ Level of Service Inventory-Revised (LSI-R) and its variants (Andrews, Bonta, & Wormith, 2004, 2006).

Some risk assessment experts have suggested that the accuracy of purely actuarial approaches can be increased if certain dynamic risk factors (e.g., active substance abuse, demonstrated pro-offending attitudes) are included in the assessment instrument or otherwise considered as part of the assessment process. Discussions of the relative merits of this approach can be found in Wollert and colleagues, 2010; Hanson and Morton-Bourgon, 2009; Doren, 2002; and McGrath, Cumming, and Lasher, 2012. One dynamic risk factor that has received considerable attention in this context is the offender's age at the time of assessment. The inverse relationship between age and criminal offending—as age increases, offending decreases—is one of the more robust findings within criminology. This relationship has been found to hold across time and geographic locations, for different types of crimes and offenders, and in both community and incarcerated offender populations (Hirschi & Gottfredson, 1983). Age as an adjusting factor in risk assessment has received considerable attention not only because of the strength and consistency of its relationship to offending, but also because some actuarial instruments (e.g., Static-99 and Static-2002) have been found to underestimate the likelihood of recidivism for younger offenders and to overestimate it for older offenders (Helmus et al., 2012; Wollert et al., 2010). As a result of these findings, the Static-99 and Static-2002 have been revised to better account for the impact of the offender's age at the time of assessment, resulting

in the Static-99R and Static-2002R. (Both of these revised instruments do not need to be adjusted for age.) Using age-adjusted risk tables is especially important when assessing older offenders.

Another set of factors often considered as potential adjustments to actuarial measures are those referred to as "criminogenic needs" (Bonta, 1996) or psychologically meaningful risk factors (Mann, Hanson, & Thornton, 2010). These are dynamic (that is, changeable) risk factors that can serve as targets for intervention efforts. For a risk factor to be considered psychologically meaningful, there must be a plausible rationale that the factor is a cause of sexual offending and there must be strong empirical evidence that the factor predicts sexual recidivism. This latter requirement is best demonstrated through research associating variation between groups in the predictor (proposed predicting factor) with variation between groups in the rate of failure (Hanson, 2009).

While it stands to reason that clinicians would want to consider dynamic factors when assessing risk, doing so via an adjustment of actuarial instruments may not be the most effective way. Although few studies have examined the effects of making actuarial risk assessment clinical adjustments, those that have done so found that overrides—a consideration of factors outside the actuarial scheme (i.e., the evaluator judges whether the predicted recidivism rate is a fair evaluation of the offender's risk)—decrease predictive accuracy (Hanson, 2009; Hanson & Morton-Bourgon, 2009). These studies (Gore, 2007; Hanson, 2007; Vrana, Sroga, & Guzzo, 2008) have all been prospective in nature, and they involved actuarial instruments currently used with sex offenders.

It is important to note that empirical research undertaken to date has yet to identify a single "best" assessment instrument. With this and the limitations of using only one risk assessment instrument (particularly in especially high-stakes situations such as civil commitment evaluations) in mind, clinicians have considered the potential benefits of using more than one instrument during the assessment process (Doren, 2002; Hanson, 2009, 2011). In fact, in a study of evaluators who conduct civil commitment evaluations, Jackson and Hess

(2007) reported that 79.5 percent of the evaluators use more than one actuarial instrument in their sex offender civil commitment evaluations.

> *"Empirical research has yet to identify a single "best" risk assessment instrument."*

Two primary rationales support the notion that using more than one instrument provides potential benefits. First, classical test theory suggests that increasing the number of items in an assessment increases reliability and coverage. Second, if there are multiple driving forces behind sexual offending behavior, and individual risk assessment instruments tap these underlying dimensions or pathways to sexual offense recidivism differentially, then the use of multiple instruments would have a distinct advantage over the use of a single instrument alone. As Doren (2002, p. 138) points out, "The evidence for multiple underlying dimensions potentially driving sexual offending represents the main relative weakness to using only the 'best' single risk assessment instrument in a sex offender civil commitment evaluation."

Indeed, the empirical evidence suggests that multiple dimensions or pathways underlie sexual offending, with a number of scholars describing a convergence between two of these dimensions: sexual criminality and general criminality. Doren (2002) describes the high sexual criminality/low general criminality pathway as typical of the generally law-abiding pedophile, and the low sexual criminality/high general criminality pathway as typical of an antisocial individual for whom sexual violence is simply one of many manifestations of a criminal behavioral pattern. Evidence for these two pathways also has been found in meta-analytic studies of the factors associated with sex offender recidivism (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). Hence, an evaluation of both dimensions/pathways as part of the risk assessment process seems beneficial and advisable, whether it is done using a single instrument that assesses both dimensions or multiple instruments that tap each dimension separately. (For more about pathways, see chapter 3, "Sex Offender Typologies," in the Adult section.)

These two underlying dimensions of sexual offending were discussed in a recent study of the incremental validity of a number of actuarial instruments (Babchishin, Hanson, & Helmus, 2011). As part of that study, the Rapid Risk Assessment for Sex Offense Recidivism (RRASOR) instrument was found to tap sexual criminality, while the Static-99 was found to assess risk along the general criminality pathway. Further, Babchishin, Hanson, and Helmus (2011) found that the RRASOR (which taps the sexual criminality dimension) and the Static-99R and Static-2002R (both of which tap the general criminality dimension) all added incremental validity to one another, in spite of substantial intercorrelations and substantial item overlap across the three instruments.

There are other compelling reasons to use more than one instrument during the risk assessment process, even when the instruments tap the same dimension or the same theoretical domain. Including a larger number of items that assess the same construct and having similar predictive accuracy increases reliability and adds to the overall predictive accuracy of the procedure. When using scales that assess the same domain of risk factors, averaging the scores is recommended. If the scales do not assess the same factors, evaluators will need to apply a scoring model that identifies the latent constructs assessed by the scales and that is based on empirical evidence concerning the manner in which the separate constructs should be weighted and combined. If such an empirically supported model is not possible, it is recommended that evaluators use the single instrument in which they have the most confidence (Babchishin, Hanson, & Helmus, 2011).

Another issue of critical importance in sex offender risk assessment is the communication of risk assessment findings (Babchishin & Hanson, 2009; Doren, 2002; Hanson, 2009). Currently, nominal descriptors of risk (low, moderate, and high) are used most commonly (Babchishin & Hanson, 2009). While qualitative descriptions in general and these particular nominal descriptors are usually preferred over numerical formats for communicating risk, the use of qualitative labels alone has certain limitations. Perhaps the most significant limitation is that clinicians (as well as decision-makers) can have very different interpretations of what these

nominal categories represent. The context in which risk assessment findings are communicated can also influence interpretation.

One way to mitigate the problems associated with the exclusive use of nominal categories is to also provide numerical indicators of risk, such as a recidivism rate probability, a percentile rank, or a risk ratio. There are various numerical formats commonly used to convey absolute risk, such as frequencies (e.g., the likelihood of recidivism is 1 out of 10) and percentages (e.g., the likelihood of recidivism is 10 percent), both of which are usually accompanied by a specific timeframe (e.g., within the next 5 years). Relative risk estimates, such as percentile ranks (e.g., the individual's risk for reoffense is equal to or greater than 90 percent of offenders) and risk ratios (the individual is four times more likely to sexually recidivate compared to the average offender), are useful as well.

While numerical estimates provide more information and are potentially less ambiguous than qualitative descriptors alone, they too have limitations. For example, even though the assessed risk is the same, risk frequencies reported with larger denominators (e.g., 10 out of 10,000 compared to 1 out of 1,000) tend to result in higher perceived risk. Interpreting numerical risk estimates properly can also be a challenge when base rates for the behavior in question are unknown or are not taken into consideration. Simply put, people tend to overestimate the likelihood of low-probability events and underestimate the likelihood of high-probability events. For instance, people are more likely to fear flying than driving, even though the likelihood of dying in a car crash is many times that of dying in a plane crash.

Evaluators can also make mistakes when communicating the results of risk assessments. Doren (2002) has identified three common errors in communicating results when using a single instrument: incorrectly describing the risk percentage associated with a particular score, neglecting to address sampling error or failing to provide confidence interval estimates, and ignoring or incorrectly stating the qualifiers as to what has been assessed.

Consumers of risk assessment information typically desire more than a simple nominal or numeric indicator of risk. Frequently, decision-makers want the risk assessment process to provide them with information on the likelihood of recidivism, the potential consequences associated with recidivism, and what might be done to mitigate the assessed risk (Hanson, 2009). Doren's (2002) recommendations for communicating the results of sex offender risk assessment, especially in cases involving civil commitment, include the following:

◆ Nominal risk categories should be accompanied by numerical risk estimates. When used in tandem, nominal and numerical means of conveying risk are more accurate and informative than either one is in isolation.

◆ Nominal categories should be explicitly defined so as to limit the degree to which readers define for themselves the meaning of the specific nominal descriptors. Two examples would be stating that "low risk" means that the risk of sexual recidivism is similar to what would be expected from a group of non-sex offenders, and "high risk" means that an offender is more likely than not to sexually recidivate over the course of his lifetime.

Significant growth has occurred in recent years in both the development of sex-offender-specific risk assessment instruments and their use in the field. While significant advances have been made regarding the reliability and predictive validity of instruments, a number of limitations remain. As noted above, there is currently no single "best" risk assessment for all offenders in all situations. In fact, there are certain populations for whom there is no validated risk assessment instrument (e.g., child pornography offenders and female offenders). (For more on child pornography offenders, see chapter 4, "Internet-Facilitated Sexual Offending," in the Adult section.) In addition, while development and testing of third-generation instruments continues, some experts are skeptical that a single actuarial scale containing all relevant risk factors could ever be developed (Hanson, 2000). Therefore, contemporary risk assessment involves a bit of paradox: even though research on risk assessment has largely eliminated subjective judgment from within the risk

assessment process itself, clinical judgment on the part of the evaluator is still needed to make valid, research-informed decisions about the appropriate risk assessment instrument(s) to apply in any particular setting. To that end, Hanson (2009) has provided the following set of qualities to guide the future of sex offender risk assessment:

◆ Assess risk factors whose nature, origins, and effects can be understood.

◆ Enable reliable and valid assessment of clinically useful causal factors.

◆ Provide precise estimates of recidivism risk.

◆ Allow all relevant factors to be considered.

◆ Inform the development of treatment targets and risk management strategies.

◆ Allow the assessment of both long- and short-term changes in risk.

◆ Incorporate protective factors as well as risk factors.

◆ Facilitate the engagement of the patient/offender in the assessment process.

◆ Use risk assessment methods that are easy to implement in a broad range of settings.

Summary

Significant advancements in the science and practice of sex offender risk assessment have occurred over the past two decades. A number of reliable, valid approaches for assessing sex offender risk are now available. Rigorous scientific research has demonstrated that respectable levels of predictive accuracy have been obtained with purely actuarial risk assessment approaches, approaches using structured professional judgment, and the mechanical combination of items from structured risk schemes. While research evidence to date has not indicated which of these approaches are best suited to specific testing circumstances and contexts (Hanson, 2009), recent meta-analyses (Hanson &

Morton-Bourgon, 2009) suggest that purely actuarial assessment approaches should be favored over other approaches for the assessment of risk for sexual reoffense (Hanson, 2009). Ultimately, however, decisions about the best approach or instrument to use should be made in the context of the assessment setting, the characteristics of the individual being assessed, and the specific purpose of the risk assessment.

> *"Training and monitoring of evaluators is needed to ensure that risk assessment procedures and instruments are used appropriately and with integrity."*

Many of the purely actuarial tools in wide use today can be completed quickly and easily by a variety of trained personnel (Klima & Lieb, 2008). The advent of automated actuarial tools conceptually allows even clerical workers to compute risk scores using these instruments. It is nonetheless important to provide ongoing training and monitoring of evaluators to ensure that risk assessment procedures and instruments are always used appropriately and with integrity. **The need for training and technical assistance in the context of risk assessment was identified by the 2012 SOMAPI forum participants.**

One of the primary challenges for the field in the future will be to identify more comprehensively the risk factors (both static and dynamic) that are related to sexual offending. Identifying these factors and incorporating them into the risk assessment process will help clinicians and decision-makers better match risk levels to treatment and management efforts, thereby fulfilling the promise of third-generation risk assessment instruments (Bonta, 1996). **The need for tailored rather than uniform interventions, and the need to match sex offender treatment and management efforts to the risk levels and criminogenic needs of sex offenders, were acknowledged by the experts—both researchers and practitioners—who participated in the SOMAPI forum.**

Given the lack of a single best risk assessment instrument, evaluators will continue to have to

rely on their professional judgment to select and employ the best risk assessment approach for the circumstances and setting. Incorporating dynamic risk factors at this point in time requires a structured approach and subsequent clinical adjustment, as there are no universally agreed-upon weights for the relevant dynamic risk factors (A. Phenix, personal communication, May 10, 2011). Additional research concerning the use of dynamic risk factors is clearly needed, along with research on how best to use knowledge about the offender's strengths and assets (protective factors) as the factors that lead to desistence from crime (Griffin et al., 2008; K. Hanson, personal communication, April 8 and June 7, 2011; Maruna & LeBel, 2003).

Research on the best ways to revise assigned risk based on post-index behavior or qualities also is needed. In effect, this entails identifying treatment targets and assessing the impact of treatment on risk and other factors, such as institutional misconduct or the amount of time that has elapsed without a new conviction (K. Hanson, personal communication, April 8 and June 7, 2011). The ability to detect meaningful changes in risk, especially for high-risk offenders, is particularly important (Hanson, 2011; Olver et al., 2007). The VRS:SO is a promising development in this area (Beggs & Grace, 2010; Thornton, Hanson, & Helmus, 2011). Other instruments to consider for gauging changes in risk over time include the STABLE-2007 and the SRA—Forensic Version (Thornton & Knight, 2009). As noted previously, the Static-99 and Static-2002 have recently been revised to incorporate the impact of aging on risk, resulting in the inclusion of new age weights and the publication of the Static-99R and Static-2002R (Helmus et al., 2012).

"Based on current knowledge, using science-based, actuarial methods to assess sex offender risk is advisable."

There also is a need to devise more effective and intuitive means of communicating risk assessment findings. Communication of risk should be tailored to the purpose and setting of the assessment, and both qualitative descriptors and numerical estimates that consumers of risk assessment information can use to guide sex offender

management decision-making should be provided. Furnishing decision-makers with both an accurate, contextual understanding of risk, and also with recommendations for mitigating and managing risk, is likely to be most beneficial.

In conclusion, based on current knowledge, using science-based, actuarial methods to assess sex offender risk is highly advisable (Doren, 2002; Hanson & Morton-Bourgon, 2009; Tabachnik & Klein, 2011). As Hanson and Morton-Bourgon (2009, p. 10) aptly state, "Given its genesis in data, the empirical actuarial approach will ultimately provide the best estimates of absolute risk." In fact, such instruments should not be ignored in assessing the risk for sex offender reoffense unless there is clear and justifiable reason to do so, such as in cases for which no applicable risk instrument exists (Hanson & Morton-Bourgon, 2009).

For assessing the likelihood of sexual recidivism, the best-supported instruments are the Static-99, Static-2002, MnSOST-R, Risk Matrix-2000 Sex, and adding the item scores from the SVR-20 (Hanson & Morton-Bourgon, 2009). For assessing the likelihood of violent (including sexual) recidivism, the best supported instruments are the VRAG, the SORAG, the Risk Matrix-2000 Combined, the SIR, and the LSI-R and its variants (Hanson & Morton-Bourgon, 2009).

Notes

1 The terms "evaluator" and "evaluation" used throughout this chapter refer to the individual performing the risk assessment and the overall risk assessment process, respectively.

2 A meta-analysis combines the results of many evaluations into one large study with many subjects.

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Chapter 7: Effectiveness of Treatment for Adult Sex Offenders

by Roger Przybylski

Introduction

Sex offenders have received considerable attention in recent years from both policymakers and the public. This is due at least in part to the profound impact that sex crimes have on victims and the larger community. Perpetrators of sex crimes have come to be viewed by policymakers, practitioners, and arguably the public as a unique group of offenders in need of special management practices. Indeed, therapeutic interventions aimed at reducing the likelihood of reoffending have become a staple of contemporary sex offender management practice. (For more on "Sex Offender Management Strategies," see chapter 8 in the Adult section.)

According to a recent Safer Society (McGrath et al., 2010) survey, 1,307 sex-offender-specific treatment programs were operating in the United States in 2008.[1] That year, treatment programs for sex offenders were operating in all 50 states and the District of Columbia, and more than 80 percent of the programs were community based. Sex offender treatment programs in the United States in 2008 provided therapeutic services to more than 53,811 individuals who committed sex crimes.

While there is strong scientific evidence that therapeutic interventions work for criminal offenders overall, the effectiveness of treatment for sex offenders remains subject to debate. Inconsistent research findings and the fact that those studies that have found a positive treatment effect have not been randomized controlled trials are two primary factors contributing to the uncertainty about treatment effectiveness.

The mechanisms that lead to sexually abusive behavior vary by offender. Treatment needs vary by offender as well, and treatment effectiveness is likely to vary depending on various individual and contextual factors. Like therapeutic interventions for other criminal offenders, sex offender treatment at its broadest level is a tool for promoting offender accountability, reducing recidivism, and enhancing public safety. Within that context, policymakers should recognize that even modest reductions in recidivism achieved through treatment can translate into fewer victims, reductions in individual and community harm, and a positive return on taxpayer investment (Drake, Aos, & Miller, 2009; Donato, Shanahan, & Higgins, 1999).

Issues To Consider

While there is growing interest in crime control strategies that are based on scientific evidence,

determining what works is not an easy task. It is not uncommon for studies of the same phenomena to produce ambiguous or even conflicting results, and there are many examples of empirical evidence **misleading** crime control policy and practice because shortcomings in the quality of the research were overlooked and inaccurate conclusions about an intervention's effectiveness were made (see, e.g., Sherman, 2003; McCord, 2003; Boruch, 2007). The importance of basing conclusions about what works on highly trustworthy and credible evidence cannot be overstated, and both the quality and consistency of the research evidence always have to be considered.

Because the quality of research studies may vary and it can be difficult for policymakers and practitioners to understand how one study might differ from another, brief descriptions of the types of studies discussed in this review are provided below. The defining characteristics of experiments (or randomized controlled trials), quasi-experiments, and various forms of synthesis research—specifically, narrative reviews, systematic reviews, and meta-analyses—are briefly described here.

Single Studies

In the fields of criminology and criminal justice, there is general agreement that certain types of single studies—namely, well designed and executed experiments or randomized controlled trials (RCTs)—provide the most trustworthy evidence about an intervention's effectiveness (see, e.g., Sherman et al., 1997; MacKenzie, 2006; Farrington & Welsh, 2007). Modeled on laboratory experiments, RCTs have several key features, most notably the use of random assignment. In random assignment, the researcher randomly decides which study subjects receive the intervention under examination (treatment) and which study subjects do not (control). In RCTs, subjects in the treatment group and subjects in the control group are compared on outcomes of interest, such as recidivism. A comparatively (and statistically significant) lower rate of recidivism for the subjects in the treatment group would indicate that the treatment being tested worked. The random assignment of subjects creates the optimal study conditions for making causal inferences about the effectiveness of an

intervention. In other words, the researcher can reasonably conclude that an observed program result—such as a lower recidivism rate for treated subjects—is due to treatment and not some other factor.

While RCTs are an important method for determining the effectiveness of an intervention, they can be difficult to implement in real-life settings. RCTs are expensive and require a level of organizational (and at times, community) cooperation that can be difficult to obtain. In addition, there may be resistance to the use of random assignment on the grounds that withholding potentially beneficial treatment from some study subjects for the sake of research is unethical. In practice, various constraints can preclude an evaluator from using an RCT, and few of these studies have been employed in the assessment of sex offender treatment.

When an RCT cannot be used, researchers examining the effectiveness of an intervention typically employ the next best approach, a quasi-experiment. Many quasi-experiments are similar to RCTs; however, they do not employ random assignment. These studies typically involve a comparison of outcomes—such as recidivism—observed for treatment participants and a comparison group of subjects who did not receive treatment. In this approach, researchers try to ensure that the treatment and comparison subjects are similar in all ways but one: participation in the treatment program. This is often accomplished by matching the treatment and comparison offenders on demographics, criminal history, risk level, and other factors that are related to the outcome of interest. Sometimes statistical techniques are employed retrospectively to create equivalence between the treated and comparison subjects. When treatment and comparison subjects are closely matched, the study can be capable of producing highly trustworthy findings. But in practice, equivalence between the groups can be hard to achieve, which may result in difficulties in reducing bias and inferring causality. As a result, quasi-experiments are typically less adept at reducing bias and inferring causality than RCTs (Boruch, 2007; Cook, 2006).[2] In fact, findings from single studies of treatment effectiveness that did not employ treatment and comparison groups that

were closely matched have been typically viewed as untrustworthy (see, e.g., Beech et al., 2007a, 2007b).

Synthesis Research: Narrative Reviews, Systematic Reviews, and Meta-Analysis

There also is agreement in the scientific community that single studies are rarely definitive (see, e.g., Lipsey, 2002; Petrosino & Lavenberg, 2007; Beech et al., 2007a). Individual studies with seminal findings exist; however, single studies—even an RCT—should be replicated before definitive conclusions about a program's effectiveness are made, and the effectiveness of an intervention can always best be understood by examining findings from many different studies (Lipsey, 2002; Petticrew, 2007; Petrosino & Lavenberg, 2007). Researchers typically accomplish this by conducting a narrative or systematic review of a large body of research concerning an intervention's effectiveness.

A narrative review is a qualitative synthesis of findings from many different individual studies.[3] Conclusions are made by the reviewer using professional judgment. Narrative reviews have been criticized for their subjectivity and lack of transparency, but they provide a rudimentary mechanism for assessing the general quality and consistency of the research evidence to arrive at a conclusion about whether an intervention works. Narrative reviews were the most common form of synthesis research in the past. Today, researchers primarily rely on a more objective and quantitative process called a systematic review. Unlike a narrative review, a systematic review adheres to a pre-established protocol to locate, appraise, and synthesize information from all relevant scientific studies on a particular topic (Petrosino & Lavenberg, 2007).[4] Methodological quality considerations are a standard feature of most systematic reviews today, and studies that fail to reach a specified standard of scientific rigor are typically excluded from the analysis.[5] Many systematic reviews rely exclusively on well-designed and executed RCTs and quasi-experiments to draw conclusions about an intervention's effectiveness. This helps enhance the trustworthiness of the review findings. A well-designed and executed systematic review produces a comprehensive summary of the scientific evidence on a particular topic, such as whether or not an intervention is effective in reducing recidivism.

Systematic reviews are increasingly incorporating a statistical procedure called meta-analysis to synthesize findings from multiple studies. Meta-analysis enhances the quantitative nature of the review and helps to reduce bias and the potential for erroneous conclusions. In practice, meta-analysis combines the results of many evaluations into one large study with many subjects. This is important, because single studies based on a small number of subjects can produce misleading findings about a program's effectiveness (Lipsey, 2002). By pooling the subjects from the original studies, meta-analysis counteracts a common methodological problem in evaluation research—small sample size—thereby helping the analyst draw more accurate and generalizable conclusions.[6] In addition, meta-analysis focuses on the magnitude of effects found across studies rather than their statistical significance. Determining effect sizes is important because, as Lipsey (2002, p. 201) points out, an outcome evaluation of an individual program "can easily fail to attain statistical significance for what are, nonetheless, meaningful program effects." Hence, effect size statistics provide the researcher with a more representative estimate of the intervention's effectiveness than estimates derived from any single study or from multistudy synthesis techniques that simply calculate the proportion of observed effects that are statistically significant.

Meta-analysis has been criticized by some researchers, primarily for combining different research approaches in the same analysis or for including studies of different quality—sometimes even studies of very poor quality—to arrive at a single estimate of treatment effectiveness (Petrosino & Lavenberg, 2007). However, advances in methods regarding heterogeneity and methodological variability can be used to address these concerns (see, e.g., Petrosino & Lavenberg, 2007; Lipsey, 2002; Wilson & Lipsey, 2001). Meta-analyses that are based on prudent exclusionary criteria, that incorporate sophisticated statistical tests to discover potential bias,[7] and that explore how methodological and contextual variations impact treatment effects are uniquely equipped to provide policymakers and

practitioners with highly trustworthy evidence about what works (Petrosino & Lavenberg, 2007; Lipsey, 2002; Wilson & Lipsey, 2001). Still, it is important to recognize that conclusions derived from a review or meta-analysis of poor quality studies are no more trustworthy than conclusions derived from an individual study that lacks scientific rigor (Rice & Harris, 2003). When systematic reviews and meta-analyses are done well, however, they provide the most trustworthy and credible evidence about an intervention's effectiveness.

Summary of Research Findings
Findings From Single Studies

One of the few studies to use an RCT design to evaluate the effectiveness of treatment for adult sex offenders was conducted by Marques and colleagues (2005). Widely known as the California Sex Offender Treatment and Evaluation Project (SOTEP), the study examined the effects of a cognitive behavioral/ relapse prevention program on the recidivism of sex offenders who were serving prison sentences for child molestation or rape. The research is widely referenced in the literature because of its use of random assignment.

Marques and her colleagues (2005) compared the recidivism rates of 204 sex offenders treated in an intensive treatment program with the recidivism rates of sex offenders in two untreated control groups.[8] One control group consisted of 225 incarcerated sex offenders who volunteered for treatment but who were randomly selected not to receive it. The other control group consisted of 220 incarcerated sex offenders who did not want treatment. The outcome measures of interest were sexual and nonsexual violent recidivism. No significant differences were found among the three groups in their rates of sexual or violent recidivism. Based on a mean followup period of approximately 8 years, the observed sexual recidivism rates were 21.6 percent for the sex offenders who completed a year or more of treatment, 20 percent for the sex offenders who volunteered for treatment but who did not receive it, and 19.1 percent for the

sex offenders who refused treatment.[9] This null finding—that is, the finding that treatment did not lead to a significant reduction in recidivism—persisted for both rapists and child molesters, and for high-risk as well as low-risk offenders. (For a discussion of adult "Sex Offender Risk Assessment," see chapter 6 in the Adult section.) Marques and her colleagues (2005, p. 99) concluded the following: "In the context of growing optimism about the benefits of sex offender treatment, this study's message is, 'Not so fast, we are still far from understanding how and when treatment works.'"

In discussing their findings, the researchers explored possible explanations for the study's overall results. Marques and her colleagues (2005) suggested that, despite the use of random assignment, the treatment and control groups likely differed in some important ways. For example, the treated subjects tended to be higher risk, and may have been less motivated or more sexually deviant than control group subjects. In addition, the screening procedures used in the research likely eliminated some of the highest risk offenders from the study. As a result, the intervention may have been too intensive for the offenders in the treatment group. Finally, the treatment program itself did not reflect "state-of the-art" treatment in several ways (Marques et al., p. 100). For example, the program did not fully adhere to the risk-need-responsivity (RNR) principles of effective intervention because it did not focus on high-risk offenders and treatment targets included only some dynamic risk factors. (See the discussion of RNR in the section "Findings From Synthesis Research.") Given the limitations of the study, Marques and colleagues (2005) called for "additional controlled investigations to address the many questions that remain about when and how treatment works for sexual offenders" (pp. 99–100). The researchers emphasized the importance of including appropriate comparison groups in future treatment outcome studies, and they urged researchers who assess the effects of treatment "to control for prior risk by using an appropriate actuarial measure for both treatment and comparison groups" (p. 103).

It is worth noting that some of the subgroup analyses performed in the SOTEP study **did** find a treatment effect. Specifically, high-risk offenders

who participated in treatment and demonstrated they "got it"—meaning that they derived benefit from the program, or basically met specified treatment goals—recidivated at a significantly lower rate than offenders who "did not get it."[10] Only 10 percent of the high-risk treated offenders who "got it" recidivated, compared to 50 percent of the high-risk subjects who "did not get it." While this finding was based on a small sample—only 38 high-risk study subjects were part of the analysis—a similar finding was observed for treated child molesters who "got it" based on a larger sample of 126 subjects. Individuals with child victims who "got it" recidivated at a significantly lower rate than similar offenders who "did not get it"—9.3 percent compared to 31.3 percent.[11]

Another study that did not find overall evidence of a positive treatment effect was conducted by Hanson, Broom, and Stephenson (2004). Recidivism rates for 403 sex offenders released from prison into mandated community-based treatment and a comparison group of 321 untreated sex offenders released from prison in earlier years were examined. Based on an average followup period of 12 years, no significant differences were found between the treated and untreated sex offenders in terms of their sexual, violent, or overall recidivism rates.

Somewhat different results were found in an evaluation of the effectiveness of the national sex offender treatment program operating in prisons in England and Wales in the early 1990s (Friendship, Mann, & Beech, 2003).[12] The researchers compared 2-year reconviction rates for a sample of 647 prisoners who voluntarily participated in and completed prison-based treatment between 1992 and 1994 and a retrospectively selected sample of 1,910 sex offenders who had been incarcerated but had not participated in treatment. The comparison group members were matched to the treatment sample on year of discharge and risk level. While no significant differences in the 2-year sexual reconviction rates were found between the treatment and comparison groups, there was a significant difference between the treatment and comparison group reconviction rates for sexual and violent crimes combined. Treated offenders had a combined sexual and violent 2-year reconviction rate of 4.6 percent, compared to a rate of 8.1 percent

for the untreated comparison offenders (Friendship, Mann, & Beech, 2003).

Significant differences were also found for the medium-low-risk and medium-high-risk offender groups.[13] For low-risk and high-risk offenders, treated offenders had a slightly lower rate of recidivism than the untreated offenders, but the differences were not statistically significant. Overall, the treatment effects found in the analysis persisted when factors linked to recidivism (such as risk level and prior criminal history) were statistically controlled. Based on their findings, the researchers cautiously concluded that the treatment program had an impact on reconvictions for sexual and violent offenses combined.

> *"Offenders who respond to treatment do better than those who do not respond well."*

Friendship, Mann, and Beech (2003) point out that treatment should not be expected to have the same effect on all sexual offenders, as success can depend on various factors, including the treatment climate, program delivery, and how the participant responds to treatment. With this in mind, researchers are increasingly examining whether a positive treatment effect is found for a particular subgroup of treated offenders, even if positive treatment effects are not observed for program participants overall. The SOTEP study discussed above is an important example (Marques et al., 2005). The study is frequently cited as evidence that treatment for sex offenders is not effective, yet some of the treatment subgroups—such as high-risk offenders who "got it"—demonstrated significantly lower rates of recidivism than their comparison group counterparts. Beech and colleagues (2001) reported a somewhat similar finding in their study that examined sexual reconviction rates for 53 sex offenders 6 years after participating in community-based treatment. Offenders who were responsive to treatment (based on a positive change in pro-offending attitudes) were less likely to sexually recidivate than offenders who were not.

Oliver, Wong, and Nicholaichuk (2008) conducted a treatment outcome study that examined the

effects of a high-intensity sex offender treatment program in a Canadian prison. The program employed a cognitive-behavioral approach and it subscribed to the RNR principles of effective correctional intervention. The 2008 study was an extension of an earlier evaluation that found that sex offender treatment worked for both first-time and repeat sex offenders. In this study, 14.5 percent of treated offenders were convicted of new sexual offenses compared to 33.2 percent of the untreated comparison group offenders, based on an average followup period of 6 years (Nicholaichuk et al., 2000).14 A higher proportion of treated offenders (48 percent) compared with untreated offenders (28.3 percent) also remained out of prison during the followup period. Treatment, however, did not appear to affect the rate at which new nonsexual crimes were committed.

The 2008 study was more rigorous than the original study. It was based on a larger sample size (472 treated and 265 untreated sex offenders) and a longer followup period. It also incorporated survival analysis, statistical controls of several factors that have been empirically linked to sexual recidivism (such as time at risk, age at release, and sexual offending history), and an intent-to-treat design.[15] Sexual reconviction rates were examined across followup periods of various lengths of time. Significant differences between the recidivism rates of treated and untreated offenders were found at each followup period (see table 1).

Positive treatment effects persisted after controlling for age and sexual offending history. In addition, survival analysis indicated that positive treatment

effects persisted over time. Oliver, Wong, and Nicholaichuk (2008, p. 533) stated:

> In conclusion, the present study provides empirical support to indicate that a high-intensity treatment program for moderate- to high-risk sex offenders that follows the 'what works' principles can yield reductions in sexual recidivism in both the shorter- and longer-term, even after potentially confounding variables were controlled for. In short, treatment appeared to 'work' for this group of sex offenders.

A recent study of prison-based sex offender treatment in Minnesota also found positive results. Researchers examined treatment effectiveness using a sample of 2,040 sex offenders released from prisons in Minnesota between 1990 and 2003 (Duwe & Goldman, 2009). This study used propensity score matching (PSM) to create the study's comparison group. PSM is a sophisticated statistical technique for achieving greater equivalence between the treatment and comparison offenders. The researchers examined recidivism outcomes for 1,020 sex offenders who received treatment while incarcerated and 1,020 matched comparison sex offender inmates who had not received treatment. The average followup period was 9.3 years. After controlling for other factors, study results showed that participating in treatment significantly reduced the likelihood and pace of recidivism (see table 2).

Other studies examining the effectiveness of prison-based treatment for sexual offenders also have found positive results. McGrath and colleagues

TABLE 1. SEXUAL RECONVICTION RATES

	Sexual Reconviction Rate, by Followup Period (%)		
	3 Years	5 Years	10 Years
Treated offenders	11.1	16.9	21.8
Untreated offenders	17.7	24.5	32.3

Note: Differences between treated and untreated offenders are statistically significant: 3 years (p=.012), 5 years (p=.023), 10 years (p=.030).

Source: Oliver, Wong, & Nicholaichuk (2008).

TABLE 2. REARREST RECIDIVISM RATES

	Rearrest Recidivism Rate, by Offense Type (%)		
	Sex Offense	**Violent Offense**	**General Offense**
Treated offenders	13.4	29	55.4
Untreated offenders	19.5	34.1	58.1

Note: Significant at *p* < .01.

Source: Duwe & Goldman (2009).

(2003), for example, examined the recidivism rates of 195 adult male sex offenders who were referred to a prison-based cognitive-behavioral treatment program. Fifty-six offenders completed treatment, 49 entered but did not complete treatment, and 90 refused treatment services. The study subjects were similar in terms of their pretreatment risk for sexual recidivism. The researchers found a sexual recidivism rate of 5.4 percent for the sex offenders who completed treatment, based on an average followup period of approximately 6 years. Far higher sexual recidivism rates were found for the offenders who did not complete treatment and for those who refused treatment—30.6 percent and 30.0 percent, respectively.

A 2003 study of a prison-based sex offender treatment program in Colorado also found positive results (Lowden et al., 2003). The program employed a cognitive-behavioral approach within a therapeutic community (TC) environment. Results showed that participation in treatment was significantly related to success on parole. Sex offenders who completed treatment and participated in aftercare had revocation rates three times lower than untreated sex offenders.[16] The length of time that an offender participated in treatment was related to positive outcomes after release. Each additional month spent in the TC increased the likelihood of success upon release by 1 percent (12 percent per year). Seventy-nine percent of inmates who participated in TC treatment and who were released on parole were arrest-free after 3 years, compared to 58 percent of former sex offender inmates released on parole who did not participate in treatment.[17]

Zgoba and Simon (2005) examined the effectiveness of prison-based treatment in New Jersey. Although results did not show a positive treatment impact on sexual recidivism, treatment was found to reduce nonsexual recidivism. The study sample included 495 treated offenders from the state's only sex-offender-specific prison. Sexual and nonsexual recidivism rates for the treated sex offenders were compared with those for a sample of 223 sex offenders from the general prison population who did not receive treatment. All study subjects were released from prison during a 3-year period (1994–1997). Based on this followup period, about 9 percent of the treated sex offenders were reconvicted of a sexual offense, compared to 8.2 percent of the nontreated sex offenders released from the general prison population. However, only 12.3 percent of the treated sex offenders had a nonsexual reconviction, compared to 26.8 percent of the nontreated sex offenders.

Several studies concerning sex offender treatment have been conducted by the Washington State Institute for Public Policy (WSIPP). In one study, Barnoski (2006a) examined the effectiveness of Washington's Specialized Sex Offender Sentencing Alternative (SSOSA). Under SSOSA, certain felony sex offenders are granted, in lieu of imprisonment, a special sentence that involves some jail time, community supervision, and outpatient treatment (Barnoski, 2006a). The evaluation found that the sexual and violent crime recidivism rates for offenders granted a SSOSA were consistently lower than the rates for other types of sex offenders. Barnoski (2006b) also examined the effectiveness of a prison-based sex offender treatment program in Washington that uses a combination of

treatment techniques, including group therapy, psychoeducational classes, behavioral treatment, and family involvement. The study found that the program did **not** reduce the recidivism rates of program participants.

Finally, Kriegman (2006) reanalyzed data from two studies that examined the recidivism rates of sex offenders.[18] After a 5-year followup, the "more dangerous" (treated) offenders in the analysis had a significantly lower rate of recidivism than the "less dangerous" (untreated) offenders.[19] In fact, the observed recidivism rate for the untreated offenders was twice as high as the rate for the offenders who received treatment—38 percent compared to 19 percent.[20]

In summary, several single examinations designed to evaluate the effectiveness of treatment for adult sex offenders have been conducted in recent years. While only one of these studies employed an experimental design, the scientific rigor of recent research has improved relative to studies conducted years ago. Recent research more frequently employed matched comparison groups, statistical controls of factors that are linked to treatment effects, lengthier followup periods, and propensity score matching. **Findings from single studies of sex offender treatment conducted within the past 10 years remain somewhat inconsistent, but the weight of the evidence from more rigorous studies suggests that treatment—particularly cognitive behavioral approaches—can have a positive effect.**

Findings From Synthesis Research

One of the most influential early reviews of sex offender treatment outcome research was conducted by Furby, Weinrott, and Blackshaw (1989). Based on a review of 42 individual studies, the researchers concluded that, due to methodological shortcomings and inconsistent findings, very little is known about the effectiveness of sex offender treatment. More recently, the U.S. General Accounting Office (1996), now called the U.S. Government Accountability Office, published a review of sex offender treatment research based on 22 other reviews covering 550 studies. In this 1996 report, the office reported to Congress that definitive conclusions about the effectiveness of sex

offender treatment could not be made. While both of these early reviews produced inconclusive results at best, systematic reviews conducted more recently have produced more positive, albeit qualified findings.

One exception to the pattern of recent positive review findings comes from a systematic review focused on psychological interventions for sex offenders conducted by Kenworthy and colleagues (2004). Nine studies, all RCTs, were included in the analysis, and the researchers concluded that due to limited data the effects of treatment are unclear.

An earlier meta-analysis of 43 studies of psychological treatment for sex offenders conducted by Hanson and colleagues (2002) produced somewhat different results.[21] The study was based on a total of 5,078 treated offenders and 4,376 untreated offenders. Average followup periods ranged from 1 to 16 years, with a median of 46 months. Hanson and his colleagues found that treatment produced a small but statistically significant reduction in both sexual and overall recidivism.[22] The researchers also reported that newer treatment programs were found to have a positive treatment effect, while older treatment programs were associated with a small but not statistically significant increase in sexual recidivism. In discussing their findings, Hanson and colleagues (2002, p. 186) stated, "we believe that the balance of available evidence suggests that current treatments reduce recidivism, but that firm conclusions await more and better research."

The meta-analysis conducted by Hanson and colleagues (2002) was criticized by Rice and Harris (2003) for its reliance on poor-quality studies. Rice and Harris described the methodological shortcomings of many of the studies in the meta-analysis and argued that the positive, albeit tentative, conclusions drawn by Hanson and colleagues were not justified. More broadly, Rice and Harris (2003) concluded, "… the effectiveness of psychological treatment for sex offenders remains to be demonstrated" (p. 428) and "… it is abundantly clear that any conclusions about the effectiveness of psychological therapy await many more random assignment studies" (p. 437).

While the Rice and Harris critique of the meta-analysis is a constructive and valuable treatise on threats to validity and the hazards of weak inference, it is important to recognize that the quality of a study and the credibility of its findings can be viewed differently by different researchers. As Beech and colleagues (2007a, pp. 1–2) pointed out in their discussion of methodological quality considerations in sex offender treatment research:

> The problem facing the field of sex offender research is that the best studies identified by Rice and Harris (2003), by Kenworthy et al. (2004), and by Hanson et al. (2002) were all different. It was not that one group of researchers was more lenient or more restrictive than another concerning study quality; the problem is that most of the studies rated as credible by one group were considered inherently biased by the other groups.

In fact, Craig, Browne, and Stringer (2003) reported that 18 of the 19 treatment studies published between 1995 and 2003 demonstrated positive treatment effects, and a third of those used sound methodological techniques. While there are well-constructed guidelines and tools available that promote objectivity and reliability in the assessment of methodological rigor, differences of opinion about the quality and scientific value of certain methods or individual studies are not uncommon.

Lösel and Schmucker's (2005) study of sex offender treatment effectiveness employed one of criminology's most commonly used tools for evaluating the quality of a study: the Maryland Scientific Methods Scale (SMS). SMS is used to assess the methodological quality of a study along a number of dimensions, including:

◆ The study's ability to control outside factors and eliminate major rival explanations for an intervention's effects.

◆ The study's ability to detect program effects.

◆ Other considerations, such as attrition and the use of appropriate statistical tests (Sherman et al., 1998).

Using SMS, Lösel and Schmucker (2005) excluded any studies that did not employ a control/comparison group. Altogether, 69 independent studies and 22,181 subjects were included in the analysis, making it one of the largest meta-analyses of studies of the effectiveness of sex offender treatment ever undertaken. In 40 percent of the comparisons, equivalence between the group of study subjects who received treatment and the group of comparison subjects who did not receive treatment was either demonstrated or it could be assumed. Nearly one-half of the comparisons in the analysis addressed cognitive-behavioral programs. About one-half were based on programs operating in an institutional setting. Significant differences between the recidivism rates of treated and untreated offenders were found (see table 3).

TABLE 3. RECIDIVISM RATES, PER META-ANALYSIS

	Recidivism Rate, by Offense Type (%)		
	Sex Offense*	Violent Offense	Any Offense
Treated offenders	11.1	6.6	22.4
Untreated offenders	17.5	11.8	32.5

Note: Significant at $p < .01$.

*Recidivism rates based on n-weighted averages. Unweighted average recidivism rates: 12% for treated and 24% for untreated. Average followup period: slightly more than 5 years.

Source: Lösel & Schmucker (2005).

Lösel and Schmucker (2005) also found that physical treatments had larger treatment effects. Among psychological treatments, however, cognitive-behavioral treatments and behavior therapy had significant treatment effects. **Treatment effects also were greater for sex offenders who completed treatment, as dropping out of treatment doubled the odds of recidivating.**

> *"Effective programs do not just influence sexually motivated problem behavior; they also have a broader impact on criminality (Lösel & Schmucker, 2005)."*

Even though the study protocol excluded studies that either did not employ a control/comparison group or those that only compared treatment completers and treatment dropouts, only six of the studies in the meta-analysis employed a randomized design.[23] In addition, equivalence between the treatment and comparison groups could not be assumed in about 60 percent of the studies in the analysis. This led Lösel and Schmucker (2005, p. 135) to suggest that one should draw "very cautious" conclusions from the study. In discussing their findings, Lösel and Schmucker (2005, p. 135) stated:

> The most important message is an overall positive and significant effect of sex offender treatment ... Sex offender treatment also has an effect on general recidivism ... Obviously, effective programs do not just influence sexually motivated problem behavior but also have a broader impact on criminality.

Another important meta-analysis was conducted by MacKenzie (2006). Her analysis of 28 evaluations extended the earlier work by Gallagher and colleagues (1999), examining the effectiveness of sex offender treatment. The original meta-analysis by Gallagher and colleagues found evidence that cognitive-behavioral approaches with relapse prevention components are effective at reducing recidivism. Sex offenders treated with cognitive-behavioral/relapse prevention techniques recidivated at a rate that was 8 percentage points below that of comparison sex offenders.

MacKenzie's (2006) meta-analysis is important not only because the review protocol excluded studies that did not employ a no-treatment comparison group, but also because it included an analysis of treatment effects based only on highly rigorous evaluations.[24] MacKenzie found that treated sex offenders had a significantly lower rate of recidivism than untreated sex offenders. The average recidivism rate was 12 percent for the treated offenders in the analysis, compared to 22 percent for the untreated comparison offenders.[25] Because large differences in effect sizes were found across studies, MacKenzie examined how various substantive and methodological characteristics of the studies affected treatment outcomes. In one analysis, the effects of various treatment types were examined using only studies of high methodological quality. **Based only on these high-quality studies, MacKenzie found that cognitive-behavioral/relapse prevention treatment, behavioral treatment, and hormonal medication significantly reduced sexual recidivism.**[26] For sex offenders receiving cognitive-behavioral/relapse prevention treatment, the average recidivism rate was 9 percent, compared to an average recidivism rate of 21 percent for untreated comparison sex offenders. No significant differences were found based on whether treatment was delivered by a criminal justice agency or other organization or whether treatment was delivered in an institution or in the community. MacKenzie concluded that sex offender treatment programs using cognitive-behavioral/relapse prevention approaches are effective at reducing recidivism.[27]

As previously mentioned, several studies concerning the effectiveness of sex offender treatment have been conducted by WSIPP, which is widely recognized for its work regarding meta-analysis and cost-benefit analysis. As part of a larger study on evidence-based public policy options to reduce crime and criminal justice system costs, **Drake, Aos, and Miller (2009) conducted a meta-analysis of six rigorous studies of adult sex offender treatment with aftercare and found that these programs reduced recidivism, on average, by 9.6 percent. In addition, these programs produced a net return on investment of more than $4,000 per program participant, or more than $1.30 in benefits per participant for every $1 spent.**

Another important meta-analysis was recently conducted by Hanson and colleagues (2009). The study's primary aim was to determine whether the RNR principles associated with effective interventions for general offenders also applied to sex offender treatment. The RNR principles have emerged from more than 30 years of research on interventions for criminal offenders. This research has produced a body of evidence that clearly demonstrates that rehabilitation works (Gendreau & Ross, 1987; Lipsey & Cullen, 2007; Joliffe & Farrington, 2007). It also has demonstrated that effective interventions share a common set of features. These common characteristics form what criminologists Don Andrews, Paul Gendreau, and their colleagues have called the "principles of effective intervention" (Andrews, 1995; Gendreau, 1996; Gendreau, Goggin, & Smith, 1999; Andrews & Dowden, 2005). Three of these are commonly known as the RNR principles:

1. Higher risk offenders are more likely to benefit from treatment than lower risk offenders. This is the **risk principle**. In practice, more intensive levels of treatment should be reserved for higher risk offenders. In fact, using high levels of treatment with low-risk offenders is not only inefficient, it can actually increase recidivism (Lovins, Lowenkamp, & Latessa, 2009; Wilson, 2007).

2. To effectively reduce recidivism, programs should target the criminogenic needs of higher risk offenders. This is the **need principle.** Criminogenic needs are dynamic risk factors that are related to subsequent offending, such as substance abuse or an antisocial lifestyle. Dynamic risk factors can be changed through programming, whereas static risk factors, such as criminal history and age at first arrest, cannot.

3. Successful programs are responsive to the motivation, cognitive ability, and other characteristics of the offender. This is the **responsivity principle.** In essence, therapeutic interventions must be tailored to the learning style and capabilities of the offender.

Research has demonstrated that programs incorporating the RNR principles are far more effective at reducing recidivism than those that do not (Andrews & Bonta, 2006). Given the strong scientific evidence supporting the efficacy of treatment for offenders overall, and the role that RNR plays in effective treatment, there is a growing interest in applying the RNR principles to treatment for sex offenders.

Although Hanson and colleagues (2009) sought to test the relevance of the RNR principles for sex offender treatment, a secondary aim was to assess treatment effectiveness using only studies that met a minimum level of scientific rigor. Using the Guidelines of the Collaborative Outcome Data Committee, which were explicitly developed to assess the quality of research on sex offender treatment outcomes, the researchers excluded from the analysis more than 100 potentially relevant studies because they did not meet minimum levels of study quality. However, of the 23 studies that were finally included in the analysis, only 5 (22 percent) were rated as good in terms of methodological quality; 18 were rated as weak. Based on an average followup period of 4.7 years, Hanson and colleagues found average sexual recidivism rates of 10.9 percent for treated offenders and 19.2 percent for the untreated comparison offenders.[28] The average overall recidivism rate was 31.8 percent for treated sex offenders and 48.3 percent for untreated comparison subjects. The researchers also found that adhering to the RNR principles increased treatment effectiveness. While treatment that adhered to one or two of the principles was more effective than treatment that did not adhere to any of the principles, treatment that adhered to all three principles was most effective.

A study by Lovins, Lowenkamp, and Latessa (2009) examined the direct effects of the **risk principle** on sex offenders. The researchers sought to determine whether intensive treatment was more effective for higher risk sex offenders and whether less-intensive treatment had greater effects for lower risk sex offenders. The study sample included 348 sex offenders paroled from a state correctional institution. Of this sample, 110 were released to a halfway house for residential sex offender treatment and 238 were released directly to the community. While offenders released directly to the community may have received outpatient treatment,

sex offenders released to a halfway house were subjected to a more intensive level of treatment. The researchers examined general recidivism but not sexual recidivism in the study. Study subjects were categorized based on their assessed risk levels.

"Findings from systematic reviews and meta-analyses conducted in recent years suggest that certain treatment approaches can and do work."

Results showed that intensive treatment was effective in reducing recidivism for all risk categories of offenders, except low-risk offenders. In fact, high-risk offenders who completed intensive residential treatment were more than two times less likely to recidivate than high-risk sex offenders who did not receive intensive treatment. Conversely, low-risk sex offenders who received intensive treatment were 21 percent **more** likely to recidivate than low-risk sex offenders who were released directly to the community. These findings lend further support to the importance of the principles of effective intervention in sex offender treatment programming.

Finally, three other reviews completed in recent years deserve brief mention, as they also have reported positive treatment effects. Luong and Wormith (2006) conducted a meta-analysis of 30 studies and found that sex offenders who received treatment recidivated at a significantly lower rate than sex offenders who did not receive treatment. The researchers reported that for every 100 untreated sex offenders who sexually recidivate, 82 treated sex offenders will do so. Again, cognitive-behavioral approaches were associated with significant reductions in both sexual and general recidivism.[29] Prentky, Schwartz, and Burns-Smith (2006, p. 5) conducted a narrative review of treatment effectiveness studies and concluded that "the most reasonable estimate at this point is that treatment can reduce sexual recidivism over a five year period by 5–8%." Finally, Przybylski (2008, p. 53) reviewed recent systematic reviews of sex offender treatment effectiveness, many incorporating meta-analysis, as part of a

larger review of what works to reduce recidivism. He concluded that "the most recent scientific evidence suggests that certain types of sex offender treatment can reduce recidivism."

While researchers agree that the evidence concerning the effectiveness of treatment for sex offenders is far from definitive, findings from systematic reviews and meta-analyses conducted in recent years suggest that certain sex offender treatment approaches can and do work. Specifically, cognitive-behavioral/relapse prevention approaches appear to be effective in reducing recidivism, whether delivered in an institutional or community-based setting. The empirical evidence also demonstrates, however, that differential treatment impacts are likely to occur for different offenders. Adhering to the RNR principles of effective intervention appears to be important. **Matching treatment to the risk levels and criminogenic needs of sex offenders may help maximize treatment effectiveness and the return on investment of treatment resources.**

Based on findings from a recent Safer Society survey (McGrath et al., 2010), sex offender treatment programs operating in the United States in 2008 most frequently identified cognitive-behavioral therapy as one of the top three theoretical models that best described their treatment approach (McGrath et al., 2010). Relapse prevention therapy was the second most frequently identified model, but the number of programs endorsing relapse prevention has fallen since 2002. McGrath and colleagues (2010, p. vii) speculated that the decrease in the use of the relapse prevention model likely reflects the "considerable criticism leveled by practitioners and researchers against relapse prevention in recent years," specifically the criticisms that relapse prevention describes only one pathway to offending and that it overemphasizes risk avoidance as opposed to individual strengths and goals.

"Adhering to the RNR principles is important. High- and moderate-risk offenders benefit most from treatment."

McGrath and his colleagues (2010) also reported that about one-third of the treatment programs in the United States responding to the Safer Society survey identified the Good Lives Model (GLM) and about one-quarter identified the self-regulation model (SRM) as one of the top three theoretical models that best described their treatment approach. These two models—GLM and SRM—are designed, at least in part, to address some of the perceived shortcomings of the relapse prevention model. (For more on SRM, see chapter 3, "Sex Offender Typologies," in the Adult section.)

> *"The GLM/SRM approach to treatment has become more prevalent. Research examining the effectiveness of this approach with sexual offenders is needed."*

GLM is grounded in the belief that sex offenders, like most individuals, seek to achieve psychological well-being and that offenders desist from criminal behavior when prosocial behavior provides a more fulfilling life. Rather than focusing solely on risk avoidance and management, GLM attempts to equip sex offenders with the skills, attitudes, and resources needed to lead a prosocial, fulfilling life, thereby reducing the likelihood of reoffending. SRM postulates that sex offenders follow different pathways to offending behavior and that treatment will be most effective if it takes those pathways into account. Four different offense pathways are identified in SRM, and they address both an individual's offending behavior goals and the manner in which the individual tries to reach them (Yates & Kingston, 2006). SRM was recently integrated with GLM to create a more comprehensive treatment approach for managing risk and helping sex offenders develop prosocial lifestyles.

While there is both statistical and anecdotal evidence suggesting that the use of the GLM/SRM treatment approach has become more prevalent, little is known about the efficacy of these treatment models (either alone or in tandem) for reducing the recidivism of sex offenders. To date, studies have focused on validating GLM and SRM for sex

offenders or discovering within-treatment change (Yates & Kingston, 2006; Yates et al., 2009; Kingston, Yates, & Firestone, 2012). While there is growing interest in the GLM/SRM approach, and research is beginning to lay the requisite empirical foundation of support, research has not yet examined whether the approach is effective at reducing recidivism among sex offenders.

Summary

Given the impact sex crimes have on victims and the larger community, and the growing number of sex offenders under correctional supervision, the need for knowledge about criminal justice interventions that are effective at reducing the recidivism of sex offenders may be greater today than ever before.

While there is strong scientific evidence that therapeutic interventions work for criminal offenders in general, the effectiveness of treatment for sex offenders has been the subject of considerable debate. Inconsistent research findings and measurement shortcomings have contributed to the uncertainty about treatment effectiveness, but both the pattern of findings and quality of the evidence have changed in recent years.

> *"Cognitive-behavioral/relapse prevention approaches appear to be effective."*

This review examined the evidence on treatment effectiveness from both individual studies and synthesis research conducted during the past 10 years. While there is agreement among researchers that the knowledge base is far from complete, the evidence suggests that certain therapeutic interventions for sex offenders can and do work. Specifically, cognitive-behavioral/relapse prevention approaches have been identified as being effective at reducing both sexual and nonsexual recidivism.

Because so few studies of treatment effectiveness have employed an experimental design—and RCTs have not produced clear evidence of a treatment effect—some researchers will likely disagree that a positive conclusion about treatment effectiveness

is warranted. While there is an undeniable need for more high-quality research on treatment effectiveness, especially well-designed and well-executed RCTs, there are several reasons why it is reasonable to conclude, albeit cautiously, that some treatment approaches can produce at least moderate reductions in recidivism for some sex offenders.

TREATMENT EFFICACY

There are several reasons why it is reasonable to conclude, albeit cautiously, that some treatment approaches can produce at least moderate reductions in recidivism for some sex offenders:

◆ A relatively consistent pattern of positive findings has emerged from recent research.

◆ Systematic reviews and meta-analyses that employ more advanced and scientifically rigorous methods consistently indicate that treatment works.

◆ Recent studies have found positive treatment effects for various subgroups of treatment participants, even when positive treatment effects were not discovered for the entire treatment sample.

First, a relatively consistent pattern of **positive** findings has emerged from recent research, and studies of treatment effectiveness conducted in recent years have generally improved in quality. More and more findings are based on studies employing matched comparison groups or statistical controls to achieve treatment and comparison group equivalence.

Second, systematic reviews and meta-analyses that employ more advanced and scientifically rigorous methods consistently indicate that treatment works. For example, using only high-quality studies, MacKenzie (2006) found that cognitive-behavioral/relapse prevention treatment, behavioral treatment, and hormonal medication significantly reduced sexual recidivism. For sex offenders receiving cognitive-behavioral/relapse prevention treatment, MacKenzie found an average recidivism rate of 9 percent, compared to an average recidivism rate of 21 percent for untreated sex offenders. No significant differences were found based on

whether treatment was delivered by a criminal justice agency or other organization or whether treatment was delivered in an institution or in the community. Drake, Aos, and Miller's (2009) meta-analysis of six highly rigorous studies of adult sex offender treatment with aftercare found that these programs reduced recidivism, on average, by 9.6 percent. In addition, these programs produced a net return on investment of more than $4,000 per program participant.

Third, recent studies have found positive treatment effects for various subgroups of treatment participants, even when positive treatment effects were not discovered for the entire treatment sample. For example, findings from the SOTEP study, which are often cited as evidence that treatment has not been shown to work because of the study's use of random assignment, indicated that treatment produced significant reductions in recidivism for subgroups of treatment participants who "got it" (Marques et al., 2005). Findings like these suggest not only that treatment works for certain offenders, but also that positive treatment effects can be masked in aggregate findings for the overall treatment sample.

> *"Treatment is apt to be most effective when it is tailored to the risks, needs, and offense dynamics of individual offenders."*

Taken together, the overall pattern of positive findings from single studies and synthesis research, the positive findings that have emerged specifically from meta-analyses that are based on prudent exclusionary criteria and that employ advanced statistical tests, and subgroup analysis research findings that clearly align with empirically supported principles about effective interventions, all lend support to the conclusion that treatment for sex offenders can be effective. Treatment, however, does not affect all sex offenders in the same way. The empirical evidence clearly demonstrates that treatment may have a differential impact, depending on the characteristics of the treatment participant and other contextual factors. Sex offenders clearly vary in terms of their recidivism risk levels, criminogenic needs, and pathways to

offending. Hence, rather than following a one-size-fits-all approach, treatment is apt to be most effective when it is tailored to the risks, needs, and offense dynamics of individual sex offenders. **The differential impact of treatment, and the need for tailored rather than uniform treatment approaches, was acknowledged by the national experts—both researchers and practitioners—at the SOMAPI forum.**

There is mounting evidence that the RNR principles are important for sex offender treatment. Lovins, Lowekamp, and Latessa (2009) found that high-risk sex offenders who completed intensive residential treatment were more than two times less likely to recidivate than high-risk sex offenders who did not receive intensive treatment. Conversely, low-risk sex offenders who received intensive treatment were 21 percent **more** likely to recidivate than low-risk sex offenders who did not receive intensive treatment. Hanson and colleagues (2009) found that treatment that adhered to the RNR principles of effective intervention showed the largest reductions in recidivism. In discussing the implications of their research findings for treatment providers, Hanson and colleagues (2009, p. 25) stated, "we believe that the research evidence supporting the RNR principles is sufficient so that they should be a primary consideration in the design and implementation of intervention programs for sex offenders."

While the knowledge base regarding treatment effectiveness has greatly improved, significant knowledge gaps and unresolved controversies remain. **The need for more high-quality studies on treatment effectiveness has long been a theme in the literature, and both RCTs and highly rigorous quasi-experiments that employ equivalent treatment and comparison groups were identified as future research needs by the experts who participated in the SOMAPI forum.**

While sound RCTs that examine treatment effectiveness are greatly needed, policymakers and practitioners, as well as researchers, must recognize that the use of an RCT design does not automatically make a study's findings trustworthy, nor does the need for trustworthy evidence obviate the need for high-quality quasi-experiments. Given the constraints typically found when working with offender populations, it is unlikely that findings

from RCTs conducted in different treatment settings and with different populations of sex offenders will become available in the immediate future. Hence, findings from quasi-experiments that examine treatment effects using **equivalent** treatment and comparison groups remain important, as they can make significant contributions to the evidence base regarding treatment effectiveness. Propensity score matching and other advanced techniques for controlling bias and achieving equivalence between treatment and comparison subjects can help enhance the credibility of evidence produced by studies that do not employ random assignment.

> *"There is an acute need for more high-quality studies on treatment effectiveness. Both RCTs and highly rigorous quasi-experiments that employ equivalent treatment and comparison groups are needed."*

Systematic reviews and meta-analyses that are based on prudent exclusionary criteria and that employ the most rigorous analytical methods available are also needed. Future research should also attempt to build a stronger evidence base on the differential impact of treatment on different types of sex offenders. **Empirical evidence that specifies what works for certain types of offenders, and in which situations, is important for both policy and practice, and it too was identified as a key research priority by the SOMAPI forum participants.** Subgroup analyses are particularly important because the positive effects of treatment for a particular subgroup of offenders can be masked in a finding that treatment failed to have a positive impact for the overall treatment sample. Researchers must be diligent, however, not to selectively emphasize treatment benefits for a subgroup of study subjects while ignoring findings for the larger treatment sample (Sherman, 2003). New treatment models, such as GLM/SRM, also need to be rigorously evaluated to assess their effectiveness at reducing recidivism.

Finally, most of the concerns about weak study designs are raised to avoid the pitfalls of erroneously concluding that treatment is effective when it is

not. Concluding that treatment is **ineffective** when it actually is effective seems equally problematic. Given the modest reductions in recidivism that have been found in prior treatment effectiveness studies, researchers should be cognizant of the need to design evaluations of treatment programs with sufficient statistical power to detect small treatment effects.

> *"Specifying what types of treatment work for certain types of offenders, and in which situations, is a key research priority."*

Given the quality and consistency of the empirical evidence, it is reasonable to conclude, albeit cautiously, that certain types of treatment can produce reductions in recidivism for certain sex offenders. While a number of researchers are likely to view the empirical evidence in a similar way, some may view a positive conclusion about treatment effectiveness as unwarranted, given the current evidence base. Because treatment has become an integral part of sex offender management in jurisdictions throughout the country, it seems that one of the crucial questions to ask is whether the empirical evidence assembled to date warrants continued support for treatment—provided treatment is well-designed and delivered—or whether it would be safer to desist from treating sex offenders until far more definitive evidence becomes available. Given the evidence assembled to date, pursuing the latter seems unwarranted. While various important questions and methodological concerns need to be addressed in the future, the quality and consistency of the evidence indicates that treatment can lead to at least modest reductions in recidivism, which in turn can translate into fewer victims, less individual and community harm, and a positive return on taxpayer investment.

Notes

1. Of the 1,307 U.S. programs, 608 provided treatment services to adult sexual offenders.

2. RCTs are considered superior for discovering treatment effects and inferring causality because of their capacity to create valid counterfactuals and reduce bias.

3. For an example of a narrative review, see Furby, Weinrott, and Blackshaw (1989).

4. For an example of a systematic review, see Lösel and Schmucker (2005) or MacKenzie (2006).

5. Methodological quality considerations typically include an assessment of the following: the study's ability to control outside factors and eliminate major rival explanations for an intervention's effects; the study's ability to detect program effects; and other considerations, such as attrition and the use of appropriate statistical tests. Based on the assessment, studies of substandard quality are typically excluded from the analysis. In addition, studies that are included in the analysis may be weighted based on their relative scientific rigor.

6. Meta-analysis also generates a summary statistic called the average effect size, which helps the analyst determine not only if the intervention is effective, but also how effective it is. There are several methods used to calculate an effect size, as described in Lipsey and Wilson (2001). The mean difference effect size is common when outcomes are continuously measured; the odds-ratio effect size is common when outcomes are measured dichotomously.

7. Such as statistical tests of homogeneity.

8. A total of 259 study subjects were assigned to the treatment group, but 55 offenders withdrew prior to starting treatment.

9. Of the 204 sex offenders who entered treatment, 190 completed 1 year or more of treatment and 14 dropped out of the program before completing at least 1 year of treatment. The observed sexual recidivism rate for treatment dropouts was 35.7 percent, based on a mean followup period of 8.4 years.

10. $p = .026$.

Chapter 8: Sex Offender Management Strategies

by Christopher Lobanov-Rostovsky

Introduction

Prevention and intervention strategies for sexual offending behavior, including sex offender management, have become increasingly prominent and important in the United States.[1] The concept of sex offender management has been conceptualized under the construct of a Comprehensive Approach to Sex Offender Management (CASOM) by the Center for Sex Offender Management (CSOM). The CASOM model (CSOM, 2007) includes the following—

◆ Fundamental principles:

- Victim-centered approach.

- Specialized knowledge and training for professionals.

- Public education.

- Monitoring and evaluation of the strategies.

- Multidisciplinary collaboration

◆ Critical components:

- Investigation, prosecution, and disposition.

- Assessment.

- Treatment. (For more on treatment, see chapter 7, "The Effectiveness of Treatment for Adult Sex Offenders," in the Adult section.)

- Supervision.

- Reentry.

- Registration and community notification.

FINDINGS

◆ Some empirical support exists for intensive supervision with a rehabilitative treatment approach. However, these studies had short followup periods, small sample sizes, different recidivism measures, and problems with scientific rigor.

◆ Some support exists for Circles of Support and Accountability.

◆ Polygraphs and global positioning systems should only be used with other controls.

◆ Findings are mixed on registration and notification:

- Some studies have found benefits in reducing sex crime rates, reducing recidivism, or expediting arrests for new sex crimes, but other studies have not found statistically significant changes in the measured effects. Studies in this area may fail to control for other influential factors and may lack sufficient scientific rigor.

- The public is generally supportive of registration and notification requirements as protective of public safety. Many sex offenders report negative social and personal impacts but may also report that the requirements deter offending or motivate them to be successful.

- No study to date has examined the multifaceted elements of registration laws generally, or the Sex Offender Registration and Notification Act specifically. SORNA incorporates registration requirements and procedures, and information sharing and enforcement mechanisms, going beyond those prevalent in registration and notification systems examined in past studies.

According to the Bureau of Justice Statistics, at yearend 2008 more than 165,000 offenders convicted of rape or sexual assault were in state prisons (Guerino, Harrison, & Sabol, 2011). The vast majority of these offenders will be released to communities at some point in the future. Additionally, more than 737,000 registered sex offenders currently reside in communities across the United States (National Center for Missing & Exploited Children, 2012). While it is difficult

to track national trends over time, there is little question that the number of sex offenders under correctional supervision in the community has increased substantially over the past 20 years. In fact, sex offender management laws have become so prominent in the United States that the issue was recently identified as the fifth most important area of concern for state legislators (CSOM, 2008). Such laws typically address issues such as incapacitation, retribution/punishment, deterrence, and rehabilitation (CSOM, 2008). During the 2007–08 legislative biennium alone, 1,500 bills related to sexual offenders were introduced in 44 states (6 states had no legislative session during this timeframe), with 275 of these bills passing into law (Council of State Governments [CSG], 2010).

Despite the intuitive value of using science to guide decision-making, laws and policies designed to combat sexual offending are often introduced or enacted in the absence of empirical support. **This dynamic was recently acknowledged and identified as a concern by the national experts—both researchers and practitioners—who participated in the February 2012 SOMAPI forum.** The reasons why this occurs are varied and complex, and they will not be explored in this chapter.[2] However, there is little question that both public safety and the efficient use of public resources would be enhanced if sex offender management strategies were based on evidence of effectiveness rather than other factors. This chapter on sex offender management strategies was developed with this in mind.

This chapter does not discuss the theoretical and sociological explanations for a given policy or place the research within this context. It also does not present an exhaustive review of the research; it focuses on recent studies deemed to be important for understanding the effectiveness of a given strategy. Finally, its primary focus is on the management of adult sexual offenders. Although some research on juveniles who commit sexual offenses is included, the effectiveness of sex offender management strategies with a juvenile population is addressed in the Juvenile section of this publication.

Summary of Research Findings
Specialized Supervision

The development and refinement of specialized legal supervision for sexual offenders has largely occurred over the past 25 years. Specialized supervision frequently involves specially trained probation and parole officers who manage a caseload of sexual offenders using sex-offender-specific supervision strategies that include special conditions of supervision, multidisciplinary collaboration with a treatment provider, and, if appropriate and permissible, the use of global positioning systems (GPS) and polygraph. Based on responses to a 2008 survey of state officials, most states use some form of specialized supervision to manage risk and provide services to sexual offenders in the community; in addition, many states use sex-offender-specific probation or parole caseloads (Daly, 2008). (For a discussion of adult "Sex Offender Risk Assessment," see chapter 6 in the Adult section.) In terms of strategies used by specialized supervision officers, a survey of probation and parole supervisors ($N = 732$) conducted in 1994 found that 85 percent referred offenders to sex-offender-specific counseling and that 30 percent of probation officers and 32 percent of parole officers had specialized caseloads; however, less than 10 percent required polygraph testing (English, Pullen, & Jones, 1996). The importance of multidisciplinary collaboration with supervision officers was also supported in a survey of treatment providers from 45 states and the District of Columbia ($N = 190$), where 90 percent said their rapport with probation officers was excellent or good, 24.2 percent said probation officers attended weekly group sessions, and 87.4 percent said communication with probation officers was essential (McGrath, Cumming, & Holt, 2002).

This section reviews research on the effectiveness of specialized supervision practices. It is important to note that these are not sex-offender-specific studies. Research relating to the effectiveness of Circles of Support and Accountability (COSA), civil commitment, polygraph, and electronic monitoring (including GPS) immediately follows. These studies

focus primarily on sex-offender-specific supervision strategies.

Research

Several large-scale studies have assessed the effectiveness of intensive supervision used with criminal offenders. It is not known whether findings from these studies are generalizable to sex offender populations, but the findings provide important insights concerning the effectiveness of intensive supervision overall. In one large-scale systematic review of 291 studies conducted over a 40-year period on various intensive supervision programs used with criminal offenders, the Washington State Institute for Public Policy (WSIPP) found no research support for the effectiveness of community-based Intensive Supervised Probation (ISP) with a primary surveillance orientation in reducing criminal recidivism (n = 24 studies). (For information on "Adult Sex Offender Recidivism," see chapter 5 in the Adult section.) However, WSIPP did find research support for the effectiveness of treatment-oriented ISP, which produced an average reduction in criminal recidivism of 21.9 percent (n = 10 studies). Based on these results, WSIPP concluded that rehabilitation via treatment—not intensive supervision—leads to a reduction in criminal recidivism (Aos, Miller, & Drake, 2006). It should be noted that this study was a followup to an earlier study by the same state agency, in which the authors concluded that surveillance-oriented ISP had a small effect, which was not statistically significant, on reducing criminal offender recidivism (n = 19 studies) (Aos et al., 2001).

A second study on the effectiveness of ISP for general criminal offenders was a randomized clinical trial[3] conducted between 1986 and 1991 across 14 sites in 9 states. In a 1-year followup, the offenders subject to ISP were rearrested at a rate of 37 percent, while the offenders not subject to ISP were rearrested at a rate of 33 percent. Further, those subject to ISP were recommitted to prison at a rate of 27 percent, while the non-ISP recommitment rate was 19 percent. In discussing the study results, the researchers concluded, "Despite the experience of hundreds of intensive supervision programs in this country and many studies, albeit few experimental, we still know very little about the effectiveness of

these programs to reduce prison overcrowding, and…, to reduce crime in detectable ways" (Petersilia & Turner, 1993, p. 121).

"There is limited research to support intensive supervision with a rehabilitative treatment approach."

Questions about the effectiveness of intensive supervision in the absence of treatment have led to the development of intensive supervision programs with a treatment orientation. A specific example is the containment approach, which includes collaboration on specialized supervision of sexual offenders provided by trained supervision personnel, sex-offense-specific treatment, and polygraph assessment. Unlike many other sex management strategies that have been implemented over the years, English, Pullen, and Jones (1996) developed the containment approach based on their study of best practices in place across the country.

Research on the effectiveness of the containment approach has been completed in a handful of jurisdictions across the country. One study was conducted in Jackson County, OR, where the community corrections office integrated treatment, supervision, and polygraph assessment in a multidisciplinary collaboration model. The research compared the recidivism rates for sexual offenders who were subject to the containment approach between 1985 and 1995 (N = 601) with those of sexual offenders from (1) a different county (Linn County) who were not subject to the containment approach between 1985 and 1992 (n = 89), and (2) a group of non-sex offenders supervised in Jackson County between 1985 and 1995 (n = 231) in a matched sample. The study used a 3- to 5-year followup period, and recidivism in this study was defined as a new felony conviction. The study found a recidivism rate of 8.8 percent for offenders in the containment group based on a followup period of at least 1 year, while the rates for the comparison groups were 15 percent and 26.7 percent, respectively. This was a statistically significant difference in recidivism for the containment group compared to both comparison groups.[4] The researchers also noted that sexual offenders

subject to the containment approach had a higher recidivism rate than the comparison groups for the first year, possibly due to the increased supervision scrutiny provided by this approach (Aytes et al., 2001).

A second study of the containment approach used with sex offenders in Colorado found that sexual offenders subject to specialized parole supervision following release from prison (*n* = 1,003), which included requirements for sex-offense-specific treatment and polygraph assessment, had a statistically significant lower recidivism rate (16.1 percent) than sex offenders not subject to parole supervision (29.3 percent; *n* = 2,040).[5] Recidivism in this study was measured as a new arrest, court filing, or return to prison (Lowden et al., 2003).

Finally, a third study undertaken in Virginia compared sexual offenders subject to containment on probation and parole (*n* = 583) to all sexual offenders on probation and parole between 2000 and 2002 (*N* = 1,753) using a 3- to 5-year followup period. The results indicated that the containment sexual offenders returned to prison for any crime at a rate of 11.3 percent, and specifically for a sex crime at a rate of 0.5 percent. The comparison group had a similar return-to-prison rate of 9.9 percent for any crime and a rate of 0.6 percent for a new sex crime, a difference that was not statistically significant. The researchers hypothesized that the higher return-to-prison rate for the containment sexual offenders was due to increased surveillance and detection provided by the model. It is also important to note that the comparison group in this study (all sexual offenders released from prison between 2000 and 2002) included the sex offenders subject to containment (Boone et al., 2006).

Two additional research studies on specialized sex offender supervision are worth noting. One study compared sex offenders (*n* = 195) under specialized supervision and in sex-offense-specific treatment to a matched group of sex offenders who did not have community supervision using a 6-year followup period. The results indicated that sexual offenders under community supervision had a sexual recidivism rate of 14 percent based on either a new sexual offense charge or a substantiated sexual offense by child protective services. In

comparison, those who were not under supervision had a recidivism rate of 35 percent, leading to the conclusion that specialized supervision resulted in a statistically significant reduction in sexual recidivism[6] (McGrath et al., 2003).

However, in a contradictory study completed in Illinois, no significant difference in sexual recidivism was found between sex offenders subject and not subject to specialized supervision. In this study in Lake County, IL, recidivism was defined as a new sex crime arrest over a 3- to 5-year followup period (Stalans, Seng, & Yarnold, 2002). The results indicated that sexual offenders subject to specialized supervision (*n* = 104) had a sexual rearrest rate of 28.8 percent, while sexual offenders not subject to this strategy (*n* = 104) had a sexual rearrest rate of 25 percent (Stalans, Seng, & Yarnold, 2002).

Limitations

The research on the effectiveness of specialized sex offender supervision in conjunction with treatment (e.g., the containment approach) has a number of limitations. These include a small number of studies, short followup periods, small sample sizes, the use of different recidivism measures (making cross-study comparisons challenging), little information about the specific elements of the programs that are found to be successful, and problems with the scientific rigor of some of the studies (including one study where the intervention group was part of the comparison group). Finally, general issues related to underreporting of sex crimes leads to the problem typically seen in sex offender management research; that is, a low base rate for sexual recidivism, which limits the ability to achieve significant differences between the intervention and comparison groups.

"Research limitations include short followup periods, small sample sizes, different recidivism measures, and problems with scientific rigor."

On the other hand, the research on the effectiveness and limitations of generalized intensive supervision for all criminal offenders, particularly when combined with a treatment component, is much

more extensive based on a number of large-scale research studies.

In terms of future research directions, it is recommended that research using rigorous scientific methods be encouraged and supported. Comparison studies with large sample sizes and longer followup periods should be conducted on the effectiveness of specialized supervision in conjunction with treatment for sexual offenders. Finally, it would be beneficial for future research to identify not only the effect of the intervention, but also the program components that appear to be most beneficial and the mechanisms by which successful outcomes are achieved.

Summary

There is empirical support for the use of intensive supervision with criminal offenders in conjunction with a rehabilitative treatment approach, and some preliminary support for specialized sexual offender supervision models (such as the containment approach) that are delivered in conjunction with treatment. However, there is no research support for the use of intensive or specialized supervision either in isolation or without treatment for either population. Given the above, **the SOMAPI forum participants recommended that jurisdictions should use specialized supervision with a rehabilitation orientation as one component of an overall sex offender management strategy.**

Circles of Support and Accountability

The COSA model is a supervision strategy involving the use of community volunteers to provide support to an individual sex offender. COSA assists offenders in garnering community resources while holding them accountable to their self-monitoring plan, typically following completion of legal supervision. This program was first developed in Canada but has since also been implemented in the United Kingdom, Europe, and the United States. Currently, there are COSA programs in California, Minnesota, and Vermont, with additional projects being developed in Colorado, Washington, and North Carolina, among others.

Research

The COSA model has been the subject of several different studies, including a survey of sexual offender participants and public member volunteers, two comparison studies, and one descriptive outcome study. The surveys showed that 90 percent of sex offenders from Canada who were surveyed (n = 24, with a 65-percent response rate) described participation in COSA as helpful in refraining from reoffense, while 68 percent of public members (n = 77, with an 80-percent response rate) said offenders' participation in COSA made them feel safer (Wilson, Picheca, & Prinzo, 2005).

In the Canadian outcome studies, one evaluation compared the recidivism rates of 60 COSA high-risk sex offenders and 60 non-COSA high-risk sex offenders using a 4.5 year followup period. The study found a 5-percent sexual recidivism rate (defined as a new sex crime charge or conviction) for the COSA group and a 16.7-percent recidivism rate for the non-COSA group. The researchers concluded that COSA participation resulted in a statistically significant reduction in sexual recidivism[7] (Wilson, Picheca, & Prinzo, 2005).

> *"COSA was identified in the Inventory of Promising or Effective Programs in Sex Offender Management as a research-supported program model."*

In a second Canadian study, the recidivism rates for 44 high-risk sex offenders participating in COSA were compared to those for a matched comparison group of 44 high-risk sex offenders who did not participate in COSA using a 35-month followup period. The study found that the COSA group sexually recidivated at a 2.3-percent rate while the non-COSA group recidivated at a 13.7-percent rate, a statistically significant difference[8] (Wilson, Cortoni, & McWhinnie, 2009).

Finally, a descriptive study of the COSA program in the United Kingdom examined recidivism outcomes for the program, but the study did not employ a comparison group of any kind. The United Kingdom

COSA model is slightly different than the model that has been implemented in Canada, in that sexual offenders in the program are still under legal supervision. The research documented the recidivism rates of 60 sexual offenders who participated in COSA using an average 3-year followup period. The study found that only one COSA participant sexually recidivated (1.7 percent), and five were reincarcerated (8.3 percent) during the followup period (Bates et al., 2011).

Limitations

Regarding survey research, limitations include small response rates and sample sizes, leading to possible self-selection bias. Regarding the outcome studies, while the results regarding COSA effectiveness thus far have been positive, only two studies have employed a comparison group and both of those studies had relatively small sample sizes. In addition, the relatively short followup periods are a challenge for these studies. Finally, these studies were done in Canada and the United Kingdom, where polygraph is not used routinely to corroborate disclosure and accountability. As a result, generalization to the United States is still in question. Therefore, future research should include larger samples sizes, sex offenders from multiple jurisdictions (including the United States), and longer followup periods.

Summary

COSA studies thus far have demonstrated positive results. While further use of the model is encouraged, implementation should occur in conjunction with rigorous evaluation. Far more high-quality research is needed before the efficacy and effectiveness of COSA with sexual offenders can be firmly established. The strength of the model is that it uses community resources for sex offender management and can be used in the absence of court supervision.

Polygraph

The use of polygraph assessment with sexual offenders is a somewhat more controversial management strategy than the others described thus far. (It is important to note that the containment approach—described above—includes polygraph testing as part of a comprehensive supervision and treatment strategy. This approach is premised on the assumption that the information disclosed via polygraph enhances the ability to create an individualized treatment and supervision plan.) Three different types of polygraphs are used with sexual offenders: a specific-incident exam that focuses on the sexual offense conviction or other specific offenses or behaviors, a sexual-history exam that explores the offender's history of sexual offending behavior, and a maintenance exam that reviews the offender's compliance with supervision and treatment conditions.

While the extent of polygraph use in the management of sexual offenders is difficult to document, there is some evidence that polygraph use has increased since the mid-1990s. In terms of sex offenders supervised within the federal probation and pretrial service system, one study found that in fiscal years 2004–05 (N = 2,199), 44 percent of those in treatment were subject to polygraph testing (Baerga-Buffler & Johnson, 2006). Similarly, in a survey of state officials (prison, community treatment, reentry, and community supervision), less than 50 percent of the respondents reported polygraph use in prison-based treatment (Daly, 2008). This percentage, however, was significantly higher than the percentage reported by English, Pullen, and Jones (1996) based on their 1994 national survey of supervision officers (N = 732), in which less than 10 percent required polygraph testing. According to CSG (2008), the following states were using polygraph testing in the management of sexual offenders: Colorado, Nevada, New Jersey, New York, and Texas. Evidence that polygraph use has increased since the mid-1990s also comes from a survey of U.S. treatment providers (N = 1307 programs), which found that respondents reporting the use of polygraph increased from 30 percent in 1996 to 79 percent in 2009 (McGrath et al., 2010).

Research

Research on polygraph use can be broken down into the following content areas: impact on disclosure, impact on sexual offender recidivism, impact on supervision professionals, impact on sexual offenders, and test validity.

Impact on Disclosure

Results of multiple research studies across various jurisdictions indicate that using polygraphs with sexual offenders leads to additional disclosures. Reported increases in offender disclosure based on polygraph include the number of victims, offenses, and offense categories (Ahlmeyer et al., 2000; English et al., 2000; Heil, Ahlmeyer, & Simons, 2003; Hindman & Peters, 2001); high-risk behaviors (Buschman et al., 2010; Grubin et al., 2004); and age of onset, duration of offending, and frequency (English et al., 2003). One example of such a study is from the Netherlands, where child pornography sexual offenders who received polygraph testing (N = 25) yielded disclosures of high-risk behavior during treatment in the areas of masturbation to fantasies of sexual contact with children (n = 15) (including masturbation while looking at children in public (n = 9)) and masturbation while manipulating children into posing nude during webcam contact (n = 4). In addition, disclosures included cruising in public places for children (n = 14), taking children's pictures (n = 5), and having scripted scenarios to be used to sexually victimize a child if there were an opportunity to do so (n = 5) (Buschman et al., 2010). It should be noted that no comparison group was used in this study; hence, attributing the disclosures directly to the use of the polygraph is problematic. Increases in the number of victims disclosed via polygraph ranged from an initial self-report of 1 victim to 11–13.6 victims, depending on the study, following polygraph testing (Ahlmeyer et al., 2000; Heil, Ahlmeyer, & Simons, 2003; Hindman & Peters, 2001). The rate of polygraph-aided disclosure was higher than the rate for offender self-reports (Hindman & Peters, 2001), and was more pronounced for inmates than parolees (Ahlmeyer et al., 2000; Heil, Ahlmeyer, & Simons, 2003). Finally, results of polygraph disclosure research indicated a large number of sanctions and changes in the case plan for offenders (English et al., 2000; Tubman-Carbone, 2009).

Limitations: Impact on Disclosure

Polygraph disclosure research undertaken to date has been based on relatively small sample sizes. There also was no corroboration of the disclosures made, allowing for the possibility of false admissions and an overstating of the number of victims. However, many polygraph disclosure studies also note that, given the deceptive polygraph results, there is also a possibility that the true incidence of offending behavior is underreported. This makes the interpretation of disclosure research findings difficult. Perhaps most importantly, most of the disclosure studies lacked comparison groups so it is not possible to know with certainty that the polygraph was responsible for the new disclosures. Further, many of these studies are limited to one state or jurisdiction, with only one study encompassing four states, raising questions about the generalizability of findings to other jurisdictions. Finally, the fact that the polygraph was voluntary in one study suggests the possibility that the results may have been different had all offenders completed the assessment. Future research on polygraph disclosures is clearly needed and it should include matched comparison groups and larger samples. Disclosure studies spanning multiple jurisdictions are also needed.

Impact on Sexual Offender Recidivism

As noted in the "Specialized Supervision" section above, the research results for sexual offenders subject to polygraph testing as part of the containment approach typically demonstrated lower levels of recidivism than sexual offenders not subject to this intervention (Aytes et al., 2001; Lowden et al., 2003). However, in a study conducted by McGrath and colleagues (2007), no significant differences in sexual recidivism between polygraphed and nonpolygraphed sex offenders were found. In that study, the recidivism rates of 104 sex offenders subject to polygraph testing were compared with those of a group of 104 matched sex offenders not subject to polygraph testing. The recidivism rate based on sexual recidivism charges was 5.8 percent for the polygraph group and 6.7 percent for the nonpolygraph group, a difference that is not statistically significant. However, there was a significant difference between the two groups in violent recidivism (operationalized as a new violent crime charge). The violent recidivism rate for those offenders subject to polygraph was 2.9 percent, compared to 11.5 percent for the nonpolygraph group.[9] It should also be noted that a large percentage of high-risk behaviors were disclosed

during the polygraph examinations (McGrath et al., 2007).

Limitations: Impact on Sexual Offender Recidivism

The limitations cited for the specialized supervision research, and in particular the containment approach, hold for the polygraph research as well. Indeed, the only study that specifically looked at recidivism related to sexual offenders subject to polygraph, compared to those who were not, showed no significant difference in the rate of sexual recidivism. However, this study acknowledged that several issues may have confounded the study results, including the small sample size, potential selection bias (in that probation officers decided who would take the polygraph), and the infrequency of polygraph testing. Hence, the study conducted by McGrath and colleagues (2007) should be replicated using a larger sample size, matched comparison groups, and program features that reduce the probability of selection bias and maintain the integrity of the polygraph treatment. Studies examining the impact of polygraph testing on recidivism in different jurisdictions are also needed.

Impact on Supervision Professionals

In a 1998 telephone survey of probation and parole supervisors (*N* = 679), approximately three-fourths believed that polygraph use enhanced disclosure of offender behavior and two-thirds believed it led to better supervision of offenders (Cooley-Towell, Pasini-Hill, & Patrick, 2000). Surveys of service providers have found similar positive results. For example, in one survey, 96 percent of the respondents reported that the polygraph was helpful (McGrath et al., 2007). In another survey, 100 percent of the providers (*n* = 11) and 90 percent of the parole officers (*n* = 105) who responded reported that the polygraph was helpful. In the same survey, 80 percent of the providers who responded reported that having one group member take a polygraph test positively impacted other group members (Tubman-Carbone, 2009).

Impact on Sexual Offenders

Research on the perceived impact of the polygraph by sex offenders themselves is extremely limited.

One study that examined this was conducted by Kokish, Levenson, and Blasingame (2005). The study surveyed 95 sexual offenders and found that 72 percent of those surveyed rated the polygraph as helpful, while 11 percent said the polygraph was harmful (Kokish, Levenson, & Blasingame, 2005).

Limitations: Impact on Sexual Offenders

Most of the limitations commonly found with survey data apply to the above studies. (For more on general limitations of sex offender research, see the "Limitations of the Data" section of chapter 1, "Incidence and Prevalence of Sexual Offending," in the Adult section.) In addition, the answers provided by sex offenders under supervision may be subject to distortion because offenders may try to give a socially desirable response or portray themselves in a sympathetic light.

Test Validity

One of the significant critiques of the polygraph is that it does not produce valid results. While this chapter only addresses the issue of test validity very briefly, readers are directed to the National Research Council report titled *The Polygraph and Lie Detection* (2003) for additional information. Its key research findings regarding test validity follow:

◆ A large-scale review of 57 studies on the use of specific-incident polygraph testing with sexual offenders found that such testing demonstrated the ability to discriminate between truth and deception at a rate well above chance.

◆ Screening tests (sexual history and maintenance) performed with the polygraph showed less of an ability to discriminate between truth and deception.

Research Summary

Research suggests that polygraph testing increases offender disclosure across multiple offending or behavior categories, including historical and current offending and high-risk behavior. The empirical evidence also suggests that polygraph testing can help reduce sexual recidivism when used

in conjunction with specialized supervision and treatment within the containment approach.

Limitations Summary

One of the key limitations in the polygraph research studies reviewed in this chapter is the inability of the research to distinguish the impact of the polygraph from other strategies (treatment and specialized supervision). Small sample sizes are also a problem and jurisdiction-specific approaches may limit the generalizability of research findings. Future research should employ more rigorous methods to better isolate the impact of polygraph testing on both disclosure and recidivism.

> *"Polygraphs should be used as one component of an overall sex offender management strategy."*

Polygraph Summary

Until more definitive research regarding the validity and impact of polygraph testing is available, the polygraph will continue to be a controversial technique used inconsistently in sex offender management schemes. If polygraph testing is used in the management of sex offenders, it should be implemented as one component of an overall sex offender management strategy. Polygraph disclosure information may be useful for assessment of risk factors and identification of treatment needs, but in some jurisdictions such information may not be used for prosecution or supervision revocation. Given the questions that remain about test validity, it is not recommended that polygraph results be relied on exclusively for sex offender management decision-making.

Electronic Monitoring, Including Global Positioning Systems

Another recent trend in sex offender management and supervision has been the use of GPS to monitor sex offenders. GPS is an updated, more technologically advanced form of the electronic monitoring techniques used with criminal offenders in the past. These earlier versions of electronic monitoring were much more passive in nature, and they typically involved the use of a radio transmitter device (worn by offenders) that alerted a home-based receiver and a remote monitoring station whenever the offender was out of range. Offenders could never be tracked or otherwise located once they left their homes. In a significant technological advance, GPS provides real-time tracking of and location data for the offender, and it also is capable of notifying authorities if an offender enters a prohibited area, such as an offender exclusion zone or victim residence. Monitoring by GPS can be either active (viewing an offender's movement between locations in real time) or passive (data are saved and reviewed later, and notification is only done electronically based on restriction parameters violated). In the United States:

◆ Six states use lifetime electronic monitoring (Nieto & Jung, 2006).

◆ Forty-seven states have some form of electronic monitoring legislation, 19 of which require the use of an electronic monitoring tool. The remaining 28 states permit but do not require electronic monitoring (Button, DeMichele, & Payne, 2009).

◆ Thirty-one states introduced electronic monitoring legislation in 2007, with 14 of 109 bills passing (CSG, 2010).

Research

In a systematic review of 12 studies examining the effectiveness of non-GPS electronic monitoring used with criminal offenders overall (not necessarily sex offenders), WSIPP found no significant reduction in criminal recidivism for offenders subject to electronic monitoring techniques (Aos, Miller, & Drake, 2006). However, a second large study that examined the effectiveness of passive monitoring devices and GPS used with criminal offenders subject to home confinement in Florida between 1998 and 2002 did find promising results (N = 75,661). Study findings indicated that criminal offenders placed on both passive electronic monitoring devices and GPS had significantly lower levels of revocation for a new criminal offense or for absconding than did offenders subject to home confinement without such monitoring[10] (Padgett, Bales, & Blomberg, 2006).

In a study of non-GPS passive electronic monitoring specific to sexual offenders in three of four Canadian provinces that use such a technique, Bonta, Wallace-Capretta, and Rooney (2000) compared the recidivism rates of a group of inmates and probationers who were not subject to electronic monitoring with those of a group of offenders who were subject to it. Based on a 1-year followup period, those on electronic monitoring sexually recidivated (defined as a sex crime reconviction) at a rate of 26.7 percent, compared to 33.3 percent for the probationers who were not monitored and 37.9 percent for the inmates who were not monitored. However, the researchers noted that although there was a statistically significant difference in recidivism between the electronic monitoring and nonelectronic-monitoring groups,[11] when the results were controlled for risk there was no difference between them. Hence, they concluded that the observed recidivism reductions were due to offender risk dynamics, not program components (Bonta, Wallace-Capretta, & Rooney, 2000).

In a study comparing states that have implemented electronic monitoring laws for sexual offenders with those that have not, Button, DeMichele, and Payne (2009) found that the states with such laws were no more likely to have rates of violent crime and rape that were higher than the U.S. average than were states without such laws.

State agencies in California, Florida, New Jersey, and Tennessee, among others, have studied the use of GPS with sexual offenders. Among sexual offenders on GPS in New Jersey ($N = 225$), there were 19 nonsexual criminal recidivists or technical violators and 1 sexual recidivist in a 1-year followup (New Jersey State Parole Board, 2007). It should be noted there was no comparison group for this study. In a Florida study of 705 offenders on electronic monitoring using predominantly active GPS (70 percent of whom were lower risk offenders and 30 percent of whom were habitual or sexual offenders), offenders on electronic monitoring had a felony recidivism rate of 2.6 percent, while offenders who were not subject to electronic monitoring recidivated at a rate of 6.6 percent in a 1-year followup. It is not known whether this difference was statistically significant (Office of Program Policy Analysis & Governmental Accountability, 2005).

Conversely, a Tennessee study that compared the outcomes of 493 sex offenders on GPS with those of 370 offenders in the same counties prior to the use of GPS found no significant difference between the two groups in the number of technical violations or new charges that occurred or in the number of days before a first technical violation (Tennessee Board of Probation and Parole, 2007).

A California study compared outcomes for 94 GPS offenders and a group of 91 high-risk offenders who were not on GPS. No significant differences in technical violations (which included offenders who committed a new crime) were found between the two groups (39.6 percent vs. 37.2 percent); however, the GPS group was less likely to abscond. This study also included a process evaluation of GPS that showed equipment problems, signal drift, blocked signals, and high caseloads impacting effectiveness (Turner et al., 2007). Finally, in a second California study of high-risk sex offenders ($N = 516$) (half of whom were on GPS while the other half was a matched non-GPS comparison group), no significant differences in sex crime rearrest (2.7 percent for the GPS compared to 5 percent for the non-GPS group) or reconviction (1.9 percent compared to 4.3 percent) were found based on a 1-year followup period. However, the GPS group had significantly lower levels of sex-related parole violations (5 percent compared to 12.4 percent),[12] general rearrests (14.4 percent compared to 26.4 percent),[13] and return to custody (58.1 percent compared to 58.9 percent)[14] (Gies et al., 2012).

Limitations

In terms of the limits of the GPS-specific studies, the sample sizes were relatively small (ranging from 94–262), with at least one study referencing primarily a lower risk, nonsexual offender group. The followup periods employed in many studies were not of sufficient length. The inability of several studies to detect a positive GPS effect may be related to problems using the technology or staffing limitations within the monitoring program.

"GPS should not be used in isolation and should be a part of an overall sex offender management strategy."

The efficacy of electronic monitoring techniques such as GPS cannot be established at this time. Additional studies with sufficient sample sizes and followup periods, and matched comparison groups, are needed to test the impact of GPS. Technological and staffing problems within monitoring programs also need to be addressed so that impact evaluations can focus on GPS programs that are implemented and delivered with integrity. Finally, while research on non-GPS electronic monitoring provides important insights about the value of monitoring strategies, the technological differences between passive alert systems (non-GPS and passive GPS[15]) and an active monitoring system (active GPS) are significant and must be accounted for when assessing the effectiveness of any specific monitoring technique or electronic monitoring strategy as a whole in any research summary.

Summary

While GPS may eventually be found to be effective as one strategy in an overall management approach for sexual offenders, empirical evidence does not at this time establish that the strategy is effective when used in isolation. Policymakers and the public should not view GPS as a viable alternative to empirically supported supervision models that incorporate treatment.

Sexual Offender Civil Commitment

At present, 20 states, the District of Columbia, and the federal government have enacted legislation allowing for the establishment of sexual offender civil commitment (SOCC) procedures.[16] SOCC is predicated on the belief that some offenders will be at continued high risk (in some cases termed "more likely than not") to commit a new sexual offense if they are not preventively detained and offered treatment designed to lower their risk for recidivism. To be subject to civil commitment, most SOCC statutes require the state to demonstrate that a potential candidate for this measure has (1) a history of engaging in criminal sexual behavior and (2) a "mental abnormality" that, without treatment, would preclude him or her from being able to manage his or her criminal sexual propensities in the community. These "criteria" form the principal basis for SOCC, and persons committed as sexually violent

persons/predators (SVPs) are held until such time as a court finds they no longer meet the criteria.

Research

More than 40,000 sexual offenders in Florida have been screened for possible referral to the courts for SOCC proceedings since the law came into effect in early 1999. However, approximately 9 percent of those screened offenders were referred for psychological/psychiatric evaluation and only about 3.5 percent have been referred to court for civil trial. Even fewer of those referred for commitment were actually found to be SVPs—in fact, less than half of those referred for trial (1.5 percent of the total considered) were designated as SVPs. This makes those persons found to be SVPs an "elite" group, at least as far as Florida is concerned (although other SOCC programs report similar numbers, i.e., less than 2 percent) (Wilson et al., 2013).

At present, very few civil commitment programs have released sufficient numbers of offenders to allow researchers to study the impact of civil commitment in a meaningful way. Across the 16 SOCC programs reporting data to the annual survey of the Sexual Offender Civil Commitment Programs Network (Jackson, Travia, & Schneider, 2010), the average number of releases per program was less than 10. Further, most releases from civil commitment have occurred recently, meaning that followup times would be quite short. As such, very little data currently exist regarding rates of reoffending in SVPs following release to the community.

One study that provides some insight into the impact of civil commitment on postrelease offending examined the reoffense rates of 135 "almost SVPs" (persons who were referred for SOCC, but petitions were not filed with the court) in Washington State (Milloy, 2007). With a uniform followup period of 6 years, 23 percent were convicted of new felony sexual offenses—a rate considerably higher than that found in "routine" samples of sexual offenders. Another study of note compared high-risk/need sexual offenders in a Canadian jurisdiction to SVPs in Florida (Wilson et al., 2013). In that study, the Canadian and American offenders were virtually identical on pertinent risk assessment and clinical

factors, and their relative rates of sexual reoffending were also remarkably similar (6.1 percent in 5.48 years compared to 3.2 percent in 2.54 years), although the Florida SVP sample size was small (*n* = 31) and the followup period for the Florida SVPs was relatively short.

Limitations

There has not been adequate empirical study to determine the effectiveness of SOCC as a sex offender management strategy at this time, at least in terms of the impact of SOCC on postrelease offending. The limited number of sexual offenders released from SOCC, the short followup periods researchers would inherently have to use, and the lack of adequate comparison groups all contribute to a paucity of research on SOCC effectiveness. Far more offenders will have to be released from SOCC, and these offenders will have to spend far more postrelease time in the community, before the impact of SOCC on postrelease offending can be studied in a meaningful way.

Summary

SOCC strategies are being used by 40 percent of states (20 states). While these programs seek to contain and treat the most dangerous sex offenders, they have significant costs; a 2005 survey found that annual per-resident costs ranged from $12,680 to $109,000, and that more than $224 million was spent annually to operate SOCC facilities nationwide (Lieb & Gookin, 2005).

Sex Offender Registration and Notification

Registration was first used in the 1930s with repeat criminal offenders as well as sex offenders. California became the first state to implement sex offender registration in 1947, while Washington became the first state to implement community notification on sex offenders in 1990. The goals of Sex Offender Registration and Notification (SORN) programs have been summarized as deterring offenders from reoffending, giving law enforcement an investigative tool, and increasing public protection (CSOM, 1999).

The federal government first implemented a national registration law with the Wetterling Act in 1994. A national notification law was enacted with the Megan's Law amendment to the Wetterling Act in 1996. Subsequently, all 50 states have implemented SORN systems. The federal government repeatedly refined and expanded the scope of SORN via a series of amendments to the Wetterling Act,[17] and then ultimately set forth a new SORN scheme with the passage of Title I of the Adam Walsh Child Protection and Safety Act of 2006 (AWA)—the Sex Offender Registration and Notification Act (SORNA)—which repealed the Wetterling Act. SORNA's requirements and how they differ from the Wetterling Act have been documented in other sources.[18] The changes include enhanced registration requirements and procedures, increased availability of sex offender registration information to the public, strengthened information sharing and enforcement mechanisms, and greater federal assistance in operating and upgrading sex offender registration programs, sharing and disseminating sex offender information, and enforcing registration requirements.

Research

SORN requirements arguably have been implemented in the absence of empirical evidence regarding their effectiveness. It has been suggested that SORN may be a specific deterrent for sex offenders; that it would facilitate sex offender awareness, monitoring, and apprehension; and that it would in the end help prevent sex offenses— particularly repeat sex offenses—from occurring. While these hypotheses were not empirically tested prior to the implementation of SORN requirements, a significant body of research using various methods has since examined the impact of SORN, particularly in relation to recidivism.

Interrupted Time Series Analysis Studies

One research method employed to assess the effectiveness of SORN for adult sexual offenders is interrupted time series analysis, which essentially examines an outcome of interest using many observations before and after the implementation of a specific intervention. Several interrupted time series analyses assessing SORN have been

completed in recent years. In one analysis of state SORN laws, Prescott and Rockoff (2011) found that SORN may have contributed to a decrease in sex crimes. More specifically, the study found that sex offender registration led to a decrease in the rate of victimization of nonstrangers and a reduction in recidivism for identified sex offenders. However, community notification did not appear to reduce recidivism for identified sex offenders (Prescott & Rockoff, 2011).

A similar analysis focused on the impact of SORN on rape in 10 states. Using Uniform Crime Report (UCR) data on rapes reported to the police as the outcome measure, the study found that statistically significant reductions in reported rape occurred following the implementation of SORN in 3 of the 10 states (Hawaii[19], Idaho[20], and Ohio[21]). In six states (Arkansas, Connecticut, Nebraska, Nevada, Oklahoma, and West Virginia), no significant change was observed following SORN implementation, and one state (California) actually had a statistically significant **increase** in sex crimes following SORN implementation.[22] Based on the varied findings, the authors concluded there was no systematic influence of SORN on the rate of reported rape (Walker et al., 2006). (For more on UCR data, see the "Uniform Crime Report" section of chapter 1, "Incidence and Prevalence of Sexual Offending," in the Adult section.)

Presently, 41 states have some kind of registration for juveniles adjudicated delinquent of sex offenses; 30 states either permit or require public website posting for those juveniles, and the vast majority require registration and public notification for juveniles transferred for trial and convicted as an adult.[23] In reviewing UCR sex crime arrest data from 47 states for 1994 through 2009, Holmes (2009) did not find a statistically significant decrease in the rate of sex crime arrest in either juvenile registration states or juvenile notification states (post-SORN).

Several studies have examined the impact of SORN in individual states. For example, in South Carolina, adult sex crimes were compared to nonsexual assault and robbery crimes pre- and post-SORN implementation (N = 194,575, of which 19,060 were sex crime arrests). Data were examined for 1990 through 2005. SORN implementation occurred in 1995. The study found that the sex crime rate declined by 11 percent[24] from pre- to post-SORN while the rates of assault and robbery did not, suggesting the possibility that SORN was a deterrent to sex crimes (Letourneau, Levenson, Bandyopadhyay, Armstrong, & Sinha, 2010). In another study from New Jersey, a downward trend in the sex assault rate was observed both pre- and post-Megan's Law (SORN), but the rate of decline increased after Megan's Law was implemented (Veysey, Zgoba, & Dalessandro, 2008).

A number of state studies did not find evidence that SORN implementation positively impacted the rate of sexual offending or recidivism. Interestingly, one of these studies focused on South Carolina, where another study **did** find evidence of a positive SORN impact (Letourneau, Levenson, Bandyopadhyay, Armstrong, and Sinha, 2010).

In the South Carolina study that **did not** find evidence of a positive SORN effect, recidivism was examined in the context of registration status for 6,064 male offenders convicted of at least one sex crime in that state between 1990 and 2004. The study found that registration status did not predict recidivism (Letourneau, Levenson, Bandyopadhyay, Sinha, & Armstrong, 2010). Another state study taking place in New York analyzed sex crime, assault, robbery, burglary, and larceny arrests from 1986 through 2006. Study results indicated that the implementation of the state's sex offender registry did not decrease the rearrest rate for convicted sex offenders, deter nonregistered offenders from offending, or decrease the overall rate of sex crimes. It was also noted that 94.1 percent of child molestation arrests were for first-time sex offenders (Sandler, Freeman, & Socia, 2008). Finally, an analysis that focused on South Carolina juveniles who committed sexual offenses between 1990 and 2004 (N = 1275) found that 7.5 percent were charged with a new sex offense and 2.5 percent were adjudicated for a new sex offense during a 9-year followup period (Letourneau, Bandyopadhyay, Sinha, & Armstrong, 2010). More importantly, the researchers found that registration was not associated with recidivism; however, nonsexual, nonassault recidivism (defined as a new charge) significantly decreased for those on the registry[25] (Letourneau, Bandyopadhyay, Sinha, & Armstrong, 2010).

Limitations: Interrupted Time Series Analysis Studies

One of the primary limitations of the studies cited above is that time series analysis and before/after methods in general are not as capable of isolating intervention effects as a randomized controlled trial. While an interrupted time series analysis based on a sufficient number of observations can produce highly trustworthy findings, outside factors such as changes in supervision, treatment, and other sex offender management practices pre- and post-SORN may also be influencing study results. Further, the authors in the New Jersey study cautioned that wide variety across county sex crime rates was noted, and the analysis did not uniformly and consistently demonstrate downward trends, suggesting that the statewide pattern identified might represent a spurious effect and be an aggregation artifact (Veysey, Zgoba, & Dalessandro, 2008). Finally, other variables such as sex crime underreporting (which could be aggravated by SORN due to the unwillingness of intrafamilial victims to report because of fears about SORN) and the limitations of official sex crime statistics may be confounding these results.

Studies Employing a Comparison Group

A number of studies have examined the impact of SORN by comparing the outcomes of sex offenders subject to SORN with those not subject to this strategy. These studies have generally produced mixed results.

One study finding a positive effect examined the recidivism of 8,359 sexual offenders in Washington State. Some of those offenders were subject to SORN, while others were not because SORN requirements were not yet in place. The study found that the sex offenders subject to SORN sexually recidivated (defined as a new Washington state conviction for a felony sex crime) at a 2-percent rate, while the pre-SORN group recidivated at a 7-percent rate[26] (WSIPP, 2005). Another study finding a positive impact took place in Minnesota. Researchers compared Level III sexual offenders subject to community notification between 1997 and 2002 (n =155) with precommunity notification sexual offenders retrospectively scored as Level III offenders (n = 125), and Level I and II sexual offenders not

subject to community notification (n = 155).[27] Based on a 3-year followup period, the community notification group had a statistically significantly lower sexual recidivism rate based on reconviction (3.2 percent), compared to the prenotification group and nonnotification group (32.8 percent and 9.6 percent, respectively)[28] (Duwe & Donnay, 2008).

On the other hand, several state-level studies have not found evidence of a positive SORN effect. For example, in an Iowa study, a group of sex offenders subject to registry requirement (n = 233) who were also under legal supervision were compared to a matched group of preregistry sex offenders not under supervision (n = 201). In a 4.3-year followup, the registry group sexually recidivated (defined as a new sex crime conviction) at a rate of 3 percent, compared to the nonregistry group's 3.5-percent recidivism rate. This difference was not statistically significant. However, when the recidivism rates of parolees and probationers were compared, the researchers found that registration requirements may have had more of an impact on parolees (Adkins, Huff, & Stageberg, 2000).

In New Jersey, researchers compared the recidivism rates of offenders subject to SORN with those of offenders who were not subject to this strategy (n = 550). Based on a 6.5-year followup period, offenders subject to SORN recidivated at a rate of 7 percent, compared to 11 percent for offenders who were not subject to SORN; however, these differences were not found to be statistically significant (Zgoba & Bachar, 2009; Zgoba et al., 2008).

> *"Research on SORN as it relates to offender recidivism has produced mixed results."*

In Wisconsin, the recidivism rates of sex offenders subject to registration and extensive notification between 1997 and 1999 (n = 47) were compared with those of sex offenders who had limited notification requirements (n = 166). No statistically significant differences in sex crime rearrest rates over a 4-year followup period were found, as 19 percent of the extensive notification group sexually recidivated, compared to 12 percent for the limited notification group (Zevitz, 2006). Similar findings

were reported in a Washington State study. Again, the recidivism rates of sex offenders subject to SORN (n = 139) were compared with those of sex offenders not subject to SORN. Based on a 54-month followup, sex offenders subject to SORN were found to have a sex crime rearrest rate of 19 percent while the rate for the non-SORN group was 22 percent, a difference that is not statistically significant. However, the researchers noted that the offenders subject to SORN were arrested more quickly than offenders in the comparison group (Schram & Milloy, 1995). Finally, in a study of New York sex offenders pre- and post-community notification (N = 10,592), researchers found no significant differences in sexual (7 percent) or general (46.6 percent) rearrest rates based on an 8.2-year followup period. However, the community notification offenders were rearrested twice as quickly for a new sex crime as the noncommunity notification offenders[29] (Freeman, 2012).

Limitations: Studies Employing a Comparison Group

The primary limitation of the studies described above is the inability to control for all outside factors and to isolate the effects of SORN requirements on recidivism.

Survey Data

Surveys of stakeholders can provide descriptive data about the impact of SORN on different populations, including the public, sexual offenders, and supervision officers.

Impact on the Public

One multistate study (n = 115 from 15 states) of community members found general familiarity with and support for SORN, along with a belief that it prevents offending (Schiavone & Jeglic, 2009). State-level surveys of community members regarding SORN in Florida, Nebraska, Washington, and Wisconsin found that the public—

◆ Was aware of and supported SORN (Anderson & Sample, 2008; Lieb & Nunlist, 2008).

◆ Thought it was fair (Brannon et al., 2007).

◆ Believed that it provides safety for their family (Anderson & Sample, 2008; Lieb & Nunlist, 2008; Zevitz & Farkas, 2000a).

◆ Thought it makes sex offenders follow the law (Phillips, 1998, as cited in CSOM, 2001; Lieb & Nunlist, 2008; Brannon et al., 2007).

◆ Saw the benefits of SORN and learning about sex offenders through SORN (Phillips, 1998, as cited in CSOM, 2001; Lieb & Nunlist, 2008).

◆ Took preventive measures (38 percent)[30] based on SORN information (Anderson & Sample, 2008).

◆ Reported suspicious behavior of offenders (3 percent)[31] (Lieb & Nunlist, 2008).

◆ Accessed the registry (31 percent),[32] but those who did were more likely to be female, to be affluent, and to have children (Sample, Evans, & Anderson, 2011).

"Survey responses indicate that SORN has both negative and positive impacts on offenders and that the public is generally supportive of SORN as promoting public safety."

Impact on Offenders

In a review of eight individual surveys on SORN's impact on sexual offenders subject to it,[33] Lasher and McGrath (2012) found that—

◆ Eight percent of sex offenders reported physical assault or injury.

◆ Fourteen percent reported property damage.

◆ Twenty percent reported being threatened or harassed.

◆ Thirty percent reported job loss.

◆ Nineteen percent reported loss of housing.

◆ Sixteen percent reported a family member or roommate being harassed or assaulted.

◆ Forty to sixty percent reported negative psychological consequences.

"Survey responses indicate that SORN has both negative and positive impacts on offenders and that the public is generally supportive of SORN as promoting public safety."

However, more than one-third of adult sex offenders reported communities being safer and approximately three-fourths felt it was a deterrent to offending (Lasher & McGrath, 2012).

A number of studies involving surveys of sexual offenders in states across the country indicate that SORN requirements have a range of negative impacts on sexual offenders. These include negative impacts on sex offenders' jobs, housing, friends, and family (Ackerman, 2009; Levenson, D'Amora, & Hern, 2007; Tewksbury, 2004; Vandiver, Dial, & Worley, 2008), which results in stress, isolation, loss of hope, and shame/embarrassment (Levenson & Cotter, 2005a), and the greater likelihood of living in disadvantaged neighborhoods where services are less available (Hughes & Kadleck, 2008). Studies have also found that 10–13 percent of sex offenders report experiencing violence (Brannon et al., 2007; Levenson, D'Amora, & Hern, 2007) and harassment (Vandiver, Dial, & Worley, 2008; CSOM, 2001). While many sexual offenders report the belief that SORN would not deter reoffending and was unfair punishment (Ackerman, 2009; Brannon et al., 2007; Levenson, D'Amora, & Hern, 2007; Tewksbury & Lees, 2007; Tewksbury, 2004), many also report that SORN requirements motivate them to be successful (Levenson, D'Amora, & Hern, 2007; Levenson & Cotter, 2005a).

Impact on Supervision Officers

In a survey of probation and parole officers (n = 77), respondents reported they generally believed community notification served an appropriate goal but had a high cost for corrections in terms of personnel, time, and money. They also believed it made sex offender housing difficult to locate (Zevitz & Farkas, 2000b).

Limitations: Survey Data

The limitations of survey data have previously been identified and are applicable here.

Impact of Failure To Register

Several studies have examined whether sex offenders who fail to comply with registration requirements are more likely to recidivate than offenders who do comply. For example, in a Washington State study, WSIPP (2006) found higher recidivism for noncomplying sex offenders compared to their registration-compliant counterparts. Noncomplying sex offenders had a felony sex crime conviction recidivism rate of 4.3 percent, while complying sex offenders had a rate of 2.8 percent. It is unknown whether this difference was statistically significant (WSIPP, 2006). Studies in Minnesota, South Carolina, and New Jersey, however, failed to find any significant differences in recidivism between registration-compliant and noncompliant sex offenders. In Minnesota, Duwe and Donnay (2010) compared the recidivism rates of 170 sex offenders who had a failure-to-register charge between 2000 and 2004 with those of 170 nonfailure-to-register sex offenders and found that the noncompliant sex offenders were no more likely to sexually recidivate (defined as a new sex crime arrest or conviction) (Duwe & Donnay, 2010). Similarly, a study focused on sex offenders in South Carolina (*N* = 2,970) found that those who failed to register were no more likely to sexually recidivate (11 percent) than those not so charged (9 percent) (Levenson et al., 2009). Finally, in a study of New Jersey sex offenders (*N* = 1,125), 644 of whom failed to register and 481 who did register, researchers again found no significant difference between the two groups in terms of their sexual rearrest rates (18 percent for the failure-to-register group compared to 11 percent for the registering group) (Zgoba & Levenson, 2012).

Limitations: Impact of Failure To Register

Relatively few studies have examined whether noncompliant offenders are more likely to reoffend than compliant offenders, and the studies again suffer from the low base rate for sexual recidivism and limited generalizability.

Accuracy Research

A number of studies have examined the accuracy of sex offender registries. For example, Hughes and Kadleck (2008) reviewed the accuracy of sex offender registries in Nebraska and Oklahoma and found that approximately 90 percent of the Nebraska records were accurate (*n* = 975), while 56.5 percent of the Oklahoma records were accurate (*n* = 5,163). In a random sample of New York registry records (*n* = 200), 37 percent of the records were found to be inaccurate, including 27 percent that did not match driver's license information and 2.5 percent that had wrong addresses (Office of the New York State Comptroller, 2006). Finally, in a Vermont study of sex offender registry records (*n* = 57), 75 percent of the records were found to have critical or significant errors (Vermont State Auditor, 2010).

Limitations: Accuracy Research

Audits of sex offender registry records provide important insights about the accuracy and reliability of sex offender registries. The major limitations of these studies are that they often are based on small sample sizes and their generalizability to other jurisdictions remains unknown.

Summary

In summary, research on the effectiveness of SORN remains relatively limited and findings from the studies are somewhat inconclusive. Findings from time series studies are mixed. Some studies find lower rates of sex crimes following SORN implementation, while others do not. Studies based on a comparison of outcomes for sex offenders subject and not subject to SORN also produced mixed findings. An arguable lack of sufficient scientific rigor may further cloud the import of studies in this area. Therefore, the results of SORN research undertaken to date continue to leave open questions about the effects of registration and community notification requirements. Finally, few if any studies to date have examined the multifaceted elements of registration laws generally or Title I of AWA (SORNA) specifically, which incorporates requirements and procedures, and information sharing and enforcement mechanisms, going

beyond those prevalent in SORN programs examined in past studies.

> *"Research findings on the effectiveness of SORN are mixed, and more high-quality studies with sufficient scientific rigor are needed."*

Sex offenders in survey responses claim a range of negative impacts from SORN; however, many see it as a deterrent to committing future crimes. Further research is clearly needed to corroborate these survey findings. Surveys of community members indicate that the public is familiar with SORN laws, and also that they are generally supportive of SORN.

Finally, registry accuracy studies have found significant problems with registry records in some states. **The need for accurate registry information was recently highlighted by the sex offender management experts who participated in the 2012 SOMAPI forum.** Clearly, additional research is needed to help better answer questions about SORN effectiveness and about which aspects of the policy may be beneficial and cost-effective and, conversely, which may not.

Given the limitations of existing research regarding SORN, the SOMAPI forum participants recommended that future changes to SORN be studied prior to enactment, particularly in the context of existing knowledge about sexual offender risk and recidivism. Pilot testing prior to full-scale implementation provides one mechanism for examining potential impacts, both positive and negative.

Residence Restrictions

Sex offender residence restrictions that limit where convicted sex offenders may legally live have become more popular across the country. These restrictions typically prevent sex offenders from living within 1,000 to 2,500 feet of schools, daycare centers, and other places where children congregate. The first states to adopt residence restrictions were Delaware and Florida in 1995. Currently, 30 states and many more municipalities have residence restriction laws, some in accordance

with Jessica's Law (Meloy, Miller, & Curtis, 2008). As with many other sex offender management strategies implemented across the United States, there was no research evidence to support the effectiveness of residence restrictions prior to the enactment of this policy. However, empirical evidence questioning the effectiveness of residence restrictions is becoming available.

Outcome Data

Several studies have looked at sexual offender recidivists to determine whether living in proximity to places where children congregate was a risk factor and whether residence restrictions would have deterred reoffense. In one study commissioned by the Colorado legislature for the purpose of studying the potential impact of residence restrictions prior to implementation (a recommended practice), no significant difference in recidivism (defined as any new criminal conviction) patterns was found based on whether or not an offender lived in proximity to schools and daycare centers (Colorado Department of Public Safety, 2004). In a study of sex offenders subject to residence restrictions in Florida (n = 165), researchers found no significant difference in the distance recidivists (defined as a new sex crime rearrest) and nonrecidivists lived in proximity to schools and daycare centers (Zandbergen, Levenson, & Hart, 2010).

In Jacksonville, FL, researchers investigated the effects of a 2,500-foot residence restriction ordinance on sexual recidivism (which was defined as a new sex crime arrest) and sex crime arrest rates. No significant differences in recidivism were found pre- and post-policy implementation. Similarly, there was no significant difference in sex crime arrest rates pre- and post-policy implementation. The authors concluded that the residence restriction ordinance did not reduce recidivism or deter sex crimes (Nobles, Levenson, & Youstin, 2012).

In a study of county and local residence restrictions in New York (N = 8,928 cases; 144 months of data from each of 62 New York counties), researchers found no significant impact on sexual recidivism against child or adult victims or on arrests for sex crimes against child victims. However, there was

a 10-percent decrease in the rate of arrests for sex crimes against adult victims.[34] As a result, the researchers concluded that residence restrictions do not appear to deter sexual recidivism or sex crime arrests where the victim was a child, but they may deter sex crimes involving adult victims (Socia, 2012).

The Iowa Department of Criminal and Juvenile Justice Planning studied the effect of Iowa's 2,000-foot residence restriction law, which was implemented in August 2005. The number of charges for sexual assaults involving minor victims was examined for both the 12-month period preceding the law's implementation and the 24-month period after the law went into effect. The study found no significant downward trend in the number of charges following passage of the law. In fact, sex crime arrests increased steadily over each of the 3 years (913, 928, and 1,095) of the study (Blood, Watson, & Stageberg, 2008).

One of the more comprehensive studies of residence restrictions occurred in Minnesota. The researchers examined the characteristics of recidivism events for 224 sex offenders who committed a new sex crime and were reincarcerated between 1990 and 2002. The researchers found that 79 percent of these offenders knew the victim prior to the reoffense. Moreover, 85 percent of the reoffenses studied occurred in a residential location and 39 percent occurred outside the home, with 9 percent taking place within 1 mile of the offender's house. Of these 9 percent, three offenders contacted a victim at a restricted location; two of the offenders were not in proximity to where they lived and the third contacted an adult victim. The researchers concluded that none of the reoffenses would have been deterred by residence restrictions (Duwe, Donnay, & Tewksbury, 2008). It is interesting to note that in Minnesota, the Department of Corrections raised concerns about the unintended negative consequences of residence restrictions, including the potential for sex offenders to congregate in rural areas without ties to the community, thereby resulting in social isolation; a lack of work, education, and treatment; and being farther away from supervision (Minnesota Department of Corrections, 2003).

Finally, in a convenience sample study of sex offenders randomly selected after being released from prison between 1996 and 2006 (n = 293 child molesters and 112 rapists), researchers found that 76.5 percent of the offenders met their victim in a private location and only 6.8 percent met a victim in proximity to a residence restriction setting. Additionally, 82.2 percent of offenses occurred in a private setting and 9.1 percent of victims were strangers to the offender, with 18.8 percent of rapists and 14.7 percent of child molesters meeting the victim in a public location. Based on this analysis, the researchers suggested that social rather than geographic proximity influenced offending (Columbino, Mercado, & Jeglic, 2009).

Limitations: Outcome Data

Limitations of residence restriction outcome studies are similar to those previously identified for other research, including small sample sizes, short followup periods, low sexual recidivism rates, and the inability of most studies to isolate the impact of residence restrictions from other influences.

Survey Data

Impact on the Public

A number of researchers have studied the impact of residence restrictions on where sex offenders reside in the community. In a Chicago, IL, study (n = approximately 4,000), researchers found that sex offenders were more likely to live in disadvantaged neighborhoods (30 percent of sex offenders lived in these areas, which is nearly 5.5 times greater than the number living in affluent areas). In a study of those sex offenders violating the residence restriction law (n = 1,008), 29 percent lived in a disadvantaged neighborhood and 2 percent lived in an affluent neighborhood. Finally, it was noted that 70 percent of the disadvantaged area was off limits to sex offenders, compared to 32 percent of affluent areas. The research suggests that residence restrictions lead to a disproportionate number of sex offenders living in disadvantaged neighborhoods (Hughes & Burchfield, 2008). Similar results concerning the disproportionate impact of residence

restrictions have been found in other studies. A Minnesota Department of Corrections study found that more offenders would be relegated to rural areas as a result of residence restrictions (Minnesota Department of Corrections, 2003). In a New Jersey study of three different areas (rural Phillipsburg and Alpha, urban Newark, and suburban Bergen County), researchers found that half of the rural area, 93 percent of Newark, and 66 percent of Bergen County would be restricted (Mandelstam & Mulford, 2008).

Impact on Offenders

Research from multiple states indicates that many sexual offenders have had to move or would have to move due to the implementation of residence restriction laws (Barnes et al., 2009; Chajewski & Mercado, 2008; Levenson & Cotter, 2005b; Tewksbury & Zgoba, 2010) despite having limited housing options, particularly in urban areas (Barnes et al., 2009; Chajewski & Mercado, 2008; Levenson, 2008). This combination led to a report of increased homelessness (Levenson, 2008), loss of family support, and financial hardship (Levenson & Cotter, 2005b).

Limitations: Survey Data

Limitations of survey data have previously been highlighted.

Summary

In summary, there is no empirical support for the effectiveness of residence restrictions. In fact, a number of negative unintended consequences have been empirically identified, including loss of housing, loss of support systems, and financial hardship that may aggravate rather than mitigate offender risk. In addition, residence restrictions lead to the displacement and clustering of sex offenders into other areas, particularly rural areas. Given the above, **expansion of this policy was not recommended by the group of sex offender management professionals attending the SOMAPI forum.**

Summary

This chapter has focused on the effectiveness of a number of prominent sex offender management strategies, including specialized supervision, COSA, polygraph, GPS, civil commitment, SORN, and residence restrictions. Specialized supervision, in conjunction with rehabilitation, appears to be effective in reducing recidivism for sexual offenders. However, the use of specialized supervision in the absence of rehabilitation is not supported by research. The few studies of COSA that have been undertaken thus far have produced encouraging findings, but far more research employing larger samples of offenders and more rigorous designs capable of isolating COSA effects are needed. **Nevertheless, given COSA's ability to facilitate collaboration with members of the community, the SOMAPI forum experts recommend COSA as a sex offender management strategy.** Research related to the use of polygraph assessment is somewhat less definitive. Therefore, the polygraph, if used, should only be used in conjunction with a comprehensive supervision and treatment approach.

In terms of SORN, research to date has exhibited mixed results on sex offender crime rates and recidivism. Studies have not adequately controlled for outside factors that might serve as an alternative explanation for the observed study outcomes. Future, more rigorous research on the effects of SORN is needed. Despite these limitations, there is broad public and policymaker support for SORN, and a perceived public safety benefit among these groups.

Finally, the evidence is fairly clear that residence restrictions are not effective. In fact, the research suggests that residence restrictions may actually increase offender risk by undermining offender stability and the ability of the offender to obtain housing, work, and family support. There is nothing to suggest this policy should be used at this time.

Sex offender management policies are often implemented on a one-size-fits-all basis for all sexual offenders. The merits of using targeted rather than one-size-fits-all strategies were recently acknowledged by participants in the 2012 SOMAPI

forum. **The SOMAPI forum experts recommend implementation of all of the above-noted policies that show a positive impact, with the caveat that the use of any strategy should always be commensurate with offender risk and need.**

Future Directions

The SOMAPI forum experts recommend that sex offender management policymakers strive to use empirically supported strategies. Granted, there are times when new strategies are identified in the absence of research and need to be tested for effectiveness, as innovation in criminal justice practice, including sex offender management, is important. Therefore, it is recommended that future implemented policies should be evidence-generating.

RESULTS FROM THE SOMAPI INVENTORY OF PROMISING PRACTICES

◆ **Q: Are you moving toward using a particular program in your work?**

- Self-regulation model (Good Lives).

- Risk, needs, responsivity model.

- Use of the stable and acute assessments—to determine risk of sexual reoffense and develop strategies to address.

- Changing emphasis from exclusive RP [relapse prevention] to more strengths—based treatment and targeting of dynamic risk factors.

◆ **Q: What practices or programs have you tried that didn't work?**

- We tried offering funds for transitional housing ... landlords were reluctant to participate.

- Excessive focus on a detailed sexual history and accountability for all past sexual behavior has not worked.

- Over-emphasis on relapse prevention with low-risk sex offenders or offenders with only one sexual offense has not worked.

Sex offender management continues to be a priority for the public, policymakers, and professionals. Using research to identify what does and does not work can help ensure that the best possible strategies for protecting the public and reducing victimization are in place. Only through objective, systematic study can we definitively know what is and what is not effective. As Patty Wetterling, in whose son's memory the first SORN system was developed at the federal level, has observed, "People want a silver bullet that will protect children, but there is no silver bullet. There is no simple cure to the very complex problem of sexual violence" (Human Rights Watch, 2007).

Notes

1. While sex offender management has also taken on increasing importance in other countries, the focus of this chapter is on sex offender management strategies in the United States.

2. For an indepth review, see Levenson and D'Amora (2007).

3. A study consisting of random assignment to either the intervention group or a comparison group, and comparing the outcomes for the two groups.

4. $p < .41$ for the Linn County sexual offenders and $p < .01$ for the Jackson County nonsexual offenders.

5. $p < .01$.

6. $p < .001$.

7. $p < .05$.

8. Ibid.

9. Ibid.

10. $p < .001$.

11. $p < .05$.

12. $p < .001$.

13. Ibid.

14. $p < .05$.

15. Passive GPS does not allow movement to be viewed in real time (active GPS) and must be downloaded from the device to a computer.

16. Dr. Robin Wilson provided assistance with the development of this section.

17. The Lychner Act in 1996, the Jacob Wetterling Improvements Act in 1998, the Campus Sex Crimes Prevention Act in 2000, and the PROTECT Act in 2003.

18. See, for example, U.S. Department of Justice, The National Guidelines for Sex Offender Registration and Notification, 73 Fed. Reg. 38029, 38044-45, 38047, 38058-61, 38069-70 (July 2, 2008); U.S. Department of Justice, Supplemental Guidelines for Sex Offender Registration and Notification, 76 Fed. Reg. 1630, 1636-38 (Jan. 11, 2011); Harris and Lobanov-Rostovsky, 2010.

19. $p < .1$.

20. $p < .05$.

21. Ibid.

22. Ibid.

23. For further details about each state's treatment of juveniles adjudicated delinquent of sex offenses and their corresponding registration responsibilities and notification requirements, see ALA. CODE § 15-20A-28 (2014), ARIZ. REV. STAT. ANN. § 13-3821(D) (2014), ARK. CODE ANN. § 9-27-356 (2014), CAL. PENAL CODE § 290.008(a) (2014), COLO. REV. STAT. § 16-22-102(3) (2013), DEL. CODE ANN. tit. 11, §§ 4121(a)(4)(b) & 4123 (2014), FLA. STAT. § 943.0435(a) (1)(d) (2014), IDAHO CODE ANN. § 18-8403 (2014), 730 Ill. COMP. STAT. 150/3-5 (2014), IND. CODE ANN. § 11-8-8-4.5(b) (2014), IOWA CODE § 692A.103 (2013), KAN. STAT. ANN. § 22-4902(b)(2) (2013), LA. REV. STAT. ANN. § 15:542 (2013), MD. CODE ANN., CRIM. PROC. § 11-704.1 (2014), MASS. GEN. LAWS. ANN. CH. 6, § 178K (2014), MICH. COMP. LAWS. SERV. § 28.722 (2014), MINN. STAT. § 243.166 (2014), MISS. CODE ANN. § 45-33-25 (2013), MO. REV. STAT. §§ 211.425 & 589.400 (2014), MONT. CODE ANN. § 46-23-502 (2013), NEB. REV. STAT. ANN. §

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