

Violent Sexual Offending

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## Introduction

In the last twenty years, most segments of Western society, particularly law enforcement agencies and clinicians, have recognized the deleterious effects of the sexual assault of women and sexual exploitation of children (e.g., Furby, Weinrott, & Blackshaw, 1989; Weinrott, 1996; Hanson & Bussiere, 1998). In particular, recent media focus on high profile sexual offenses has highlighted to the public incidents of sexual offending in a wide range of offender-victim relationships, including strangers, neighbors, family members, and members of the clergy. These have resulted in contentious public dialogue about where sexual offenders may live after they have served their time, and in some cases, whether they should have to serve that time at all.

Society's resolve to prevent sexual assault has resulted in the development of numerous treatment services for sexual offenders (Barbaree, Hudson, & Seto, 1993). While a great deal of clinical research has focused on the topic, little prospective longitudinal research has been conducted on the etiology and long-term trajectories of sex offenders (see Barbaree, et al., 1993; Weinrott, 1996). The goal of the present work is to summarize briefly the theoretical explanations for sexual violent behavior, to review what has been found in past research about the epidemiology and social development of sexual offenders, and to examine self-reported and official data on sexual offending from the National Youth Survey, a nationally-representative, longitudinal, prospective study of youth as they age into adulthood.

## Theoretical Perspectives and Comorbidity

A wide variety of theoretical perspectives have been used to attempt to understand the rationale behind sexually deviant behaviors (ranging from paraphilias to rape), including biological, sociobiological, cognitive, social cognitive, psychoanalytical, psychosocial, and affective. Before discussing the variety of theoretical perspectives, it is important to address the developmental

psychopathological perspective that asserts that it is crucial to fully understand what is normative in order to fully understand what is deviant. Given that sexuality exists normally across the childhood years, the important question about the development of deviant sexual behaviors is about how sexual offenders diverge from the normal course of sexual development.

### *Attachment theory*

Attachment theory, developed by Bowlby (1969; 1973; 1980, cited in Ward, et al., 1996) and refined by Ainsworth (Ainsworth, 1989; Ainsworth & Bowlby 1991, cited in Ward, et al., 1996), asserts that secure attachments develop when the parent is sensitive to the needs of the child, anxious/ambivalent attachments develops when caregivers respond inconsistently to infants, and avoidant attachments develop when the caregiver is typically detached, lacking in emotional expression, and unresponsive to the child's needs. It is argued that infants develop internal working models (essentially mental templates) that they will use for their future relationships based upon this attachment to their primary caregiver.

Marshall (1989; 1993; in press) has argued that insecure attachment may be a risk factor for criminality in general, although given that sex offenders appear to have difficulties in establishing close relationships, it is conceivable that this attachment style is a particularly influential factor in the etiology of sex offenders. Further, when sex offenders fail to develop secure attachment bonds in childhood; this may result in a failure to learn the interpersonal skills and self-confidence that are crucial for achieving intimacy with other adults.

Ward, Hudson, and Marshall (1996) built on Marshall's work by examining finer distinctions of attachment (including two types of insecure attachment) styles in a group of 147 men (55 sexually offended against children, 30 sexually offended against adult women, 32 committed violent offenses, and 30 men were incarcerated for neither sexual or violent offenses) in New Zealand. Results indicated that the two groups of sex offenders were insecurely attached (preoccupied) in their relationships with adult romantic partners. However, both criminal comparison groups were also

predominantly insecurely attached (fearful), which indicates that this is not a unique characteristic of sex offenders. Additionally, the authors note that though the offenders reported a wide range of attachment difficulties in adult relationships, there appeared to be a relationship between attachment style and offender type; particularly, non-sexual violent offenders were similar to rapists in their attachment style. This preliminary study provides initial research evidence that corroborates clinical observations of attachment style in offenders.

Similar to attachment theory's internal working models, Money (1996) has identified "love maps" as mental templates that in response to neglect, suppression or traumatization of its normal formation, has developed with distortions. This love map is the foundation for the theory of courtship disorder.

*Ethology: Courtship Disorder*

Freund (Freund, et al., 1983; Freund, et al., 1997; Freund & Watson, 1990; Freund, 1988; 1998) has argued that, in human males, several deviations in preferred erotic activity are all expressions of a common underlying disturbance. These behaviors are voyeurism, exhibitionism, frotteurism, and preferential rape, and are conceptualized together as disorders of "courtship behavior" (Freund, et al., 1983). Courtship disorder is rooted in ethology (Morris, 1957; 1966; cited in Freund, et al., 1983), and is hypothesized to reflect a distortion of the normal courtship process in males. This system proposed by Freund and colleagues involves four phases: (1) a finding phase, in which a potential partner is located and appraised; (2) an affiliative phase, characterized by nonverbal and verbal overtures such as looking, smiling, and talking to a potential partner; (3) a tactile phase, in which physical contact is made; (4) a copulative phase, in which sexual intercourse occurs. According to this theory, voyeurism can be viewed as a distortion of the finding phase, exhibitionism and obscene telephone calling as a distortion of the affiliative phase, frotteurism as a distortion of the tactile phase, and rape as a distortion of the copulatory phase (Freund, 1988; 1998).

Study of the courtship disorders provides evidence supporting the hypothesis that it is not common for men to report participating in only one paraphilia, but instead, there is a great deal of co-occurrence in paraphiliac activities in identified offenders (e.g., Abel, et al.; Freund, 1988; 1998). Specifically, in a clinical sample, Freund (1998) found that rapists were more likely than controls to admit voyeuristic, exhibitionistic, or frotteuristic activities. Because exhibitionism is considered to be the “hub” of courtship disorder, Freund analyzed separately those rapists who admitted to engaging in exhibitionistic activity (22%) and those who did not (78%). Those in the exhibitionistic group were significantly more likely to admit engaging in frotteuristic and voyeuristic activity than the latter group, providing evidence that sex offenders are unlikely to engage in only one type of offending behavior.

#### *Psychodynamic theory*

Freud’s view was that all sexually deviant behaviors are theoretically and etiologically similar, and that they represent a single type of psychopathology – specifically, a form of character disorder, and that these behaviors are highly resistant to change. Freud used the term “perversion” to specify that either the aim or the object of a person’s sexual desire had become diverted (Lanyon, 1991), or regressed to an earlier level of psychosexual development (Kaplan & Krueger, 1997).

There are several psychodynamic theories of rape described in Lanyon (1991). Specifically, Cohen, Garofolo, Boucher, and Seghorn (1971) are cited for offering three classifications of rape determined by the motivation of the act: (1) When rape has an *aggressive* aim, the purpose of the behavior is to humiliate, dirty, and defile the victim; (2) When rape is motivated by a *sexual* aim, the aggression is in the service of sexual wishes; (3) When the rape has a *sadistic* aim, the sexual and aggressive drives are fused so that some degree of violence must be present in order for sexual excitement to be present.

### *Psychosocial Theory*

Miner and Dwyer (1997) studied 81 sex offenders in a psychosocial treatment program. The offenders completed instruments designed to measure both the positive and negative poles and resolution of Erikson's psychosocial crises. The authors found some evidence for this theoretical framework, in that incest offenders were significantly different from exhibitionists on measures of mistrust, shame and doubt, isolation, stagnation, and despair – that is, the negative ends of the continua studied. No differences were found for the positive ends or the resolutions of the psychosocial crises.

### *Learning Theories*

Bandura's theory of learning through observation and imitation supports a hypothesis that learning may begin prior to experience, and thus for the sexually abusive youth, they may have observed a model and reinforcement of early imitative or reactive behaviors led to a patterned response (Ryan, 1997). Laws and Marshall's (1990, cited in Kaplan & Krueger, 1997) model suggested that deviant sexual behaviors are obtained and established through Pavlovian and operant conditioning, learned from observation and modeling, and shaped through differential reinforcement.

### *Biological/Physiological Theories*

It has been argued that the idea that deviant sexual preferences have their roots in biological abnormalities is appealing, since one could then argue that those men are not bad, but instead are ill, and can be successfully treated. However, none of the theories appears to offer an adequate empirical foundation for the basic premise upon which they are based, that is, that the offender's sex drive is out of control because his level of sex hormones (plasma testosterone) is too high, or that the offenders are impulsive with under controlled aggression (Lanyon, 1991; Kaplan & Krueger, 1997).

Evolutionary theories are presented by Ellis (1991) and Palmer and Thornhill (2000), who argue that unlike women, men would maximize their reproductive potential by copulating with numerous sex partners, and thus men who are at a minimum "pushy" and at a maximum tolerant of

forced copulation, would be most favored evolutionarily. These potential causes are not considered from a perspective that rape is good and/or inevitable, but rather it could enable researchers to identify environmental factors that may be proximate causes of rape and recidivism.

### *Social Cognitive Theories*

Research has also been conducted in the social cognitive realm on empathy, social skills, and information processing (see Geer, Estupian, and Manguno-Mire, 2000, for a review). The Geer, et al. (2000) review concludes that most of the research on empathy in the sex offender population has only been conducted on one aspect, emotion recognition, and not other empathic processes. Further, the authors note that it is a popular view in the clinical literature that sex offenders are deficit in social skills, and that a careful review of literature reveals that there is more empirical evidence for social skills deficits in child molesters than for rapists of adult women. Geer, et al. (2000) further reviews literature on the degree to which rapists demonstrate considerable difficulty establishing and maintaining social relationships, particularly with women. They conclude that sex offenders have been shown to have general deficits in the manner in which they relate to others, particularly women, though they caution against the continued reliance on self-report measures of social skills in this population

Dalton and Bezier (1998) examined state anger (i.e., current anger) versus trait anger (i.e., predisposition to anger) in male sex offenders (85% had admitted to sexual contact with a child, sexual assault, or exhibitionism) and controls on the State-Trait Anger Expression Inventory (STAXI). Results of the study indicated that the only significant difference between the sex offenders and the “normal” controls was in state anger, that is, offenders reported more anger at the time of testing than did the controls, and were not generally angrier (as a trait) than nonoffenders.

Finally, Valliant, et al. (2000) conducted a small clinical study of rapists, incest offenders, child molesters, general offenders, and nonoffenders. Results revealed that the rapists and child molesters scored higher on moral reasoning scales, and also rapists' scores were more elevated on

psychopathic deviate and paranoia scales, indicating in this small clinical sample that rapists and child molesters have the ability to understand moral issues, but that given their personality orientation, they may choose to ignore these interpersonal social values.

### *Cognitive Distortions*

One potential problem that may present when an offender self reports a behavior but is permitted to clarify his response with follow-up questions, is the possibility of the intrusions of cognitive distortions into his beliefs about the act. That is, according to Abel, et al., (1986), when a paraphiliac first begins to commit sexual offenses, he will frequently become uncomfortable, anxious, and feel guilty or depressed. However, reinforced by the pleasure of the sexual activity, many paraphiliacs begin to modify their cognitions or belief systems in order to support and to justify their deviant behavior. The authors note that there is no evidence that the paraphiliac person's cognitive distortions are responsible for the paraphiliac behavior, but instead these develop into rationalizations that help explain and justify the deviant behaviors. Cognitive distortions that paraphiliacs may create include: (1) Exhibitionism: "My penis is unique and different from the penises of other men and therefore others should see it; I can tell if exposing myself to others is going to have a negative impact on them now and in the future;" (2) Frottage: "If I touch a woman in the bus (?) and she does not yell or scream, it means that she is really enjoying the experience and wants me to continue to touch her;" (3) Pedophilia and Incest: "Children know all about sexual behavior between adults and children; children are informed and can give consent; If a child has been voluntarily sexual with another child, it is okay for an adult to have sex with that child inasmuch as it is the same thing;" (4) Rape: "If a woman goes to a bar, it means she wants to have intercourse with any man there; Unless a woman physically resists a man throughout any attempt at making love to her, it is not rape;" (5) Sadism: "A sexual assault is justified if a woman is drunk, on drugs, a runaway, of a lower socioeconomic group, or lives in a large city" (Abel, et al., 1986).

### *Family Theories*

Ryan (1997) notes that some of the common characteristics of the families of sexually abusive youth are emotional impoverishment, lack of appropriate affect, dangerous secrets, distorted attachments, and a history of disruptions in care and function. It is further suggested that the juvenile's role in the family has been to act as a receptacle for negative feelings in the family (especially shame, guilt, and anxiety), and the sexual abuse may become just the presenting symptom in a long history of acting-out behaviors. Typologies of the youth's family include: (1) exploitative (i.e., there is no unconditional love shown and children are used to meet the parents' needs); (2) rigid or enmeshed (i.e., they may be secretive and isolated, and family members may collude in reassuring each other that they do not need or want extrafamilial contacts); (3) chaotic or disengaged (i.e., parents may set an example of acting-out behavior, the families often lack attachments and family members may appear unconnected); (4) the "perfect" family (i.e., the family initially appears functional and appropriately concerned; however it may lack quality and depth, while family members maintain investment in appearing the perfect family and play their roles, regardless of reality); and (5) the previously adequate family (i.e., a previously functional family that becomes dysfunctional because of new dynamics).

### *Integrated Theories*

Hall (1996) presents a theoretical model that incorporates aspects of four theories of sexually aggressive behavior, physiological, cognitive, affective, and developmental. The model is designed to describe adjudicated men as well as nonadjudicated men, following the rationale that "the primary difference between an incarcerated rapist and an acquaintance rapist is that the former has been caught and the latter has not" (p. 52). The model presents four motivational characteristics from each theoretical perspective, which Hall (1996) argues may interact. Thus, a physiological explanation may be most appropriate are those who commonly sexually aggress against children, those with multiple (often male) victims, and to be less appropriate for those who use physical violence and

nonsexual aggression. A cognitive explanation may describe those for whom sexual aggression is planned, and who may commit acquaintance rape or incest, and less descriptive of those who are impulsive or violent, and for those least likely (compared to other subtypes) to be apprehended. An affective explanation is argued to be most useful in describing those for whom sexual aggression is opportunistic, unplanned, and often violent, and both sexual and nonsexual aggression is common, and the aggressors are also most commonly angry and depressed. Finally, those for whom a developmental/personality explanation is most appropriate are those who have chronic personality problems, have a generalized propensity to violate rules, and whose sexual aggression is typically violent. This final group is hypothesized to have the poorest treatment prognosis (Hall, 1996).

#### *Underlying Psychoses and Paraphilias*

Men who are sexually aggressive because of underlying psychoses constitute fewer than 5 percent of individuals charged with such crimes (Abel, et al., 1986). It is further argued that men with antisocial personalities compose about 29% of men charged with rape; the hallmark of this category of sex offender is the pervasiveness of their antisocial behaviors. Abel, et al. (1986) argue that they do not have ongoing urges to commit sexual crimes, but instead the person's opportunistic nature leads to the committing of sexually aggressive crimes during the course of other antisocial acts. In contrast, they discuss the paraphiliac who stands out from psychotic and antisocial personalities because of their characteristic compulsive thoughts and urges to carry out sexually aggressive behaviors.

Most knowledge about paraphiliac personalities has been limited to clinical samples and prison populations. Abel, et al., (1986) argue that obtaining information from these sources does not provide a complete picture of the paraphiliac as many individuals are in jail because they were inept enough to be apprehended, lacked financial resources to present a strong defense at their trial, or the brutality of their crime made incarceration more probable. To avoid these difficulties, Abel, et al., recruited their sample via a treatment program – which also presents sampling issues, but which at a

minimum gathers subjects from a variety of referral sources ranging from health and mental professions to family and friends to self-referral.

Using retrospective data, the authors found that over 50% of their sample reported a deviant arousal pattern prior to age 18. The results of their analyses indicate that when paraphiliac persons developed their deviant arousal at an early age and continued with that arousal throughout their lives, there was at least a 70-fold increase in the number of crimes committed. These findings highlight the importance of identifying and treating paraphiliacs early in their deviant careers.

### *Substance use*

In a review of the literature relating substance use and abuse and sexual offending in adolescence, Lightfoot and Barbaree (1993) reveal that though studies of adult offenders have frequently found that more severe offenses tend to follow substance use (particularly alcohol use), and that alcohol use has often been found to be particularly associated with sexual offenses, it has been argued that this relationship may be spurious due to the high rate of substance use and abuse in antisocial individuals. In particular, the National Youth Survey (Elliott, Huizinga, & Menard, 1989) found that almost half of “serious” juvenile offenders (i.e., those who committed three or more index offenses in the past year) were also users of multiple illicit drugs. To date, most studies have examined the question of whether or not substance use and abuse are related to sexual offending, but they have not examined the degree to which substance use and abuse are specific risk factors for sexual offending, compared to nonsexual violent offending or more general offending (Lightfoot & Barbaree, 1993).

Similarly, Abel, Osborn, and Twigg (1993) discuss that adult sexual aggression may result from adults having impaired judgment resulting from drug or alcohol abuse, “a lack of acquisition of cultural prohibition regarding sexual aggression, organic brain disease (e.g., temporal lobe lesion), antisocial personality characteristics, culturally-defined gender roles, or obsessive sexual arousal to the fantasies and cognitions of deviant sex acts.” These deviant sex acts are referred to as

paraphilias. Abel, et al. (1993) theorizes that some adolescent paraphiliacs may lose their deviant interests prior to adulthood, while others may desist in their paraphiliac behavior due to realization of either the inappropriateness of their sexual interest or of the legal ramifications of their sexual behavior. Still others' behavior may not be brought to the attention of psychological or legal services, and so they may continue to engage in the same sorts of behaviors or may evolve to more serious offenses. Abel, et al. (1993) specifically argue that little is known about the frequencies of such outcomes, as it is unethical to conduct longitudinal studies on adolescent offenders without attempting treatment, and thus most research on the long-term trajectories of adolescent paraphiliacs are retrospective studies of adult sexual offenders.

Finally, rapists and violent offenders (Gudjonsson & Sigurdsson, 2000) and pedophiles (Pithers, et al., 1989) have also been found to be more commonly intoxicated during the commission of the offense than other types of offenders. As a result, Gudjonsson argues that some sex offenders suffer from "over controlled hostility," which may result in assaultive behavior when they are less inhibited during alcohol intoxication.

### Sex Offending: Classifications

The study of sexual offending is exceptionally complex due to the heterogeneity of behaviors involved (e.g., Becker, 1998; Brown & Kolko, 1998; Rightland & Welch, 2001; Murphy, Haynes, & Page, 1992). Sexual offenses range from relatively minor instances of unwanted gestures to more serious sexual assaults that may involve physical violence.<sup>1</sup>

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<sup>1</sup> The classifications used in this work are based upon the cultural norms of Western nations, specifically those of the United States. Because of cultural differences in definitions of family roles, coercion, consent, secrecy, and norms about age discrepancies, cultural constructions of child abuse, incest, and rape differ (Lefley, 1999).

The meaning and seriousness of the behaviors also range with the ages of the perpetrators and victims, e.g., some behaviors are crimes only when the victim is below the legally defined age of consent or if the perpetrator is substantially older than the victim. The perpetrators also vary from those who exhibit a few relatively minor anomalous behaviors, to those with sadistic fantasies and marked delusions (Hudson & Ward, 1997a). Rarely do perpetrators fit neatly into one offender category (e.g., exhibitionism or pedophilia) without overlap into other categories (e.g. sexual assault (Abel & Rouleau, 1990). Moreover, offenders vary widely in arousal profiles and motivation and intent (Weinrott, 1996). Rape is a combination of a violent crime and a sex crime and may possibly be triggered by one motivation and not the other. Specifically, Ellis (1978) argues that not only are there many different types of sex offenders but that the same person may commit a sex crime on one occasion for one apparent reason and on another occasion for an entirely different reason. As a result, it is difficult to tease apart the different behaviors in which sex offenders engage, and even more difficult to determine the etiologies of those interlinked behaviors.

### *The Paraphilias/Hands-Off Offenses*

Sexual deviations vary from highly private sexual behaviors generally conducted outside of public awareness (e.g., fetishes) to sexual behaviors that occur in public but are considered nonthreatening to others (e.g., transvestitism) to sexual behaviors that are considered damaging to victims because they are carried out against the victim's will (e.g., forcible rape; Abel, Rouleau, & Cunningham-Rathner, 1986). Paraphilic behaviors are defined by mental health professionals as anomalous sexual behaviors that are obsessive and compulsive, and that interfere with relationships and intimacy. As most of the paraphilias do not involve direct contact between the perpetrator and a victim, these offenses are also referred to as "hands-off" offenses.<sup>2</sup>

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<sup>2</sup> The *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* of the American Psychiatric Association (1994) defines the paraphilias as: "recurrent, intense sexually arousing fantasies, sexual urges, or behaviors generally involving: (1) nonhuman objects; (2) the suffering or humiliation of oneself or one's partner; or (3) children or other non-consenting

Those paraphilias discussed as the most common in the DSM-IV include: (1) *exhibitionism* (sexual excitement associated with exposing one's genitals in public); (2) *voyeurism* (sexual excitement by watching an unsuspecting person); (3) *frotteurism* (sexual excitement from touching or fondling an unsuspecting person); (4) *pedophilia* (sexual attraction to pre-pubescent children); (5) *sexual masochism* (sexual excitement from being the recipient of the threat or administration of pain); (6) *sexual sadism* (sexual excitement from threatening or administration of pain); and (7) *transvestic fetishism* (sexual excitement from wearing the clothing or the opposite sex). Other paraphilias include *telephone scatologia* (obscene telephone calling), *fetishism* (sexual excitement from the use of an inanimate object or a specific part of the body), and *preferential rape* (a preference for coercive sexual activity among non-sadists, defined by lower relative importance of physical pain, injury, and suffering (Freund, 1988;1998). Two of the paraphilias measured in the National Youth Survey, and that will be used in later analyses, exhibitionism and voyeurism, will now be described in greater detail. Another paraphilia, obscene telephone calling, will also be used in later analyses, but little work has been conducted on its etiology and consequences.

*Exhibitionism.* If a person is arrested or convicted of a crime involving exhibitionistic behaviors, that person will be labeled by the criminal justice system as an exhibitionist, or one who has committed an exhibitionist offense. In contrast, mental health professionals use The *Diagnostic and Statistical Manual-IV (DSM-IV;* APA, 1994) to define exhibitionism as exposing one's genitals to a stranger, and that sometimes the individual may masturbate while exposing himself or by fantasizing exposing himself. Further:

“(1) For at least 6 months an individual has recurrent, intense, sexually arousing fantasies or behaviors of exposing their genitals to an unsuspecting stranger, and (2) the fantasies, urges,

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persons....Additionally, the behavior, sexual urges, or fantasies cause clinically significant distress in social, occupational, or other important areas of functioning (pp. 522-523).”

or behaviors cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.” (p. 526)

There is some controversy regarding the diagnosis of exhibitionism since denial and minimizations make it difficult to gather enough evidence to apply the 6-month criteria (Murphy, 1997). In a review of the exhibition literature, Murphy (1997) notes that exhibitionism is primarily a male disorder and victims are primarily female, and although no studies have followed exhibitionists over a long period of time, descriptive studies suggest a steady decline of onset after age 40. Murphy (1997) further notes that although earlier, less-stringently conducted research indicated that exhibitionism was associated with a variety of psychological disorders, research using standardized assessment instruments does not indicate severe psychopathology in exhibitionists. Instead, severe psychopathology may be related to general criminality.

*Voyeurism.* As with exhibitionism, the criminal justice system and the mental health community differ in the criteria for labeling one a voyeur. That is, those who commit an act of voyeurism for which they are arrested and convicted, are considered voyeurs in a legal sense. However, the *DSM-IV* (APA, 1994) defines voyeurism as observing unsuspecting individuals who are naked, in the process of disrobing, or engaging in sexual activity, with the goal of achieving sexual excitement, but not of having sexual activity with the person. For some individuals, voyeurism is their exclusive form of sexual activity, while for others these fantasies are preferred but not required for sexual arousal. For others, the fantasies and urges are episodic and become more profound only during times of stress. Finally, many individuals include voyeuristic fantasies or behavior in a repertoire of sexual fantasies. The *DSM-IV* criteria, as with exhibitionism, requires these behaviors to occur over a period of at least six months and that “the fantasies, sexual urges, or behaviors cause clinically significant distress or impairment in social, occupational, or other important areas of functioning” (APA, 1994, p. 532).

According to the *DSM-IV* (APA, 1994), the onset of voyeuristic behavior is usually before age 15, and the course tends to be chronic and lasts a lifetime. In a review of the voyeurism literature, Kaplan and Krueger (1997) reported that the extent to which voyeurism exists in the general population is not known because most voyeurs are secretive and fearful of arrest, and are thus unlikely to self-report the behavior.

### *Sexually Abusive Behavior*

Sexually abusive behavior is “any sexual interaction with person(s) of any age that is perpetrated (1) against the victim’s will; (2) without consent; or (3) in an aggressive, exploitative, manipulative, or threatening manner” (Ryan, 1997). The behaviors are heterogeneous, as they may be characterized by one or more of a wide array of behaviors or multiple paraphilias (discussed below).

### *Rape/Sexual Assault*

Rape is typically defined both by the nature of the sexual assault itself and by the age of the victim (most commonly set by legal statute at age 16 years of age; Hudson & Ward, 1997). Most states and the federal code have dropped the term *rape* and substituted *aggravated sexual assault*, *abusive sexual contact*, etc. Similar gradation was already in use for other violent offenses, allowing for aggravating offenses such as use of a weapon. Most sexual assault statutes now focus on the force or threat of force by the offender and have dropped the necessity of having corroborating witnesses (Bachman, 1998).

Rape may include any sexual act perpetrated with violence or by force, although legal definitions often include penetration: oral, anal, or vaginal and digital, penile, or objectile (Ryan, 1997). Rape, as defined by the National Crime Victimization Survey (NCVS), is:

forced sexual intercourse and includes both psychological coercion as well as physical force.

Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s). This

category also includes incidents where the penetration is from a foreign object such as a bottle. (Bachman & Saltzman, 1995)

Sexual assault, as defined by the NCVS, includes a wide range of victimizations that generally involve (unwanted) sexual contact but not sexual intercourse. Rape and other sexual assault victimizations, as measured by the NCVS, can include male as well as female victims (Bachman & Saltzman, 1995).

In the present study, in which data from the National Youth Survey (Elliott, et al., 1989) in analyzed, youth and adults were asked to self-report: "How many times in the past year have you had (or tried to have) sexual relations with someone against their will?" Beginning in the fourth of nine waves of data collection, additional follow-up questions were added; these were designed to gather information on whether or not the rape was completed, the type of force used, if the victim was injured and the type of injury, if others were involved in the assault, the perpetrator's relationship to the victim, and if the perpetrator had been drinking or using drugs before the incident.

#### *Offense and Recidivism*

Ideally, it would be possible to identify all sexual offenders in such a way that all of those who had committed sex offenses were known, and that all of their hands-on and hands-off offenses were known. However, this is not possible given the limitations of current instruments and methods, and thus we are left with imperfect measures of identifying sexual offenders and those who recidivate.

As will be discussed further under the heading of issues of reliability and validity, there are several ways to identify sexual offenders in order to assess the prevalence and frequency of sexual offenses. First, offenders can be identified because they have been arrested and convicted for an offense ranging from voyeurism or exhibitionism to sexual assault. They may also be identified through therapy sessions of their own or of their victims. These are the only ways that specifically identified sex offenders are likely to come to the attention of legal or mental health authorities.

Results from the National Crime Victimization Surveys conducted in 1994, 1995, and 1998 indicate that only 32% of all sexual assaults against persons 12 or older were reported to law enforcement agencies (Cited in CSOM, 2000). The Center for Sex Offender Management (2000) interprets this finding to indicate that convicted sex offenders under the authority of corrections agencies in the United States represent fewer than 10% of all sex offenders living in communities nationwide.

Prevalence rates and individual-offending rates that do not identify specific individuals for arrest or treatment may also be determined via confidential surveys of representative samples of the population. These surveys (e.g., National Crime Victimization Study) may use self-report questionnaires of victimization, which gather information on offenses and offenders from the perspective of victims. Still other offenders are identified via self-report measures of engagement in sexual offenses; one notable survey of this variety is the National Youth Survey (Elliott, et al., 1989), from which the data for the analyses that follow are drawn. The National Youth Survey is the longest prospective, self-report survey of crime and delinquency currently available.

Sex offender recidivism has been defined in several ways by the legal, law enforcement, and mental health research communities. First, it may be a reconviction for the same type of sexual aggression for which they initially came to the attention of the authorities. Second, it may be a reconviction for any type of sexual aggression or any type of sexual offense. Third, it may be a reconviction for any violent offense. Fourth, it may be a reconviction for any criminal offense. Moreover, it may not involve conviction at all, but rather it may be arrest for any of the above offenses, regardless of whether or not a conviction resulted. Finally, it may not involve the legal authorities at all, but rather may be defined simply as the commission of any of the above offenses. For example, Fehrenbach, Smith, Monastersky, and Deisher (1986) described a study of 305 adolescent sexual offenders who had been referred to a clinic for hand-on offenses such as rape and indecent liberties, and hands-off offenses such as exhibitionism, voyeurism, obscene

phone calls, and other inappropriate acts (there was no comparison group). In 57.6% of cases, the study found substantial evidence that the offender had committed at least one sexual offense prior to the referral offense. Of those with a prior sexual offense, 23% had committed both the same type and a different type of sexual offense. Only 5% of repeat offenders reportedly committed only a completely different type of sexual offense. All of these definitions of recidivism have been used as the outcome variables in the following literature review, and so the specific definition used are specified where appropriate.

### Sociodemographic Characteristics of the Offenders

When rapists have been compared with violent offenders, property offenders, and other sexual offenders, past work has shown that rapists were more similar on socio-demographic variables to violent and property offenders than they were to other sex offenders (Alder, 1984). Because so many juvenile sex offenders have nonsexual conduct disorders, it has been argued that juvenile sex offenders without other conduct disorders may be a group with unique characteristics that are obscured in most current research (France & Hudson, 1993).

#### *Sex of Offenders*

Most studies report that over 90% of sexual offenders are male (e.g., Green, 1999), though women are increasingly becoming identified as sex offenders. This may be due to an actual increase in female offending, though other authors suggest that the prior lower rates of reporting were due in part to reluctance on the part of victims to report offences when women are the offenders [or for police to file charges when the perpetrator is a woman?]. Because most identified sexual offenders are male, much of the literature review to follow will focus on males, as will portions of the analyses. A full review about what is known about female offenders is beyond the scope of the present work, but a brief discussion follows.

Females have been found to commit between five and eight percent of total child molestations (see Cooper, 2000, for a review). Findings from prior studies have revealed that female sexual molesters often exhibit histories of maltreatment and/or exposure to interpersonal violence, but that females tended to be younger than juvenile male sex offenders when first victimized, and more often coercive force was used against them. Araji (review, 2000) found that female child sex offenders, compared to male child sex offenders, tended to choose younger victims, had more victims, were more likely to abuse and to threaten harm to the child's family, tended to use objectile penetration, and were more likely to force child-to-child activity. Female serial exhibitionism is disproportionately rare, given that it is one of the most common of sexual offenses in men.

Clinical studies that specifically addressed female sex offender populations generally have not used control groups nor used longitudinal methods, but rather, described characteristics of the groups studied. Female sex abusers of minors often (nearly 50%) had a history of significant psychiatric illness, and most females convicted of less serious indecency offenses demonstrated social skill deficits, low intelligence, psychiatric problems, and substance abuse (Travin, Cullen, & Protter, 1988). They prototypically offended against a five-year-old child in a baby-sitting situation, their victims were more commonly female, were more often a relative or acquaintance of the family, they generally limited their offenses to hand-on victimization of younger children in contrast to the wider array of victims of male offenders, many reported having been sexually abused, and fewer than 10% were known to be involved in any other delinquent behaviors. (Fehrenbach and Monastersky, 1988)

Specific typologies of female offenders and the common *modus operandi* (MO) discussed in the literature include: (1) *The Teacher/Lover Offender* (Matthews, Matthews, & Spelz, 1991; Araji, 2000; Cooper, 2000); (2) *The Intergenerationally Predisposed Offender* (Matthews, et al., 1991, Araji, 2000; Cooper, 2000; O'Connor, 1987); (3) *The Male Coerced Offender* (Matthews, et al.,

1991; Cooper, 2000; O'Connor, 1987; Travin, Cullen, and Protter, 1998); and (4) *The Experimenter-Exploiter* (Araji, 1991). [I think we could drop this paragraph.]

### *Age of Offenders*

There has been limited research on adolescent-aged sex offenders, compared to that on adult-aged sex offenders (c.f., Caputo, Frick, & Brodsky, 1999, Weinrott, 1996). One reason is the common misperception that these offenses are uncommon (Becker, 1988). However, it has been reported that juveniles were the offenders in more than one fourth to one half of all child sexual abuse cases (Groth, Longo, & McFadin, 1982; Barbaree, Hudson, & Seto, 1993; Araji, 2000; Davis & Leitenberg, 1987). Moreover, adolescents committed 20% of the forcible rapes reported to the FBI in 1981 (Uniform Crime Report).

In a review of the literature on adolescent sexual abusers, Araji (2000) concluded that the “typical” juvenile sex offender is male, 14 years old, and likely to be white and living with both parents at the time of the offense. When arrested, it is unlikely that he had a previous conviction for sexual assault, but he has had other victims, and likely prior convictions for nonsexual delinquent behavior. The most likely victim is a female, 7 or 8 years of age, who is not related to the offender by blood or marriage but is known by the offender (over 95 percent of the cases). The assault is unwanted, involves genital touching, involves penetration over 60 percent of the time, and is accompanied by force. Araji (2000) notes that preadolescents may also be sexual abusers, and are similar to their adolescent counterparts, but their victims are more likely to be family members (siblings appear to be common targets). Most of these conclusions were consistent with an earlier review conducted by Davis and Leitenberg (1987), who also found that concurrent and past signs of behavioral and school disturbances were common in the histories of adolescent sexual offenders, but were no more common than in other delinquent youth who had never committed a sex offense. The review also revealed that despite the argument that sexual offenses arise from a lack of sexual experience, adolescent sex offenders claimed to have had more sexual experiences, including

consenting ones, than did comparison groups of adolescents. Finally, that study revealed recidivism rates of less than 10 percent.

Another reason that juvenile sexual offenders may have been understudied is the assumption that these acts are exploratory in nature and thus will not continue into adulthood (Caputo, et al., 1999). This is not supported by empirical research, as close to half of all adult sex offenders report committing their first sexual offense in their teenage years (Groth, et al., 1982). Abel and Rouleau (1990) found that over 50 percent of adult offenders reported the onset of at least one deviant sexual interest before the age of 18, and of those, each reported at least 2 different paraphilias and an average commission of 380 sexual offenses by the time he had reached adulthood. In a review, Grey and Pithers (1993) conclude that over the past two decades, "...the notion that juveniles are easier to treat than adults has been recognized as yet another myth about sex offenders. The desire to view all instances of juvenile sexual abuse as isolated events is not supported by research data" (pp. 289-290).

Hunter, Hazelwood, and Slesinger (2000) examined police investigative records and found that juveniles who sexually assaulted peers or adults had more female victims, were more likely to target strangers, and were more likely to commit the sexual offense in association with other offenders than were child molesters. Additionally, they were more likely to commit the sexual offense in conjunction with another crime, and to utilize more force than their child molester counterparts. The authors also found that peer and adult offenders most frequently utilized an intimidating presence as a means of controlling the victim, followed by the presence or use of a weapon and injurious force. The sexual crimes of child molesters occurred most frequently in the victim's residence, followed by the perpetrator's residence, and fewer than 10% of the assaults occurred in a public place. The victims were often siblings or other family members. These data suggest that juvenile child molesters were generally less physically aggressive and violent than their peer and adult offending counterparts. As with the peer/adult offenders, the majority of the offenses committed by child molesters involved multiple sexual acts.

Additionally, Miranda and Corcoran (2000) compared juvenile and adult sexual offenders on the characteristics of the abuse they perpetrated. Results indicated that juvenile sexual offenders committed more intra-familial sexual assaults than did the adult offenders. In contrast, the adult offenders reported more victims and longer relationships with the victims than did the juvenile offenders.

Characteristics of offenses appear vary by age of first offense within adolescent-aged molesters. Burton (2000) examined incarcerated adolescents who admitted to committing sexual offenses. Results indicated that 46 percent of the sample reported initiating sexual offending before the age of 12. Those who admitted offending both before and after age 12 reported more severe and complex acts than those in the comparison groups. Those with a first offense before age 12 who did not continue after age 12 had the lowest level and lowest complexity of perpetration. The continuous offenders also reported higher levels of past sexual and emotional victimization than did the early offender group, who in turn reported more than those who's only admitted offenses occurred after age 12.

### Characteristics of victims, offenders, and offender/victims

#### *Victims*

Sexual abuse is problematic because of both the occurrence of a sexual behavior and also because of the abusive nature of the interaction. The victim's experience is affected by vulnerabilities to abuse, prior life experience, betrayal, the offender-victim relationship, developmental stages, sexuality, gender issues, secrecy and accommodation (Ryan, 1997). The short-term impact of sexual abuse on the victim includes emotional trauma, impaired psychological functioning, and dysfunctional behavioral change. In particular, victims often present clinically with symptoms such as numbness, feelings of vulnerability, helplessness, hopelessness, anger, shame,

anxiety, fear, depression, and nightmares of the sexual assault (Becker & Abel, 1981; Ellis, Atkeson & Calhoun, 1981; Culbertson & Dehle, 2001).

Additionally, victimization often leads to an intense fear of revictimization, terror of death, a feeling of invasion of personal boundaries, and loss of control (Marx, Calhoun, Wilson, & Meyerson, 2001; Moscarello, 1991; Culbertson & Dehle, 2001). Moreover, rape victims constitute the largest percentage of individuals with post-traumatic stress disorder (Foa & Riggs, 1994). Research has found that victims continued to report rape-related difficulties for as many as 13 years after an assault (Riggs, Kilpatrick, & Resnick, 1992). This may include sexual dysfunction, somatic complaints and anxiety, affective disorders and suicide risk, substance use and abuse, eating disorders, and communication, learning, and relationships.

Bachman (1998) analyzed data from the redesigned National Crime Victimization Survey from 1992-1994, and found only 25% of (one on one, male on female) victimizations were reported to the police. Of those who reported the incident to the police, most reported that they did so because they believed it was a crime and to prevent further crimes by the offender. When the incidents were not reported, victims reported that the incident was a private and personal matter and they dealt with it in another way. More than 1 in 10 victims who did not report their victimization said they did not report it because they were afraid of reprisal by the offender. Further analyses revealed that injury and weapon presence were the only contextual factors that significantly increased the likelihood that rape victimizations would be reported to the police.

Widom and Ames (1994) examined the long-term consequences of sexual victimization in childhood, using a prospective cohort design. Abused and non-abused children were followed over time and their official criminal histories (arrests) were recorded. When children were sexually victimized, as adolescents they were at an increased risk of arrest for becoming runaways, and as adults they were at increased risk for sex crimes compared to controls. However, victims of physical abuse and neglect were at similar increased risk for these same criminal acts. The juvenile victims of

sex crimes were distinguished from other abuse and neglect victims and controls by being more likely to be arrested for prostitution, regardless of gender. Finally, the findings also suggested a relationship for males between physical abuse and arrests for violent sex crimes (rape and/or sodomy). Those sexually victimized as children by a relative tended to have a somewhat higher percentage of arrests as juveniles (but not as adults) compared to those victimized by nonrelatives; however the difference was not statistically significant.

Culbertson and Dehle (2001) specifically note that “the spectrum of interpersonal relatedness between rape victim and perpetrator may be an important determinant in predicting the rape sequelae for a given victim, as although all rape victims are affected by sexual assault, victims who are more invested in their relationship in terms of financial and material constraints or have some ongoing relationship with their perpetrators may suffer unique or more severe sequelae compared with victims who have less connection to the perpetrator.” For sexual assault victims in many cultures, a pre-existing sexual relationship between perpetrator and victim partially or totally mitigates the individual’s claim to victimization, because of an implied sexual obligation or consent inherent within sexually intimate personal relationships. The authors found that individuals cohabitating with, married to, or in an acquaintance relationships with their perpetrator were more adversely impacted by the sexual assault than were individuals in a dating or previously sexually intimate relationships with their perpetrator (Culbertson & Dehle, 2001).

#### *Offender-Victims.*

It is often presumed that sex offenders were themselves victimized when they were children or adolescents, and this assertion is supported to some degree in past research. Offenders have retrospectively reported prior physical abuse (Davis & Leitenberg, 1987; Haapasalo & Kankkonen, 1997; Ford & Linney, 1995), sexual abuse (Davis & Leitenberg, 1987; Zgourides, Monto, & Harris, 1997; Romano & DeLuca, 1996; Haapasalo & Kankkonen, 1997; Ford & Linney, 1995), psychological, especially verbal, abuse (Haapasalo & Kankkonen, 1997), and witnessing of other

violence in the home (Seidman, Marshall, Hudson, & Robertson, 1994; Caputo, Frick, & Brodsky, 1999; Ford & Linney, 1995). The latter study showed that the witnessing of severe domestic violence was related not only to juvenile sex offending but to contact offending in general. DiCenso (1992) studied case histories of male adolescent sex offenders which revealed that 95% reported prior victimization, some as early as age 3, and 75% acknowledged that their offense paralleled their own victimization.

However, the accuracy of these retrospective accounts has been questioned. Hummel, et al. (2000), note that willingness of offenders to disclose details of having experienced sexual abuse often depends on the offender's age (adolescent vs. adult) and the place of the interview (e.g., at home, during outpatient examination, in residential treatment, or in custody awaiting trial or after conviction). They further note that it has been argued by Hanson and Slater (1988) and Langewin, et al., (1989) that sex offenders possibly make inaccurate assertions concerning a history of sexual abuse either for reasons of self-justification, or to achieve a more lenient judgment from the court. They note alternatively that Worling (1985) and Furniss (1989) found that adolescent sex offenders (in treatment after conviction) had a higher shame threshold before they were willing to disclose their own experience of sexual abuse at all, and thus they may under-report their past abuse. Finally, Baker, Tabacoff, Tornusciolo, & Eisenstadt (2001) found that offenders may not fully report their own sexual and physical abuse backgrounds until after at least six months of treatment.

### *Offenders*

Both adult and juvenile sex offenders primarily fall into two major types: those who target children and those who offend against peers or adults. The distinction for juveniles between the two groups is based upon the age differences between the victim and the perpetrator (in most states, child perpetrators are those who target children five or more years younger than themselves; CSOM, 1999). In the current data set, the respondents were not asked the age of their victims, thus it will not be possible to make this distinction in the analyses that follow. The age of the perpetrators will be

examined (adolescent perpetrators and adult perpetrators), but those who victimized children, peers, and adults cannot be differentiated. Even though the victim age distinction will not be examined in the analyses that follow, much research on sex offenders does distinguish between ages of offenders and victims, and thus the following review of characteristics of offenders includes identification of the age of offenders and victims studied when available.

Araji (2000) reviewed the literature on those who sexually abuse children, ranging from viewing, exhibitionism, touching, fondling, and oral sex to all types of intercourse, and the process could include use of pressure, coercion, and/or deception. Results revealed that about 90 percent of all reported child sexual abusers were male, and though the age of abusers varied widely, the mean age was 32.5 years, and the age range of victims was usually 8 to 12 years. Sexual abusers of children frequently were characterized as nonviolent; however other studies suggested that abusers employed threats of harming the child, a significant other, or a pet. Far less frequently, they were more extreme and sexually abused their victims and killed them. While there is debate among professionals and researchers as to whether child sexual offenders are manipulative, aggressive, and violent, or shy, passive, and lacking in social skills, it is clear that there is no profile that fits all sex offenders. There is general agreement that they are a heterogeneous group, with one exception – that most are men.

Pithers, et al. (1989) conducted clinical interviews of 200 convicted sexual offenders in order to identify risk factors that appeared to predispose men toward or precipitate sexual victimization. Comparing rapists to pedophiles (there was no non-offending control group), the authors found that a greater percentage of rapists than pedophiles experienced generalized anger, displayed anger toward women, acted suddenly and opportunistically rather than grooming the victim, and used alcohol or another drug prior to offending. In contrast, depression was observed more commonly among pedophiles than rapists, and pedophiles were more likely than rapists to acknowledge having planned the exact circumstances of their offenses. During clinical interviews, the authors found that a greater

proportion of pedophiles than rapists revealed a preference for fantasies of abuse, rather than consenting, adult, sexual acts.

Adjudicated child molesters and rapists have both been found to be more introverted than the norm, compared to violent offenders in the same study who were found to be more extraverted than the norm (Gudjonsson & Sigurdsson, 2000). Other researchers have found child molesters to have lower self-esteem (Fisher, 1999; Ford & Linney, 1995), to report being more lonely (Fisher, 1999; Seidman, et al., 1994), to report more social anxiety (Fiquia, Lang, Plutchik, & Holden, 1987), to be less assertive (Fisher, 1999), to have a greater need for control and inclusion in interpersonal relationships (Ford & Linney, 1995), and to have greater deficits in empathy for victims (Fisher, 1999), compared to controls. Seidman, et al. (1994), however, found that rapists (of adults) in their study were among the most deficient in intimacy compared to other sex offenders; they were not more lonely, angry, or hostile toward women than the other sex offenders. Moreover, Caputo, et al. (1999) found juvenile sex offenders to show more callous and unemotional traits than other offenders. Barbaree, Seto, Serin, Amos, and Preston (1994) compared sexual and nonsexual rapist subtypes from a treatment center. They found that for those for whom the primary motivation was sexual (sadistic and nonsadistic), and those for whom the primary motivation was aggression (vindictive and opportunistic), both expressed hostility, or a callous disregard for the feelings of the victim. Hall (1989) studied nonpsychotic male sexual offenders who had been admitted to a state hospital, and found that rapists of adult and adolescent women reported more hostility toward women than did rapists of children. In contrast, Caputo, et al., (1999), found no differences between juvenile sex offenders and other juvenile offenders on measures of poor impulse control or sexist attitudes toward women. Moreover, Harmon, Owens, and Dewey (1995) found that incarcerated non-rapists had the most conservative/traditional attitudes, and these scores were statistically significantly different from other offenders and nonoffenders. Finally, Fiquia, Lang, Plutchik, and Holden

(1987) found that total hostility, fear of negative criticism, and social skills deficits were best predictive of total violent crimes, whereas total sex crimes would not be predicted by any factor.

Longo (1982) found in a sample of 17 adolescent sex offenders that the offenders generally had sexual experiences during the elementary school years, prior to the onset of puberty. Some of these cases were non-coercive acts that were curious in nature; however, a significant number were experienced as sexual trauma. Some researchers have found that sexual offenders report greater exposure to porn. Ford and Linney (1995) found that the sexual content of early childhood memories and exposure to pornographic material were higher for sexual offenders compared to violent nonsexual offenders and status offenders. Howells and Wright (1978) found that sex offenders reported greater dissatisfaction with their sex lives, more worry about sex, more sexual difficulties, less satisfaction and more frustration in their sexual contacts, compared to nonsexual offenders.

*Typologies.* Grey and Pithers (1993) reviewed literature on typologies used to distinguish adolescent offenders, such as “sexually curious,” “group influenced,” and “age difference/coercion.” The authors concluded that the existing typologies represented “useful heuristic devices” (p. 292), however, research has not yet empirically validated those clinical impressions. However, Knight and Prentky (1990) have worked to identify empirical homogeneous subgroups of adult sexual offenders for the purposes of enhancing the study of the etiology of this very heterogeneous group of behaviors. In a later chapter (Knight & Prentky, 1993), they provide a theoretical discussion and an empirical examination of the typologies in which they suggest juvenile sexual offenders may be placed. In particular, adult rapists and child molesters were studied and further divided into groups based upon whether or not they had been charged or convicted of a serious crime before their 19<sup>th</sup> birthday. Typologies were created based upon a variety of characteristics, including degree of social competence, fixation on children, aggression during the assaults, criminal lifestyle, expressive

aggression, and sexualization. Analyses indicated that those who had been charged with sexual offenses as juveniles and those without such charges showed significant group differences for both rapists and child molesters. However, results indicated that the taxonomic results and the analyses of group differences suggested that only a subset of the types found in adult sexually aggressive samples appeared to be appropriate for the juvenile samples. In particular, for both rapist and child molester typologies, low social competence, high antisocial types appeared to be the most prevalent among juvenile offenders. Further analyses indicated that sexual and physical abuse and neglect were complexly intertwined in the developmental histories of sexually aggressive juveniles. The authors caution readers about the limits of taxonomic models, and instead suggest their work serve as an initial step in a taxonomic research program.

### Recidivism

Furby, Weinrott, and Blackshaw (1989) conducted a review of the literature on sex offender recidivism. First, when they considered how many men continue to commit sex offenses, they found a great deal of variability in the quality and results of the examined studies (range in prevalence for sex offense recidivism was 0 to 40 percent, and for other offenses recidivism was 5 to 55.6 percent). The only discernable pattern was for any crime recidivism indicating that the longer sex offenders were followed, the higher their recidivism rate. Second, there was no evidence that clinical treatment reduced the rates of sex re-offending in general and no appropriate data for assessing whether it may be differentially effective for different types of offenders. Finally, there was some slight evidence that recidivism rates may be different for different types of offenders; however, the same review also argued that recent evidence suggests that offender classifications based on a single offense can be misleading.

Hanson and Bussiere (1998) conducted a meta-analysis of 61 sexual offender recidivism studies. On average, the sex offender recidivism rate was 13.4% (specifically, the rate was 18.9% for

rapists and 12.7% for child molesters). The average follow-up period was 4-5 years. The recidivism rate for nonsexual violence was 12.2%, but there was a substantial difference in the nonsexual violence recidivism rates for the child molesters (9.9%;  $n = 1,774$ ) and the rapists (22.1%;  $n = 782$ ). When recidivism was defined as any re-offense, the rates were predictably higher: 36.3% overall, 36.9% for child molesters and 46.2% for rapists. The authors note that caution is necessary when interpreting the specific averages as they were based on diverse methods and follow-up periods, and that many sexual offenses remain undetected. Overall, the authors found that the predictors of nonsexual recidivism (violent or nonviolent) were very similar to those found in the research on general offender populations. However, the strongest predictors of sexual recidivism were factors related to sexual deviance, and so the authors argue that though the correctional literature has a propensity toward minimizing differences between types of offenders, the current results suggest that sexual offenders may differ from other criminals.

Of the demographic variables examined in the meta-analysis (Hanson & Bussiere, 1998), age (younger) and marital status (single) were related to sexual offense recidivism. Further, failure to complete treatment was a moderate predictor of sexual offense recidivism. Criminal lifestyle variables were assessed and found to be modest predictors of sexual offense recidivism; specifically, antisocial personality disorder ( $r_+ = .14$ ) and the total number of prior offenses ( $r_+ = .13$ ). Further, many of the sexual criminal history variables showed small to moderate correlations with recidivism. The risk for sexual offense recidivism was increased for those who had prior sexual offenses ( $r_+ = .19$ ), had victimized strangers, had an extrafamilial victim, began offending sexually at an early age, had selected male victims, or had engaged in diverse sexual crimes. Neither the degree of sexual contact, force used, or injury to victims were significant predictors of sexual offense recidivism. However, the strongest predictors of sexual offense recidivism were measures of sexual deviancy. Sexual interest in children, measured by phallometric assessment, was the single strongest predictor found in the meta-analysis ( $r_+ = .32$ ). Other related predictors included phallometric

assessment of sexual interest in boys as well as any deviant sexual preference (which was assessed by a variety of methods). Perhaps most striking is that phallometric assessments of sexual interest in rape were *not* related to recidivism, and neither was being sexually abused as a child. Finally, the authors examined the impact of the method of gathering recidivism data on the magnitude of the results, and found that the correlations based on convictions were equivalent to those findings based on other recidivism measures for prior sexual offenses. Further, the authors state that the thoroughness of the recidivism search had no influence on the magnitude of the findings.

The meta-analyses further found that rapists were more likely to recidivate with nonsexual violence than were child molesters. Further, relatively low rates of nonsexual violent recidivism were found for those who selected related victims or male victims, and overall, the number of prior sexual offenses was unrelated to nonsexual violent recidivism. Finally, the same factors that predicted nonsexual violent recidivism also predicted general recidivism. That is, general, as well as nonsexual violent recidivists tended to be young and unmarried. As has been found in much prior work, the best predictors of continued criminal involvement were measures of prior criminal involvement (as a youth or as an adult) and antisocial personality or psychopathy. Sexual criminal history was only weakly related to general recidivism. Specifically, the general recidivists were those most likely to have used force against their victims and more likely to have targeted unrelated adult victims. There was little relationship between the measures of sexual deviancy and general recidivism. Sex offenders were at increased risk for general recidivism if they terminated treatment prematurely, denied their sexual offense, or showed low motivation for treatment. The only psychological maladjustment variables that were significantly related to general recidivism were personality disorders and alcohol abuse.

In a ten year study, Romero and Williams (1985) followed a group of 231 adult males who were convicted of sex offenses and placed on probation.<sup>3</sup> The authors elected to use arrest records rather than convictions because of the loss in the number of cases as one moves from arrest data to conviction data. This can be problematic as well, as prior sex offenders may be disproportionately targeted for arrest. The group contained three subgroups: exhibitionists, pedophiles, and sexual assaulters (female victim age 13 or older, or age 11 or 12 if there was an age differential between victim and perpetrator greater than ten years). The subgroups of men included those with other legal charges: sodomy, solicitation to commit sodomy, immoral practice, indecent exposure, open lewdness, corrupting the morals of a minor child, statutory rape, rape, indecent assault, and assault and battery with intent to ravish. Recidivism was measured in two ways, by the number of arrests for a sex offense and the number of arrests for a nonsex offense for each individual in the sample during the 10-year follow-up period. Overall, results indicated that exhibitionists in the sample were arrested on sex-related offenses twice as often as were sexual assaulters. The authors argue that the public's conception of the sexual assaulter as a man continually driven to aberrant sexual behavior is not supported by their research, but that the sexual assaulter's potential for antisocial behavior is clear. Further, sexual assaulters were found to commit almost as many nonsexual violent offenses as sexual offenses. The exhibitionists and pedophiles studied had a lower rate of nonsex crimes and a higher rate of sex crimes than the sexual assaulters. The authors argue that all forms of bodily assault committed by sex offenders, particularly sexual assaulters, should be carefully examined as parallels may exist between the two types of offenses. Those who were younger when they were arrested for the sex offense for which they were ultimately assigned to the research sample were significantly more likely to be rearrested. The variables most strongly associated with a new arrest for a sex offense was the prior sex arrest rate per year. The findings from this study underscore the importance of conducting long-term follow-up research of sex offenders, as evidenced by the finding

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<sup>3</sup>We have not systematically reviewed treatment studies for estimates of recidivism rates.

that of those found to be recidivists in this ten year follow up, over 25% were not arrested for a new sex offense until 4 years or more had passed.

### Reliability and validity issues in reporting

Social psychologists and sociologists have argued that clinical studies of sex offenders may present biased estimates of sexual assault because they include only a small subset of sex offenders – those who have been caught. That is, prevalence data gathered via self reports of perpetration and victimization have been compared to conviction rates, yielding the conclusion that the vast majority of sex offenders are never convicted and thus unidentified (Barbaree, et al., 1993).

The most conservative measure of sex offending and recidivism is a conviction and reconviction record in official court files (Proulx, et al., 2000). A second official measure involves police records of arrests. In addition to these official sources of information, nonofficial sources are also used, such as self-report measures by the aggressor, reports from social or mental health professionals familiar with the aggressor, and information from relatives, coworkers, or friends of the aggressor. Police records are valued for their convenience, and presuming the legal system is accurate, they typically provide some corroboration that the offenses were committed. However, only 10 - 25 percent (Ouimet, 1998, cited in Proulx, et al., 2000; Bachman, 1998) of sexual assaults are reported to the police<sup>4</sup>, and only about half of these result in a conviction. Arrest data reflect a variety of factors besides commission of offenses, including administrative policies, surveillance priorities, availability of witnesses, and even the luck of the offender (Kitsuse and Cicourel, 1963; Morris and Hawkins, 1970; Geerken, 1994; Elliott, 1995).

Most technical offenders – that is, most individuals who actually commit an act that an official statute has labeled as an offense – are never arrested. Of those who are arrested, a large

percentage is not convicted despite having committed a statutory offense. Further, many of those who are convicted are allowed to plead guilty to a lesser charge and are therefore never charged with or convicted of a specific sex offense. As a result, individuals who are finally convicted represent only a relatively small percentage of those who commit a sex act that is illegal where they live (Ellis, 1978). The FBI believes that their own data on rape reflects the greatest underreporting of all the crimes they measure (Federal Bureau of Investigations, 1982, reported in Hudson & Ward, 1997b). Koss (1992, reported in Hudson & Ward, 1997b) reviewed independent survey studies, and estimates that the actual rate of rape is likely six to ten times the current estimates of the Bureau of Justice Statistics' National Crime Survey (NCS) estimates.

#### *Self Report measures*

Because of these concerns about the serious underestimation of sexual offenses when using only official data sources, researchers, statisticians, and clinicians have turned to self-reports for estimates of prevalence and frequency of sexual offending behaviors. Most information on offenders is gathered when youth enter a treatment program, though it may also be gathered upon arrest or in a research study with a random sample in which they were not identified a priori as sexual offenders. In one study, first-adjudicated juvenile sexual offenders admitted committing two to five sexual offenses for which they had not been apprehended (Groth, Longo, and McFadin, 1982). Bremer (1992) also found that the self-report of recidivism was higher than was the conviction rate. Despite findings such as these, concerns about self-report data revolve around the questionable veracity of the reporting offenders (Hindelang, Hirschi and Weis, 1981; Huizinga and Elliott, 1986). Specifically, there is concern that sexual offenders may deny their offenses for several reasons, including fear of being further punished for offenses previously unknown to authorities, shame at having committed such taboo offenses, and simply denial that they have done something wrong. Clinical reports indicate that the true nature and extent of sexual crimes may be revealed only after months in treatment (Baker, Tabacoff, Tornusciolo, & Eisenstadt, 2001)

In order to test this hypothesis, Baker, et al., (2001) compared data from 47 male sex offenders (43 adjudicated) when they were admitted to treatment, and then after the families had been in treatment for at least six months. Results indicated that 30% of the youth reported additional offenses with already known victims at posttest. An additional 31.9% reported committing additional offenses with previously unidentified victims. In total, 53.2% reported either a new offense or a new victim. Before treatment, 51% of youth reported having been abused in childhood. Once in treatment, the number of youth reporting being abused increased significantly (an additional 15%). Further, the amount of sexual and physical violence in the home increased significantly from pretest to posttest. There are some limitations to this study – the sample is small, it is possible that these results reflect a compliance effect of treatment, and there were no independent criteria to establish the validity of either pre-or-post test estimates. Still, they do suggest caution in accepting the accuracy of self-reports for offenses that are highly stigmatizing. The validity and reliability of self reported criminal offending in general is quite high (Hindelang et al, 1981; Huizinga and Elliott, 1986), but reports of sexual offending, particularly pedophilia, are an exception (see below). In any case, it is important to get corroborating evidence if possible and to gather data beyond that which is immediately available to an agency upon intake.

*Fear of arrest.* When self-reports are not therapist- or police-administered questionnaires with known sexual offenders, but instead are confidential reports of general populations, the concern about getting caught may be minimized, and the offenders may be more likely to admit their offenses. Elliott, et al., (1989) have shown in prior work with National Youth Survey data that self-reported ever-prevalence rates are dramatically higher than the arrest ever-prevalence rates for serious violent offenses.

*Social desirability.* It has been argued that perpetrators may under-report their involvement in criminal and sexual acts because of a need to present themselves in a manner that is deemed favorable by most of society. As a result, even in a setting in which they believe their responses will

likely not be made public, the perpetrators may under-report their behavior if it constitutes a serious violation of societal norms. Traditionally, one method of attempting to circumvent this bias in reporting has been the use of penile plethysmography (PPG; Konopasky & Konopasky, 2000). PPG measures the changes in circumference of the penis in response to auditory or visual stimuli, and been used to attempt to identify sexual preference, sexual paraphilias, and past or future criminal sexual behavior.

The influence of social desirability on self reporting of deviant behavior has also been examined using polygraphy. In a classic study by Clark and Tifft (1966), respondents were interviewed about their involvement in a variety of deviant behaviors that varied in the degree to which they were expected to elicit false negative responses due to social desirability. The respondents were then given the opportunity to change their answers knowing that they would be asked to take a voluntary polygraph test on their final responses. When the researchers compared initial responses to final interview response, all respondents had changed some of their responses, 58 percent on the “final” interview and 42 percent at the time of the polygraph test. Three-fourths of all changes increased the frequency of admitted deviance, and specifically, all respondents under-reported the frequency of their misconduct on at least one item, while only one half over-reported at least one item. Results indicated that self-reports of general delinquency were rather accurate, but that the items most frequently used on delinquency scales were found to be rather inaccurate.

This method has been used specifically with a sample of sex offenders (Ahlmeyer, Heil, McKee, & English, 2000). Sex offenders (voluntary inmates and mandatory parolees) reported on the number of victims and offenses in pre-sentence investigative reports, sexual history forms, and two consecutive polygraph examination reports. The authors reported substantial increases in the number of admitted victims and offenses for inmates (but not for parolees), from the pre-sentence reports to the sexual history forms to the first polygraph reports (smaller increases were found between the two polygraphs). Further, decreases in the age of first known sexual offending were

found for inmates, but not for parolees. The rate of deception was high in the polygraph examination, and the authors note that the questions were constructed so that deception was designed to indicate that the offender had more victims or offenses than previously disclosed in the pretest.

The method was also used by O'Connell (1998, reported in O'Connell, 2000), in a study of men referred for evaluation of amenability for community-based sex offender treatment. Men reported about their behavior on referral, after clinical interviews, and after sexual history polygraph testing. Polygraph testing revealed significantly more information regarding sexually deviant behavior and lifetime sexual offending. Specifically, on average, more than three times the number of incidents of sexually deviant behavior were reported after polygraph testing than were previously revealed, and double the average number of different paraphilias were also reported. O'Connell (2000) further noted that the results indicated that sex offenders who took polygraph exams to corroborate their self-report of sexual history had a high base rate (46 percent) of attempting deception, lowering the probability of false-positive results with the sample.<sup>5</sup>

*Denial.* Laflen and Sturm (1994) described the recognition and treatment of denial in adult sexual offenders using Salter's (1988) framework. The first stage is denial of behavior, in which the offenders deny categorically that they committed an offense. The second stage is minimization of the seriousness of the behaviors and the need for treatment. The third stage is denial of responsibility for the behaviors. The final stage is full admission of the behaviors accompanied by acceptance of responsibility for the behaviors, and genuine guilt about them. The authors note that a great deal of work is required by therapists to enable offenders to move through the stages. Not surprisingly, Hunter and Figueredo (1999) found that lower levels of client denial at intake predicted program compliance for juvenile sexual offenders. Any stagnation in the first stage or even the second stage

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<sup>5</sup> Further, O'Connell (2000) argues that besides helping with assessment and treatment planning, use of the polygraph can also aid in monitoring participation in treatment. "Rule compliance polygraph testing" is used to focus on the offender's adherence to external controls, such as not allowing child molesters to

has important implications for the validity of self-report sex offender studies – that is, if known offenders are unwilling to admit involvement in sexual offenses to their therapists, or when they admit involvement, they often minimize the seriousness of the offense, this raises questions about sex offenders being willing to admit their offenses in self-report measures. However, most self-reports are obtained in a different social context, with guaranteed confidentiality and no implications for any treatment or response to what is reported. Still, the validity of self-reported sexual offending may be problematic for estimating rates of offending or recidivism rates.

#### Previous work with the current dataset

The current dataset includes the first nine waves of the National Youth Survey, a longitudinal, prospective study of multiple birth cohorts who were aged 11-17 when first examined in 1976. The current study will examine all nine waves of data, while previous reports were limited to fewer waves of the study.

Analysis of the developmental progression of serious violent offenses (aggravated assault, robbery and rape) showed that aggravated assault preceded robbery in 85 percent of the cases, and that robbery preceded rape in 72 percent of cases. In that dataset, rape appeared to be the end-point in the violence continuum (Elliott, 1993). Serious violent offenders are very versatile offenders, that is, they do not specialize in violent crime (Elliott, 1995). Leading up to the time in which an offender committed his first serious violent offense (SVO), there was a general tendency for the variety of minor offenses to increase in the year prior to the onset of a SVO, but annual variety scores remained relatively constant after onset. Second, the frequency of minor offending tripled over the 3 year period prior to onset of SVO, and this trend continued after the SVO onset, although the increase was

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have unsupervised contact with children. Six month intervals are recommended for using polygraph techniques to discover problems, encourage rule compliance, and increase self-disclosure in therapy.

not as dramatic. NYS data reveal that models predicting minor delinquency suggest a common etiology for minor delinquency, alcohol use, and serious violence.

*The Sexual Abuse Project (SAP)*

In 1983, Ageton published *Sexual Assault among Adolescents*, which examined the first five years of data from the National Youth Survey. The youth in the Sexual Abuse Project (SAP), were aged 11-17 in the first time period examined, 13-19 in the second time period examined (wave three of the NYS), and were fifteen through twenty-one years of age in the fifth wave, the third year of data examined. The SAP data were self-reports of engagement in sexually coercive behaviors. Specifically, potential sexual assaulters were identified as those who reported having: “(1) Had or tried to have sexual relations with someone against their will; (2) Pressured or pushed someone such as a date or friend to do more sexually than they wanted to do; or (3) Physically hurt or threatened to hurt someone to get them to have sex with you?” Additionally, reports of physical assault on other NYS questions were followed up to note whether a sexual assault had occurred as well. To avoid overlap and potential multiple reports of the same incident, respondents were also asked to report the total number of sexual assaults that had occurred during the year in those cases in which more than one sexual assault question was answered. Follow-up filter questions were asked that were designed to filter out “trivial” cases, or those that did not seem “appropriate”, that is, responsive to the intent of the offense item. For example, female offenders, male victims (including homosexual assaults), and date rape cases in which it appeared the respondents had interpreted the date rape item more loosely than was intended, were excluded.

Results indicated that in each year from 1978 to 1980, the prevalence of female sexual assault victimization was five to eleven percent (Ageton, 1983). There were no significant race or social-class differences, and no consistent age trends emerged. The prevalence rates were dramatically higher than those prevalence rates obtained from official arrest data (Uniform Crime Reports) and self reports of victimization from another nationally-representative sample (National Crime Survey).

The latter source, despite also being a self-report measure and thus potentially expected to yield prevalence rates similar to those in this project, asked respondents only about forcible rape, not more broadly-defined sexual assaults as did the SAP. Most of the sexual assaults reported to be committed by adolescent males in this sample were determined by Ageton (1983) to be spontaneous events that occurred in the context of a date. The victims were typically girlfriends or dates of approximately the same age as the offender, and fewer than fifteen percent of the victims in any one year were unknown to the offender. Most of the assaults occurred in the offenders' or victims' houses. The offenders reported viewing their own sexual excitement and the behavior and physical appearance of the victim as instrumental in causing the assault. Many of the offenders reported they had been drinking or taking drugs prior to the assault, and the primary type of force or pressure used was verbal.

When offenders were compared with non offender controls in order to examine predictors of engaging in later sexual assault, results indicated that both groups were very similar demographically, the offenders were more likely to be from families that experienced significantly more crises such as divorce and extended unemployment. Additionally, offenders were found to be more estranged from their parents and less attached to school than were the controls. However, the strongest findings were that the sexual assault offenders had significantly higher exposure to delinquent peers and received support from these friends for unconventional, delinquent acts, including sexual aggression. The offenders themselves were also more involved in general delinquency than were the non-sexually assaulting controls. Overall, the data suggest that the explanation for sexual assault is not particularly different from that for other types of illegal behavior committed by adolescents.

Ageton's (1983) study has been criticized for the heterogeneous grouping of sexual offenders, incorporating in the same group those who used weapons and those who used verbal pressure, such as, "If you love me you will," in order to coerce their victims. However, this study

has also been commended as the only longitudinal, representative sample that examined sexual aggression within heterosexual relationships, including dating and marital relationships (White & Koss, 1993).

### *The Current Study*

As with any data set, there is variability in the degree to which the NYS is well-suited to answer the research questions at hand. First, the greatest strength of the NYS is its prospective nature – that is, with this sample there is the rare opportunity to follow a representative national sample *forward*, such that there is the opportunity to examine true predictors of sexually aggressive behavior, without having to rely on the accuracy of retrospective data. However, with this advantage comes a price – that is, because the original sample was a representative sample and was not selected to contain a substantial number of sexual offenders, and because sex offenses are relatively uncommon, there is not a large sample of sex offenders to examine in the study. Another strength of the dataset is that because the offenses are self-reported, offenses are included in the study even if they were not reported to the police or did not result in an arrest or a conviction. Alternatively, as was discussed earlier regarding polygraph evidence, sex offenders are unlikely to fully disclose their behaviors even in a confidential interview. Finally, the data set includes official arrest data on all respondents, allowing for a comparison of official and self-reported sexual offending and an estimate of the probability of arrest per self-reported sexual offense. The following questions will be addressed in the current research:

#### **1. What is the age of onset for sexual assaulters?**

We will provide information on age of onset of sexual assaults, in the form of hazard rates for initiating sexually-assaultive behavior. Additionally, we will provide age-specific prevalence rates and cumulative prevalence rates.

**2. Regarding hands-off offenses, how many hands-off offenders become hands-on offenders? How many hands-on offenders are also hands-off offenders? Do hands-off offenders continue this behavior into adulthood?**

The answers to this question will be limited as the most relevant hands-off offenses (exhibitionism and voyeurism) were only assessed in waves 6 through 9, and thus are only available for respondents aged 18-24 in the earliest wave, continuing until they are 27-33. This also means that it is not possible to compute the age of onset for hands-off offenses. We will provide information on the overlap between hands-on and hands-off offenses. Additionally, we will examine the four youngest cohorts, who were aged 18-21 in wave 6. Specifically, we will examine those who have not yet reported committing a sexual assault in wave 6, and do report hands-off sexual behaviors. We will then examine their responses for waves 7-9 to see whether they report hands-on offenses in those waves, after only acknowledging hands-off offenses in wave 6.

**3. What proportion of sexual assaulters re-offend, how often, and what is the average time interval between offenses?**

The answers to these questions will be limited due to the intermittency of the data, that is, some of the reports refer to the previous year, with follow-up questions, and some involve recall back two or three years about prevalence, without follow-up questions. We will compute the percentages of respondents who reported committing a sexual assault one time only, compared to those who report committing multiple sexual assaults. We will then examine the average number of years between that first reported sexual assault and their second reported sexual assault and between each subsequent reported assault.

**4. Is there an age at which sexual offenders tend to stop their sexual offending?**

We will chart a survival rate that will indicate the length of sexual offenders' careers.

Because of right-hand censoring in the data (approximately 90 percent of respondents are still alive), we cannot know if any offender has permanently stopped offending. We will define the length of

their career as the time between their first reported offense and their most recent reported offense. We will also examine suspension of hands-off offenses. However, these data are only available for waves 6 to 9, and thus the answer to this question will be limited to examining whether those who report hands-off offenses in waves 6 and 7 report no offenses in waves 8 and 9.

**5. Regarding arrests: What percentage of self-reported offenses result in arrest? How does this differ for hands-on and hands-off offenses? How does the rate of arrest for sex offenders compare with the rate for other violent and nonviolent crimes? Does this differ for hands-off offenses and hands-on offenses?**

Respondents were not asked if they were arrested for each of the sexual assaults they reported committing. We do have information on respondents' arrests from 1976-1990, which matches with the first eight waves of data collected. We will provide information on the number of NYS participants who reported committing sexual assaults, serious sexual assaults, as well as other felonies and misdemeanors, and will compare those responses with the number of NYS respondents who were actually arrested for perpetrating these acts.

**6. What is known about sexual assaulters' careers? What do we know about their patterns of offending? How often do juvenile sexual offenders continue their behavior into adulthood? What does the career of a sexual assaulter look like? Are there any clues from the current data set that could be used to intervene early in such a career?**

We will provide descriptive information on those who report committing sexual assaults. In particular, we will provide a year by year case history of the hands-on and hands-off offenses they reported committing during the time of the study. Additionally, we will provide the total number of hands-on offenses, hands-off offenses, felonies, and misdemeanors that the identified sexual assaulters and serious sexual assaulters reported committing. Further, we will provide information from the follow-up items on their relationship to their victims, the location of the incident, and whether or not sexual intercourse was successfully forced. We will also examine predictor variables

such as behavior and attitudes, which the sexual assaulters reported in the wave prior to their engagement in sexual assault or serious sexual assault. Family variables, including normlessness, social isolation, and parental labeling of emotional problems, and peer variables such as exposure to delinquent peers, normlessness, social isolation, and peer labeling of emotional problems, will be examined as predictors to sexual assault and hands-off offenses. In addition, attitudes toward deviance, violent and sexual victimization, first sexual experiences, problem substance use, and engagement in violent behavior will be examined.

## Method

### *The Current Sample/Subjects*

The National Youth Survey (NYS; Elliott, Huizinga, & Menard, 1989), is a prospective, longitudinal study of American respondents who were 11-17 years old in 1976, the first year for which data were collected, and 27-33 years old in 1992, the most recent year for which data are available. From 1976 to 1980 (Waves 1-5 of the study), data were collected annually. After this, data were collected at three year intervals, beginning with the data for 1983 (wave 6) and continuing through 1992 (wave 9). The study measured delinquent behavior, alcohol and drug use, and problem-related substance use as well as measures of satisfaction and adjustment in developmentally appropriate contexts such as school and family in the American youth population. The NYS employed a probability sample of households in the continental United States based upon a self-weighting, multistage, cluster sampling design.

The sample was drawn in late 1976 and contained 2,360 eligible youth aged 11-17 at the time of the initial interview. Of these, 1,725 (73%) agreed to participate in the study, signed informed consents, and completed interviews in the initial (1977) survey. Respondent loss over the nine surveys was relatively small (80%, 83%, and 78% participated in waves 7,8, and 9, respectively). At each wave, NYS respondents have been shown to be representative of the total U.S. population born

from 1959 to 1965 as established by the U.S. Census Bureau, with respect to gender, ethnicity and rural/suburban/urban residence.<sup>i</sup>

### *Instruments*

Available measures include perpetration of rape, perpetration of other criminal or delinquent offenses, involvement in paraphilias, victimization, and a set of predictor and co-morbid measures. It is important to note that though nine waves of data were collected, there is variability in the number of “data points” available for each item. That is, some items were measured at each wave, and thus there are nine data points of responses, and other items were only measured in earlier or later waves and have fewer data points of responses. For other items, specifically criminal and delinquent behavior, retrospective items for each of the previous two years were asked during the waves that occurred every three years (waves 6 through 9), in order to complete the annual time line, and thus for these items, there are 8 additional data points - 17 overall. Table 1 specifies which National Youth Survey variables used in this study was available for each wave and year.

### *Self-Reported Delinquency and Criminality*

Respondents were asked to report on their involvement in a variety of delinquent and criminal behaviors during all nine waves of data collection. For each wave of the study, subjects were thus asked to recall events from the past year and report a number of times they engaged in that behavior. In the first five waves of the study, this resulted in data from five consecutive years. Waves six to nine were collected at three year intervals, and in each of those waves, three questions were asked. First, respondents were asked to report a number by recalling one year past as in all prior waves. Subjects were also asked to report on two years prior and three years prior, to fill in the years between data collections. For these two and three year recall items, subjects were not asked to report a specific number, but instead were asked to report the frequency of their participation using a 4 point scale: (1) never, (2) 1-2 times, (3) 3-11 times, and (4) 12 or more times. For all waves and intervening years, prevalence of a behavior was indicated by any non-zero response to an item.

Frequencies were estimated by using the number provided by the respondent for all of the one-year retrospective items, and by using a derived frequency for the two- and three- year retrospective reports (never = 0, 1-2 times=1, 3-11 times=5, and 12 or more times=12).

*Sexual Assault Items.* In all nine waves of the study, respondents were asked to answer the question, “In the last year, how many times have you had (or tried to have) sexual relations with someone against their will.” Prior work with the National Youth Survey on serious assaultive behavior (aggravated assaults, robberies and sexual assaults) distinguished between those reporting any assaults of these types and those reporting more serious assaults, based on follow-up information about injury levels and weapons used (Elliott, 1994). In a similar way, a distinction is made here between persons reporting any sexual assault and those reporting particularly serious sexual assaults.

This distinction is based on follow-up items to the sexual assault questions obtained in Waves four through nine (but not intervening years between survey years). These questions gathered detailed information on the most recent reported incidents. These items asked subjects to report the outcome (forced intercourse or tried but did not succeed), the means used (e.g., verbal threats, mild roughness, beaten/choked, overpowered physically, or drugged or got drunk), whether or not the victim was physically hurt and if so, to what degree, whether or not others were involved and if so, how many, whether or not the respondent had been drinking or using drugs before the incident, and the respondent’s relationship to the victim. Reported sexual assaults involving a completed forced intercourse, or the use of physical force, or injury, whether completed or not, were classified as “Serious Sexual Assaults (SSA’s)” and persons reporting these types of assaults were classified as “Serious Sexual Assaulters.” Those assaults that were not completed and involved no physical force, alcohol/drugs or injury, were included, together with SSA’s, in a general category called “Sexual Assaults (SA’s)” and persons reporting either SSA’s or SA’s were classified as “Sexual Assaulters.”

In the first three waves of data collection, respondents were not asked these follow-up questions. Following the procedure utilized in other reports on serious violent offenders (Elliott, 1994; Elliott et al., 1986), persons who reported two or more sexual assaults in any one of these waves (1-3) was classified as a Serious Sexual Assaulter, and those who reported only one assault in any one of those waves was considered a Sexual Assaulter.<sup>6</sup>

*Other Self-Reported Delinquency and Criminality.* Responses to other delinquency and criminality items also will be used in the analyses. Specifically, felony assault, felony theft, and minor delinquency were used as scales based on the aggregation of several items. Felony assault is the aggregation of aggravated assault, sexual assault, and gang fights<sup>7</sup>. In instances in which it was desirable to use felony assault in the same analysis with sexual assault, sexual assault was omitted from the felony assault scale to avoid overlap. Felony theft is the aggregation of: (1) motor vehicle theft; (2) broken into a building; (3) stole something worth greater than \$50; and (4) bought stolen goods. Minor delinquency was measured using an aggregation of: (1) bought stolen goods; (2) carried a hidden weapon; (3) stolen something worth less than \$5; (4) been paid for sexual relations; (5) sold marijuana; (6) hit parents; (7) hit someone at work/school; (8) hit anyone else; (9) been loud, rowdy; (10) sold hard drugs; (11) motor vehicle theft; (12) stolen things worth \$5 to \$50; and (13) begged for money.

### *Sexual and Violent Victimization*

Self-report of victimization items were assessed in all nine waves, using the same one-year retrospective method employed with the self-report of delinquency items above. These items were

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<sup>6</sup> In the fourth and fifth waves of data collection, the follow-up items were asked for the most recent incident, and thus up to one incident could be validated as a Serious Sexual Assault. In the sixth through ninth waves of data collection, these follow-up items were asked for the last three incidents, and up to three incidents could be validated as Serious Sexual Assaults. In the retrospective years of data collection for the sixth through ninth waves, all responses were considered serious.

<sup>7</sup> Aggravated assault: "How many times in the last year have you attacked someone with the idea of seriously hurting or killing him or her?" Gang fights: "How many times... have you been involved in gang fights?" Over

not assessed in the intervening years (i.e., two year and three year retrospectives) of waves six through nine. Similar to the self-report of delinquency, all non-zero responses were used to compute prevalence, and the numbers provided by the respondent were used to compute frequencies. To assess sexual victimization subjects were asked, “How many times in the last year have you been sexually attacked, or raped (or an attempt made to do so)?” The violent victimization scale included: (1) sexual victimization; (2) being attacked by a parent; (3) being attacked by someone else; and (4) being attacked with a weapon. Because of the overlap with sexual victimization, the remaining violent victimization items were used as single items.

#### *Hands-Off Offenses/Paraphilias*

Obscene phone calls were measured in all nine waves and all eight retrospective years, in the same format as the sexual assault and other delinquency items. Respondents were asked, “How many times in the last year have you made obscene telephone calls, such as calling someone and saying dirty things?” Prevalence and frequency were measured for each of the nine waves, and prevalence and derived frequency were measured for each of the eight retrospective waves.

Two hands-off offenses (i.e., paraphilias), exhibitionism and voyeurism, were measured only in the sixth through ninth waves, when respondents were 18-24 through 27-33 years old. At each of these waves, a question was asked in which respondents were asked whether or not they had ever engaged in these behaviors, and if so, whether or not it had been in the past year, and if so, how many times in the past year. Because it cannot be clarified how many times it had occurred in prior years or in which prior years it had occurred, only prevalence variables were created, and only for each of waves six, seven, eight, and nine. To measure exhibitionism, respondents were asked, “How many times in the past year have you purposefully exposed (displayed) the sexual parts of your body to

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60% of gang fights involved a weapon or an injury requiring medical attention and were thus considered aggravated assaults.

strangers?” To measure voyeurism, respondents were asked, “How many times in the past year have you purposefully and secretly watched others who were dressing or engaging in sexual acts?”

### *Predictor Variables*

The following scales measure the constructs that were used as predictor variables in the regression analysis that follows. All of the scales have been demonstrated to be reliable and valid in past work with other datasets as well as the current dataset.

*Exposure to Delinquent Peers.* This scale measures the extent to which an individual is bonded to deviant or delinquent friends. This measure of peer group delinquency measures how many of the respondents’ friends have engaged in a set of 10 illegal acts<sup>8</sup>

*Attitudes toward Deviance.* Belief, an indicator of internal bonding to society in general, measures the extent to which an individual believes it is morally wrong for someone of the same age to commit a variety of illegal (assault, theft, drug use) or rule violating (cheating on tests/taxes) acts. Respondents were presented with eight statements and asked to indicate the degree to which they believed these acts were wrong (e.g., “How wrong is it for someone your age to ...purposefully damage or destroy property that does not belong to him or her,” “ ...to hit or threaten to hit someone without any reason.”). Scores for each item could range from 1 (Not wrong at all) to 4 (Very wrong). These items were asked in all nine waves of the data collection.

*Normlessness (Family and Peer).* Family normlessness and peer normlessness are also indicators of internal bonding, but differ from the previous instrument as they measure bonding to a specific context. Normlessness in the family and peer contexts indicates the extent to which a respondent in a particular context believes it is necessary or acceptable to engage in socially disapproved behavior (e.g., lying, cheating, breaking rules) to achieve desired goals within that

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<sup>8</sup> . Items asked respondent to indicate, during the last year, how many of their close friends had “purposefully damaged or destroyed property that did not belong to them,” “stolen something worth less than \$5,” “broken into a vehicle or building to steal something.” Scores for each of the 10 items could range from 1 (None of them) to 5 (All of them).

context. The family and peer scales are composed of four items each, that ask respondents the degree to which they agree with the presented items (e.g., “Making a good impression is more important than telling the truth to friends,” “Sometimes it’s necessary to lie to your parents in order to keep their trust.”). Scores for each item could range from 1 (Strongly disagree) to 5 (Strongly agree). These items were asked in all nine waves of data collection.

*Attitudes toward Sexual Assault and Interpersonal Violence.* In the second through fifth waves of data collection, respondents were asked to respond to items designed to assess their attitudes toward sexual assault (3 items) and their attitudes toward interpersonal violence (4 items). The items assessing attitudes toward sexual assault include “Women ask to be sexually assaulted,” “A women can’t be assaulted against her will,” and “Women are curious about sexual assault.” The items assessing attitudes toward interpersonal violence include, “It is alright to beat someone up,” “Hitting another person is acceptable,” “It is alright to beat up another person if he started it,” and “It is sometimes necessary to fight.” Scores for each scale could range from 1 (Never) to 4 (Often).

*Social Isolation/Loneliness (Family and Peer).* This scale was designed to measure what Weiss (1973) refers to as social and emotional isolation, loneliness stemming from the frustration of needs for belongingness and social connectedness to primary groups, the absence of close friendships, or psychological deficits in these relationships. Past research has linked isolation and loneliness to a number of adolescent problems such as drug addiction, suicide, prostitution, alcoholism, sexual exhibitionism, and delinquency (see Elliott, et al., 1989). The Social/Loneliness scale used in this research is a ten-item scale with items reflecting received isolation from one’s family and peers, and general feelings of loneliness in each of these social contexts. Sample items include, “I feel like an outsider with my family,” “I don’t feel that I fit in well with my friends,” “I feel close to my friends.” Separate scales are examined for family and for peers, and scores for each item could range from 1 (Strongly disagree) to 5 (Strongly agree).

*Labeling/Emotional Problems (Family and Peer).* The emotional problems scale is a sixteen-item subscale from a modified version of the Klein, et al. (1978) Negative-Labeling scale. The items in the general scale are descriptive phrases (e.g., have a lot of personal problems, do things that are against the law, are often upset) and respondents were asked how much they think parents and peers would agree or disagree with each of these descriptions of them. Four item scales measured two constructs each for family and peers. The constructs measured were bad (e.g., delinquent, unruly) and sick (e.g., emotional problems). This scale reflects the degree to which respondents perceive that parents and peers view them as having emotional problems. It is a measure of *perceived* labeling by parents and peers as a person with emotional problems. It is not a direct measure of self-reported emotional problems. In past work with the NYS, this scale has been found to be highly related to social isolation, and because of this, the social isolation measures were no longer used after the fifth wave of data collection (Elliott, et al., 1989). These items were asked in all nine waves of data collection.

*Problem Alcohol Use.* Beginning in Wave 3, a scale measuring problem use of alcohol was obtained. This measure was patterned after the problem use of alcohol measure developed initially by Cahalan (1970) and modified by Jessor and Jessor (1977). These scales involved six items, reflecting negative consequences of alcohol use. The general form of the questions was: “How many times in the last year have you had problems with your family because of your use of alcohol?” Different life areas were reflected in each item (friends/spouse/girlfriend/boyfriend, physical fights, physical health, arrests by police). Responses ranged from “never” to “more than six times” and only respondents reporting some alcohol or drug use were asked these questions.

*First Sexual Experience.* Beginning in Wave 6, respondents were asked to report the age at which they first began to engage in sexual intercourse. Responses from all of the waves were examined, and the age the youth acknowledged as their initial experience was identified as the age of onset for sexual intercourse. Onset ranged from age 4 to age 27. Respondents were asked to report

whether their first sexual intercourse experience was forced or voluntary, and this was recorded as a dichotomous variable.

## Results

This section is organized by the six clusters of questions to be addressed through analysis of National Youth Survey data. Section 1 addresses the age of onset for sexual assaulters, levels of participation in sexual assault at each age and the cumulative proportion reporting one or more offenses by age over the life course. Section 2 focuses on hands-off offenses and the degree to which they overlap with hands-on offenses. Section 3 examines the degree to which the reported sexual offenses resulted in arrests. Section 4 examines recidivism rates, the average amount of time between offenders' first and second reported offenses, and the average length of time between subsequent offenses. Section 5 presents a survival analysis (time to suspension of offending) and estimates of the length of offenders' careers. These are compared to hands-off offenses and other criminal offenses. Section 6 addresses offending patterns during sexual assaulters' careers; specifically, the degree to which sexual offending is embedded in other criminal offenses. Finally, Section 7 examines risk factors for subsequent involvement in sexual assault.

### ***Section One: Cumulative Prevalence Rates, Age of Onset, and Age-Specific Prevalence Rates***

The first question to address is what percentage of the sample self-reported engaging in sexual assault and serious sexual assault. Results (shown in Table 2) indicate that overall, 5.7% ( $n=90$ ) of the NYS sample reported perpetrating any sexual assault, and 2.4% of the sample ( $n=41$ ) reported perpetrating a serious sexual assault. As shown in Table 3, these offenders were disproportionately males with 8.8% of males reporting a sexual assault and 4.0% reporting a serious sexual assault. These respective rates for females were 1.1% and 0.5%. Thus 90.0% of those reporting any sexual assault and 90.2% of those reporting a serious sexual assault were men. Table 4 shows the percentages of males, by ethnicity, who reported committing a sexual assault or a serious

sexual assault. Specifically, of white males, 8.9% reported committing any sexual assault, and 3.1% reported committing a serious sexual assault. Prevalence rates for African American males were higher with 13.3% reporting any sexual assault, and 8.6% a serious sexual assault. Finally, of males of all other ethnicities combined<sup>9</sup>, 11.4% reported committing any sexual assault, and 3.8% reported a serious sexual assault. Finally, Table 5 shows sexual offending varies by social class. Nearly 13 percent (12.8%) of lower class males reported committing a sexual assault and 5.6% reported committing a serious sexual assault; while working- and middle-class males reported prevalence rates similar to each other, each approximately half of the prevalence rates reported by lower class males.

Next, onset of sexual assault and serious sexual assault were examined. Individuals' responses were examined to determine the first wave in which they reported engaging in sexually assaultive behavior or serious sexually assaultive behavior. Additionally, respondents were asked a single retrospective question during Wave 7 in which they were asked to report the earliest age in which they engaged in sexually assaultive behaviors. These data were used to create Figure 1, which shows the hazard rates for age of onset of sexual assault.<sup>10</sup> That is, the area under the curve represents the total number of sexual assaulters, and the height of the curve indicates the percentage of the NYS sample that began offending at the indicated age.<sup>11</sup> Because the youngest respondents were aged 11 in the first wave of the study, we used ages 11 or earlier as the initial age of onset interval in Figure 1. The hazard rate shows a clear increase in onset from age 11, peaking at age 16, and then decreasing to age 26. By the time the respondents in the sample reached age 20, most (88%) of those who were going to become sexual assaulters during the study had already done so.

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<sup>9</sup> All other ethnicities were combined due in part to smaller percentages in the sample and a much smaller total number of sexual offenders.

<sup>10</sup> The earliest onset date from these two sources was used as the age of onset in Figure 1.

<sup>11</sup> Due to the relatively low level of occurrence of sexual assault in a representative sample, three year running averages were used to create Figures 1 through 4 in order to provide a smoother curve.

After age 25, the hazard rate is close to zero, at least to age 33. The majority of sexual assaulters (70%) initiated their sexual offending in adolescence (prior to age 18).

Figure 2 shows the same hazard rate computed only for the males in the sample, as they represented approximately 90% of the sexual offenders. The pattern for males is similar to the whole sample, but is somewhat more dramatic, with a much higher rate in the peak year and a much steeper decline in the late teens. By age 17, 72 percent of males ever involved in a sexual assault had initiated this behavior. Figure 3 shows the hazard rate for the onset of serious sexual assaulters, and Figure 4 shows the hazard rate for male serious sexual assaulters. The onset pattern for serious sexual assaulters appears to be quite different from the pattern for sexual assaulters generally. Specifically, the age of onset curve does not show the steep upward trend from age 11 to 16, but instead shows a relatively high and constant level from 11 to 20, with the decline not starting until after age 20. The onset rate for serious sexual assault is essentially constant over the adolescent years and does not decline until the early 20's. The proportion of serious sexual assaulters (total and males) who initiated their sexual assaults prior to age 18 (60%) is also smaller than for sexual assaulters generally.

Finally, age-specific prevalence rates were computed. Figures 5 through 12 show the number of NYS participants who reported committing a sexual assault or a serious sexual assault for each age in which subjects participated in the study. Because there were a smaller number of participants providing age-specific estimates for the earliest and oldest ages, those aged 11 and 12 were combined into one group, and those aged 31 to 33 were combined into another group. Figure 5 shows the age-specific prevalence rates for sexual assault for the total sample, and Figures 6 through 8 break down the rates by sex, and then for males by ethnicity and by social class. Figures 9 through 12 show the same results for serious sexual assaulters. The rates portrayed in the figures show the percentages of the specific subpopulations who reported sexually offending at specific ages.

In general, the age-specific prevalence of sexual assault between 11 and 17 is close to 1 percent (from 0.6 to 1.6). It drops to approximately 0.5 percent at each age between 17 and 24, and again to about 0.2 from ages 25 to 31. This pattern is not as clear for males only, but again, there is a general declining trend with age. Age-specific prevalence rates for African American males were substantially higher than those for white males, and while the rates for whites appeared to decline after age 17, those for African Americans tended to be more consistent across the life course from early adolescence through the 30s. There is thus evidence for a greater continuity in sexual assault into the adult years for African Americans than whites. Age-specific prevalence rates were also generally higher for lower class than working or middle class males, and there was more adolescent to adult continuity of sexual offending for lower-class males.

### ***Section Two: Hands-Off Offenses Compared to Hands-On Offense***

First, cumulative prevalence rates were computed for hands-off offenders in the NYS; specifically, exhibitionists, voyeurs, and obscene telephone callers. Prevalence rates could be computed cumulatively for all nine waves of the NYS for those who reported making obscene phone calls, but prevalence rates could be computed only for waves six through eight for exhibitionism and voyeurism. Those who reported engaging at least once in any of the three examined hands-off offenses are reported in Table 6. Overall, 23% of the sample reported making obscene phone calls in Waves 1 through 9, 4% reported engaging in voyeurism in Waves 6 through 9, and 2.5% reported engaging in exhibitionism in Waves 6 through 9. In all, 7.7% of the sample reported engaging in at least one of the three hands-off offenses in Waves 6 through 9. Finally, a high proportion (75%) of respondents report using pornography at some time.

Table 7 describes the hands-off offenses by sex. For both males and females, about one out of every four reported making an obscene phone call. The prevalence of voyeurism is substantially lower but higher for males (6.5%) than females (1.3%). Prevalence rates for exhibitionism are even lower for males (3.4%), but the female rate of exhibitionism (1.5%) is similar to that for female

voyeurism. Except for obscene phone calls, these hands off offenses are reported predominantly by males. Use of pornography is also predominantly a male activity with nearly 87% of males compared to 63% of females involved in this behavior.

Tables 8 and 9 describe the cumulative prevalence of hands-off offending by ethnicity and by social class. There were no substantive differences in the ever prevalence of obscene phone calls or exhibitionism by race/ethnicity or social class.<sup>12</sup> There were both race/ethnic and class differences in rates of voyeurism with lower-class and minority group members reporting higher rates than non-Hispanic whites. Overall, there were slightly lower prevalence rates for these hands off sexual offenses for middle-class and Non-Hispanic white youth. In contrast, pornography use was slightly lower for Latino and lower-class youth.

Next, the overlap between hands-off offenses and hands-on offenses was examined. Tables 10a, 10b, 11a, and 11b show this overlap for serious sexual offenders and for any sexual offenders. It is important to note that sexual offenses, serious sexual offenses, and obscene phone calls were reported by offenders in Waves 1 through 9, while exhibitionists and voyeurs were only identified in Waves 6 through 9. This analysis reveals that hands-off offenders were more likely (Odds-Ratios from 3 to 9) to be sexual assaulters or serious sexual assaulters than those with no hands-off offenses. At the same time, it is also the case that most hands off offenders were not sexual assault offenders. Though this analysis is not longitudinal and therefore cannot be used for prediction, these results are consistent with past work that indicates sexual assault offenders frequently report earlier engagement in paraphiliac behavior, but also that it is relatively uncommon for hands-off offenders to also engage in hands-on offenses. The data on the use of pornography indicates that this behavior was very common and rarely escalated into sexual assaults. This said, pornography users were at elevated risk (Odds-Ratio =2.95) for involvement in a sexual assault and a serious sexual assault (OR=2.39).

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<sup>12</sup> The numbers of Latinos and other ethnic minorities is quite small and there were design effect problems for our Latino sample. For these reasons these estimates may not be reliable should be viewed with caution

Next, a prospective case study analysis was conducted of hands-on and hands-off offenders. First, those who were in the two youngest age groups in the first year of the study were identified, as this was the only group that would be under age 20<sup>13</sup> at the beginning of Wave 6, which is when hands-off offenses began to be assessed. Next, of those under age 20 at the beginning of Wave 6, only those who had never committed a hands-on offense prior to that point were selected. Finally, the remaining group was further narrowed to include only those who either committed a hands-off offense before age 20 or who had committed their first sexual assault or serious sexual assault after age 20. With this group, the question of whether or not hands-off offenses preceded hands-on offenses could be examined. Results of this analysis indicate that of the six sexual assaulters with onset after age 20, none reported exhibitionistic behavior, one reported voyeurism, and four reported making obscene phone calls before age 20. Further, neither of the two exhibitionists, one of six voyeurs, and four of seven obscene telephone callers reported later onset of sexual assault. Though this is a very small case study example, these results indicate that about a third of hands off offenders subsequently initiated a sexual assault.

### ***Section Three: Probability of Arrest***

Because NYS respondents were not specifically asked whether or not they were arrested for the sexual assaults they reported, it was not possible to precisely examine the probability that respondents were arrested for each of their specific reported offenses. However, in 1990, NYS staff collected arrest information for all of the NYS respondents. As a proxy for examining arrest probabilities for each specific reported offense, we calculated an overall probability of arrest, i.e., the number of times respondents in the study were arrested for a sexual assault between 1976 and 1989, divided by the number of sexual assaults they reported during that period. Tables 12 and 13 provide this information for sexual assaults and serious sexual assaults. For comparison purposes, Tables 12

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<sup>13</sup> Recall that in earlier analyses, it was shown that most sexual and serious sexual assaulters had begun assaulting by age 20.

and 13 also provide the same arrest per self-reported offense estimate for robbery and aggravated assault. These arrest probabilities are also presented for sex and ethnic/racial groups. Overall, results indicated that 2.5% of self reported sexual assaults resulted in an arrest, compared to 1.9% of robberies and 2.8% of aggravated assaults. In contrast, 10% of serious sexual assaults, 16.7% of serious robberies, and 3.5% of serious aggravated assaults resulted in an arrest. The females in the sample were rarely arrested, despite reporting committing all three types of offenses. African Americans had substantially higher risks of arrest for all of these offenses, with the differentials being particularly high for robbery. The probability of arrest was clearly linked to the seriousness of the offense and was higher for sexual assault and robbery than aggravated assault. But the overall probability of arrest for *any* of these offenses was quite low.

Additional types of offenses were examined as well. These arrest rates are presented in Table 14. Arrests for “Other Sexual Offenses”<sup>14</sup> account for 0.9% of these self reported behaviors. Felonies were also examined; these included felony theft and felony assault (which did include sexual assault). Only 4.5% of these reported felony offenses resulted in arrest. Less than one percent (0.6%) of misdemeanors, which included minor theft, minor assault, illegal services (which includes mostly drug offenses), damage to property, fraud, and public disorder, resulted in arrest.

Results of these data comparisons provide further evidence that samples drawn entirely from sexual offenders who are in contact with the judicial or mental health systems represent a very small percentage of those who are actually committing these offenses.

#### ***Section Four: Time between First and Second Offense***

Before the time between sexual assaulters’ and serious sexual assaulters’ first and second reported offenses could be examined, it was necessary to determine how many offenders did and did not report committing at least one sexual assault after their first assault – a general recidivism rate. Of serious sexual assaulters ( $n=41$ ) 78 percent were recidivists, e.g., reported committing one or

more additional serious sexual assaults. Fifty-eight percent of sexual assaulters ( $n=79$ ) were recidivists (for any sexual assault). These are relatively high recidivism rates, given that they involve repeated sexual offenses of the same type. Recidivism based on a repeated offense of *any* type is close to 100 percent (99%).

Next, the time between initial and subsequent sexual assaults and serious sexual assaults was estimated. If a respondent reported committing multiple assaults in a single year, then the time between each of those assaults was coded “0.” In all other cases, the time between assaults was coded by number of years and ranged from 1 to 13. Table 15 shows the average amount of time between serious sexual assaulters’ first and second reported sexual assault and the minimum and maximum period between offenses. The period between the first and second serious sexual assault ranged from zero to six years with an average of 0.47 years. The period between all other pairs of consecutive serious sexual assaults ranges from zero to thirteen years with an average of 0.81 years. Table 17 provides the same information for sexual assaulters. The average amount of time between the first and second sexual assault was 0.70 years with a range of zero to ten years, and the average amount of time between all other pairs of sexual assaults was 0.66 years with a range of zero to 13 years. Since these average times were all less than 1 year, this means that a substantial number of consecutive sexual assaults occurred in the same year. But it is also true that the interval between sexual assaults for some offenders was sometimes very long, as long as 13 years.

Additionally, the rate of offending<sup>15</sup> was compared for those whose onset of sexual assault was prior to age 18 and those aged 18 and older, and results are presented in Tables 16 and 18. Results indicated that serious sexual assaulters who reported beginning their serious sexual offending careers before age 18 reported committing an average of 2.89 offenses per year, compared with the 1.43 serious sexual offenses per year reported by those serious sexual assaulters who reported

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<sup>14</sup> We currently are confirming that this variable includes only Hands-Off Sexual Offenses.

<sup>15</sup> The rate of offending is the average number of offenses per year following onset.

beginning their sexual offending careers at age 18 or later. Similarly, those sexual assaulters who reported beginning their sexual assaulting careers before age 18 reported an average of 1.99 sexual assaults per year during their sexual assaulting careers, compared to the 1.63 sexual assaults per year reported by those beginning their sexual offending careers at age 18 or later. These data confirm that the earlier the onset of a sexual assault career, the higher the average offending rate.

***Section Five: Length of Sexual Assaulters' and Serious Sexual Assaulters' Careers***

Sexual Assaulters' and Serious Sexual Assaulters' responses over the 18 years of data collection were examined to determine the number of years between their first and last reported offense. We refer to this period as the length of the offender's career. It is estimated here from an offender survival curve. Figure 13 shows the survival curve for serious sexual assaulters, Figure 14 shows this same information but with the distinction between those whose first reported serious sexual assault occurred before age 18 and those whose first reported serious sexual assault occurred after age 18. Figures 15 and 16 provide this same information for those who reported committing any sexual assault.

Overall, results indicated that serious sexual assaulters' career length ranged from 1 to 17 years, with an average of 2.54 years. Sexual assaulters' career length also ranged from 1 to 17 years, with an average of 2.19 years. It is important to note that the range of years is artificially limited to 17 years because of right-hand censoring in the data. That is the maximum period of time covered by the study. There were assaulters who reported offenses in the final year of data collection, and whose careers may well extend beyond this last year of data collection.

The continuity of offending from the adolescent into the adult years was also examined. Ten percent of Sexual Assaulters initiating their sexual assaults prior to age 21, continued offending into the adult years; for Serious Sexual Assaulters, 17 percent continued into the adult years. Consistent with the earlier analyses that indicated a more sustained involvement in sexual assaults between 16 and 20

and longer average career lengths for Serious Sexual Assaulters, there was also greater continuity in offending among Serious Sexual Assaulters.

### ***Section Six: Offending Patterns during Sexual Offenders' Careers***

First, we examined the year by year individual-level frequencies of sexual assaults and serious sexual assaults. In addition, we examined each sexual offender's reports of exhibitionism, voyeurism, obscene telephone calls, minor delinquency, felony assault (including sexual assault), and felony theft. This individual level analysis of offending patterns provides clear evidence that sexual assaulters' patterns of offending included a wide range of persons and predatory crimes, not just paraphiliac behaviors. On average, sexual assaulters reported 0.34 exhibitionisms, 2.22 voyeurisms<sup>17</sup>, 7.37 obscene phone calls, 400.05 minor delinquencies, 16.06 felony assaults (including sexual assaults), and 13.94 felony thefts each. Nearly 80 percent of sexual assaulters reported one or more felony thefts. Their sexual assaults were clearly embedded in very serious criminal lifestyles. Serious sexual assaulters were slightly more heavily involved in traditional criminal behaviors, with an average of 434.93 minor delinquencies, 18.68 felony assaults, and 12.17 felony thefts. But their reported involvement in the hands off sexual offenses was slightly lower than that of sexual assaulters in general.

Next, the follow-up questions that were asked of all respondents who provided a non-zero response to the sexual assault questions in Waves 6 through 9 were examined. Table 19 provides results from this analysis. Specifically, of 78 sexual assaults about which respondents were queried, one third reported that they actually succeeded in forcing sexual penetration, while two thirds reported that they tried but did not succeed. Most respondents reported using only verbal threats, though a substantial number reported using mild roughness and "other" (unknown) means. Most

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<sup>17</sup> This mean is based on setting the maximum number of reported voyeurisms to 100 for purposes of calculating a mean. One respondent's report was clearly out of this range.

respondents reported that they did not hurt the victim, though three reported leaving the victim bruised. Most (97.4%) reported that they were the only perpetrator; only two respondents reported additional perpetrators were involved in the assault. More than half reported drinking alcohol before committing the sexual assault, and one fifth reported using drugs. Finally, the respondents reported a variety of relationships with the victims, including stranger, acquaintance, friend, and boyfriend/girlfriend, with nearly half from the latter two categories, i.e., they were well known to the perpetrator.

### ***Section Seven: Predicting the Onset of Sexual Assault Offending***

Finally, we examined a set of behavioral and attitudinal variables which have been identified or suggested in theory and prior research as predictors of sexual assault and/or violence more generally (Elliott, 1994; Lipsey and Derzon, 1998; Hawkins et al., 1998; Widom and Ames, 1994; Weinrott, 1996; Araji, 2000). These include: (1) Aggravated assault; (2) Gang fights; (3) Exposure to delinquent peers; (4) Early onset of sexual intercourse; (5) Sexual victimization; (6) Violent victimization (attacked with a weapon); (7) Nature of first sexual intercourse; (8) Attitudes toward deviance; (9) Attitudes toward interpersonal violence; (10) Attitudes toward sexual assault; (11) Normlessness (2 scales: family and peer); (12) Social Isolation (2 scales: family and peer); and (13) Labeling (4 scales: family-bad, family-sick, peer-bad, peer-sick). Two separate predictions of individual onset of sexual assault are presented. First, for all those who initiated a sexual assault after wave one, wave one attitudinal and attribute predictors and one-year retrospective behavioral predictors (victimization and delinquency) from wave two were utilized to predict onset. In this analysis, the temporal order of predictor and outcome measures was controlled and the time lag between measurement of the predictor and outcome ranged from less than one year to 16 years. Those individuals who initiated onset in wave one were excluded from this analysis.<sup>18</sup> Because the

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<sup>18</sup> A few respondents who indicated onset prior to wave one in the long-term retrospective question were also excluded.

time lag between wave-one attitudes, attributes and behavior was quite long for those initiating sexual assault after wave five, a second analysis used wave five predictors to predict the onset of sexual assault for those initiating this behavior after wave five. The number of onset cases was quite small for this analysis, but it provided a more proximate lag between the predictors and outcomes and a second prediction estimate. Only data from the main waves (i.e., not the retrospective years) were used as predictor measures, because none of the victimization nor attitudinal or social psychological variables were available for these intervening years.<sup>19</sup> Unless specified, all of the analyses were restricted to males in the sample.

A logistic regression analysis was conducted in which reported sexual assault (i.e., yes or no) was entered as the dependent variable. In the first analysis, presented in Table 20, the model  $R^2_L$  was .30, indicating that 30% of the variance in the ever prevalence of sexual assault after wave one could be explained by the combination of variables that were entered into the equation. The two strongest predictors were peer group measures – peer normlessness (a shared belief that there are no norms to regulate behavior or they don't apply to the group) and participating in gang fights. Two other variables were marginally significant predictors: Attitudes toward deviance and Family normlessness. Two separate models were examined in the second analysis on later onset. In the first model (Table 21), all respondents were included, both males and females, and some additional predictors available at wave five and later were employed as predictors. The level of explained variance in this model was .23 and there were two statistically significant predictors- perceived labeling as “bad” by one’s family and attitudes towards sexual assault. The second model (Table 22) was restricted to males and included only attitudes, perceptions and context variables. Statistically significant predictors in this model included two predictors identified in earlier models, Attitudes

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<sup>19</sup> Because the intervening years were not used, and because the sexual assault outcome variables were only used from Waves 3 through 9, quite a few sexual assaulters were eliminated from the analyses. The resulting sample was too small to use the serious sexual assault variable as an outcome variable, and thus only prevalence of any sexual assault was used as the outcome variable.

Toward Sexual Assault and Attitudes Toward Deviance. Social Isolation was also marginally significant in this analysis. The level of explained variance in this model was .54. However, some caution should be exercised in interpreting these last two models as the number of onset cases after wave five was quite small and the models were highly sensitive to the particular variables included in the model. Still, there was some consistency in these models predicting onset. Individual attitudes toward deviance or sexual assault (when available) did predict later onset of sexual assault, even when the time interval to onset was quite long. The normative context in both the family and peer contexts was also a significant predictor of ever prevalence of sexual assault. While the predictive power of the wave one model was modest, it should be remembered that it was predicting an outcome that may not occur for many years.

## Discussion

### **Sexual Violence Compared To Other Forms of Serious Violence**

To what extent does involvement in sexual assault look like involvement in other forms of serious violent behavior, such as aggravated assault and robbery, and to what extent does it appear different? The findings suggest a number of similarities. First, it is clear that sexual assaults like aggravated assaults and robberies are embedded in a criminal lifestyle; those committing these offenses were typically involved in many other criminal offenses with relatively high offending rates. On average, serious sexual assaulters in this study reported over 400 crimes each, including nearly 20 non-sexual felony assaults and 12 felony thefts. There is little evidence that rapists *specialize* in this behavior; it was part of a general pattern of violent behavior. Second, as with serious violent offenses generally, the onset of this form of serious violence typically occurred during adolescence and the shape of the age-specific hazard curve for any sexual assault looked quite similar to that for other serious violent offenses. Third, the relationship between early onset and rate of offending was also

similar for serious violent offenses generally and sexual offenses specifically – those with an early onset tended to have higher rates of offending and longer offending careers. Fourth, for both sexual assaults and aggravated assaults/robberies, a majority of offenses occurred while the perpetrators were adolescents. At least half of the reported sexual assaults in this study occurred while the perpetrators were adolescents. Fifth, violent offenders were predominantly males; the sex ratio was higher for sexual assaults than aggravated assaults and robberies, but this ratio was high for all of these offenses. Sixth, the probabilities of arrest for sexual assault and the other forms of serious violent behavior were quite similar – they were all very low- 10 percent or less (Elliott, 2000). Finally, alcohol and drugs appeared to be implicated in about the same proportion of sexual assault and other violent offenses and both sexual assaults and non-sexual aggravated assaults involved predominantly friends, acquaintances and family members as victims. Overall, the similarities between sexual and other forms of serious violent assaults were substantial

There are also important differences between sexual assault and other forms of serious violent behavior. First, several findings suggested a greater continuity for serious sexual assault offending than for other forms of violent behavior. The maturation effect (the point at which new onset of this type of offense drops off dramatically) was significantly later for serious sexual assaults than for aggravated assaults, robberies or any sexual assault generally. While the hazard rate for these other forms of violence or any sexual assault began to drop dramatically after age 16 or 17, the decline for serious sexual assaults did not begin until age 21. Moreover, the age-specific prevalence rates for lower-class and minority offenders did not decline substantially after age 17 as they did for violent offenders (see Elliott, 1994). These rates, for both serious and any sexual offending, remained quite high across the entire study period (see Figures 7, 8, 11 and 12). Next, the career length for sexual assault offenders was, on average, substantially longer than for violent offenders generally. Elliott et al., (1987) reported an average career length of 1.6 years for violent offenders compared to the 2.5 years for serious sexual offenders and 2.2 years for any sexual assault offenders reported

earlier. The longer careers finding was linked to a substantially greater minority and lower social class representation among sexual assault offenders as compared to violent offenders, and the finding that lower class and minority group offenders had substantially longer sexual offending careers. Finally, the recidivism rate was higher for sexual assault offenders than aggravated assault or robbery offenders (see Elliott, 1995, 2000). Taken together, these findings indicated a substantially greater continuity in sexual assault offending than other forms of serious violent behavior.

There is one important qualification to this claim. The continuity in sexual assault offending was primarily a longer period of involvement during the late adolescent years, up to age 21. The continuity from adolescence into the adult years (after age 21) was actually lower than that reported for serious violent offenders (29% - see Elliott, 2000). Eleven percent of those initiating any sexual assault prior to age 21 continued their offending into their adult years and 17% of those initiating serious sexual assaults during adolescence continued into adulthood. It was also partly a longer period of involvement for those initiating sexual offending after age 21. There was virtually no new onset of other forms of serious violence after age 21, but there was a substantial new onset of sexual offending in the adult years. Still, sexual offenders did report longer careers than other violent offenders.

There is another difference in sexual assault as compared to other forms of violence. Sexual assaults were much more likely to involve solo perpetrators. Over 97 percent of sexual assaults reported involved single perpetrators (for comparable co-offending rates for other offenses see Warr, 2002, Reiss, 1986 and Erickson and Jensen, 1977).

### **Findings Compared to Earlier Studies**

Overall, results of the present study are consistent with prior work in some respects but not others. Consistent with other studies, ever prevalence of sexual assault through age 33 was

quite low - about 6 percent for any reported sexual assault and under three percent for those considered serious sexual assaulters. Over 90 percent of perpetrators were males. Perpetrators were also disproportionately from lower socioeconomic class and minority groups. The peak year of onset for any sexual assault was age 16, similar to that reported earlier by Green (1999). Consistent with earlier findings, those with an early onset of sexual assault behavior had higher annual and career offending rates than those with a later onset. Sexual assaulters were more likely to have used pornography than non-offenders, as reported earlier by Ford and Linney (1995). However, the predictive utility of this finding is limited since the vast majority of all youth reported some pornography use and the correlation between use and sexual violence was quite small.

Our findings also support, at least indirectly, the claim that most sexual assault offenders had committed at least one prior sexual assault at the point they were arrested for a sexual assault (Fehrenbach et al., 1986). The five percent of sexual assaulters who were arrested during the study period all had multiple self-reported assaults, but we did not determine for which offense they were arrested. But 95 percent of all sexual assaulters had yet to be arrested, and for each of them, any arrest would be subsequent to a reported sexual assault.

Finally, most reported sexual assaults *as described by the perpetrators* failed to achieve penetration, involved mild forms of physical force that did not hurt or injure the victim, were solo assaults (did not involve accomplices), involved alcohol use prior to the assault, and involved family or acquaintances as victims - all findings consistent with earlier studies of sexual assault offenders. Sexual assaulters also tended to be more isolated and lonely than other youth (Fisher, 1999; Seidman et al., 1994)

There are also some findings that are substantially different from those reported earlier. In many cases the differences can be attributed to differences in study design, i.e., a prospective, national representative general population with over 20 years of follow-up compared to clinical or incarcerated samples with short follow-ups or long-term retrospective recall.

Recidivism rates for sexual assaulters (58%) and serious sexual assaulters (78%) were substantially higher in this study, by a factor of 2 to 6, than those reported earlier (Furby et al., 1989; Hanson and Bussiere, 1998; Davis and Leitenberg, 1987). This was also true for recidivism rates for any type of subsequent offense. Burton (2000) reported that 46 percent of sexual assaulters initiated this behavior prior to age 12. Our data do not suggest such a high rate of early onset; less than 14 percent of either group of sexual assaulters initiated sexual offending before age 12. The FBI (1981) estimates that about 20 percent of reported forcible rapes involve adolescent perpetrators. Our estimate suggests a much higher proportion of self-reported sexual assaults/rapes involve adolescent offenders. This could reflect a lower law enforcement reporting rate by victims of adolescent perpetrators or differences in the definitions of sexual assault as used in this study and rape as defined in legal statutes and reported to the FBI.

### **Other Findings**

Obscene phone calls were the most prevalent hands off offense in this national sample of young persons. Nearly one in four reported this type of behavior over the study period. Slightly under 10 percent reported engaging in voyeurism and less than three percent reported exhibitionism. Lower socioeconomic status persons and white males were disproportionately involved in these offenses. While involvement in hands off offenses did increase the risk for a sexual assault by a factor of 3 to 7, most persons involved in hands off offenses did not report any sexual assaults. The relationship between hands off offending and sexual assault offending is

thus asymmetrical: many of those involved in sexual assault are using or have used pornography, but relatively few of those using pornography are also involved in sexual assaults. As a result the predictive value of pornography use as a risk factor for sexual assault is quite limited.

Given the low base rate of sexual assault in this representative national sample, our success in predicting sexual assault behavior was relatively good. The initial analysis demonstrated that information collected at the beginning of the study accounted for about thirty percent of the variance in subsequent onset of sexual assault over the next 16 years. The strongest predictors in this lagged analysis were peer and family normlessness, involvement in gang fights, and tolerant attitudes towards deviant behavior.

### **Study Limitations**

As is often the case in research, this study has some important limitations that must be taken into account in interpreting our findings. We believe that the use of self-reported involvement in sexual assaults provides a new source of data that has many advantages over the use of official arrest or conviction records. It is well established that a relatively small percentage of rapes and sexual assaults are reported to the police and official record studies; in this study 90 percent of persons reporting one or more serious sexual assaults were never arrested for a sexual assault. Self report data capture a much larger portion of the actual rapes and sexual assaults actually occurring in the general population. It has also been demonstrated that the seriousness of self-reported violent acts is comparable to that of offenses included in arrest records (Elliott, 1994). That said, it must also be noted that we believe self reports of serious sexual assaults are under reported. How much is not clear. This is a problem for all self reports, both offender reports such as those used in this study and victimization reports like those used in the National

Crime Victimization Survey. We thus view our estimates of the prevalence of sexual offending as conservative estimates at best and it is possible they involve more substantial underestimates. If it were the case that the under reporting was substantial and a result of selective reporting, the generalization of the findings presented here would be problematic. However, neither of these two parameters has yet been established.

It is also true that in several of the analyses presented the number of cases is quite small and this reduces our confidence in these findings. These findings should be considered tentative. Because serious sexual assaults are relatively rare in the American youth population, very large sample sizes would be required to generate sufficient samples of sexual assaulters for more robust analyses. Still, sample sizes are sufficient for most of the analyses presented, and it is our belief that future research will benefit from general population studies with both self-report and official measures of serious sexual offending such as the National Youth Survey. Unfortunately, relatively few general population studies include both types of offending measures and relatively few even include sexual offending in the set of criminal acts being investigated.

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Endnotes

<sup>i</sup> Annual involvement in delinquent behavior and specific problem behaviors was self-reported by respondents in confidential, personal (face to face) interviews. There was one exception to this, as the final wave reported in this study was collected via confidential interviews over the

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telephone. With the exception of the ninth wave of data collection, in most instances, these interviews occurred in the respondent's home. If the situation at home was such that privacy could not be guaranteed, arrangements were made to conduct the interview in some other setting where privacy was assured. Respondents were guaranteed that any information they provided in the interview was confidential and could not be released to any person or agency without their written consent. All data collected were protected by a Privacy Certification from the U. S. Department of Justice or a Certificate of Confidentiality from the U.S. Department of Health and Human Services (Elliott, Huizinga, & Menard, 1989).