



Special Article

THE NATURE AND DYNAMICS OF SEXUAL HOMICIDE: AN INTEGRATIVE REVIEW

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ABSTRACT. *The author reviews the definitions, epidemiology, evolving research, offender, and offense characteristics of sexual homicide, a form of intentional killing that occurs in less than 1% of homicides in the United States. Although the extant research is limited by very few comparative studies, repetitive use of small, nonrandom samples, retrospective data, no prospective studies, and the absence of any predictive statistical analyses, the yield over the past 100 years is impressive. The author advances a clinical typology of sexual murderers. The first group of compulsive sexual murderers leaves behind organized crime scenes and are usually diagnosed with sexual sadism and antisocial/narcissistic personality disorders. They are chronically emotionally detached, often primary psychopaths, are autonomically hyporeactive, and the majority experience no early trauma. The second group of catathymic sexual murderers leave behind disorganized crime scenes and are usually diagnosed with a mood disorder and various personality disorders that may include schizoid and avoidant traits. They are hungry for attachment, only moderately psychopathic, are autonomically hyperreactive, and have a history of physical and/or sexual trauma. © 1999 Elsevier Science Ltd. All rights reserved.*

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INTRODUCTION

THE WISH TO KILL the object of one's sexual desire is peculiarly understandable, especially for males of our species. Shakespeare understood this when he wrote, "One sin, I know, another doth provoke; murder's as near to lust as flame to smoke" (*Pericles* I, I). T. S. Eliot echoed this hidden desire in his poem, "Sweeney Agonistes":

I knew a man once did a girl in
 Any man might do a girl in
 Any man has to, needs to, wants to
 Once in a lifetime, do a girl in.
 (Eliot, 1963)

And an anonymous person, presumably a young man, captured the feelings of sexualized devaluation and affectional yearning, laced with a certain maternal awareness, when he scrawled on a Los Angeles public bathroom wall:

All women are whores
 (except for my mom)

The *act* of intentionally killing the object of one's sexual desire, however, is a relatively rare event in our species, perhaps a testament to the strength of male inhibition. Our understanding of this most extreme form of sexual aggression remains limited, yet promising, after more than a century of scientific scrutiny by a handful of physicians, psychiatrists, psychologists, and criminologists.

DEFINITIONS

Sexual homicide is the intentional killing of a person during which there is sexual behavior by the perpetrator. This definition closely parallels others, such as the one used by Douglas, Burgess, Burgess, and Ressler (1992)—“sexual homicide involves a sexual element (activity) as the basis for the sequence of acts leading to death” (p. 123)—and contains a number of components that are critical to capturing the domain of sexually homicidal acts. First, homicide, or “intentional killing,” has several legal meanings, and could range from murder to voluntary manslaughter, each specific crime having a number of legal elements necessary to prove it beyond a reasonable doubt. For our purposes, the range of possible criminal charges underscores the variety of thoughts and emotions that could accompany such an act: from careful planning of the sexual homicide days or weeks before the event (often charged as first degree or aggravated murder), to an impulsive, rageful killing during a sexual encounter, perhaps precipitated by the victim's rebuff and alcohol intoxication of the perpetrator (sometimes charged as a degree of manslaughter). Each sexual killing holds within it facts, independent of assumptions, that the forensic investigator uses to discern the internal dynamics and motivations of the perpetrator.

Second, “during which there is sexual behavior” is sufficiently ambiguous to capture the variety of time frames and sexual acts that may be evident in any one case: When did the sexual activity occur, especially in relation to the killing and death of the victim, and what was the nature of the activity? Sexual behavior might occur before, during, or after the killing, or throughout the event; and the behavior could range from only conscious fantasy, to physiological arousal, to masturbation, or actual penetration (oral, anal, or vaginal) of the victim with a variety of objects, animate or inanimate. Sexual behavior also may be symbolically expressed, often suffused with anger and curiosity, through mutilation of the victim's genitals.

We have operationalized sexual behavior in our research subjects (Gacono & Meloy, 1994; Gacono, Meloy, & Bridges, in press; Meloy, Gacono, & Kenney, 1994) when there is either (a) physical evidence of sexual activity in close temporal or physical proximity to the crime or crime victim; or (b) a legally admissible statement by the perpetrator of sexual activity.

TABLE 1. Sex-Related Murders as Proportion of Murders in United States, 1991–1995

	1991	1992	1993	1994	1995
Rape	132	138	115	78	79
Other sex	47	34	28	41	30
Prostitution	20	32	18	14	9
Total	199	204	161	133	118
Total murders	21,676	22,716	23,180	22,084	20,043
Percent Sex-related	0.91	0.89	0.69	0.60	0.58

Data from *Uniform Crime Reports*, by the Federal Bureau of Investigation, 1996, Washington, DC: Department of Justice.

EPIDEMIOLOGY

The base rate for sexual homicide is unknown. The Federal Bureau of Investigation's (1996) *Uniform Crime Reports* does not collect and publish such data, and to my knowledge, no other statewide or national database exists. There is also no official estimate from the Behavioral Sciences Unit of the Federal Bureau of Investigation (FBI), despite published hearsay, on the number of serial murderers (the majority of whom are likely to be sexual murderers; see Geberth & Turco, 1997) currently at large in the United States (A. J. Pinizzotto, personal communication, January, 1998).

There is a method, however, by which we can estimate sexual homicides as a proportion of homicides in the United States. Table 1 lists data on total homicides between 1991 and 1995, and reported homicides that are categorized as rape, other sex, or prostitution. As noted, the sum of these homicides, which *may* be sexual homicides, typically represent less than 1.0% of homicides reported by law enforcement throughout the United States each year. Despite the temporal reliability of these proportional frequencies, these numbers should be considered both a gross estimate and a likely underrepresentation of the incidence of sexual homicide each year due to confounding variables in reporting such data to the FBI.

EARLY RESEARCH

The first scientific study of sexual homicide was *Psychopathia Sexualis*, published in 1886 and authored by a German psychiatrist and physician, Richard von Krafft-Ebing, Professor of Psychiatry at the University of Vienna.¹ Appearing within several years of Britain's most notorious serial sexual homicide case, Jack the Ripper, this text remains historically significant because of the clinical detail used to describe a nonrandom sample of varieties of sexual homicide. Dr. von Krafft-Ebing wrote, for instance, of one of the crimes of a serial sexual murderer named Vincenz Verzeni:

On August 28, 1871, a married woman, Frigeni, aged twenty-eight, set out into the fields early in the morning. As she did not return by eight o'clock, her husband started out to fetch her. He found

¹ Although previous writers addressed sexual deviancy, von Krafft-Ebing's text was the most comprehensive collection of case histories to date. The book had 12 German editions, and was translated into seven languages. Freud referred to it in his *Three Contributions to the Theory of Sex* (1905/1953).

her corpse, lying naked in the field, with the mark of a thong, with which she had been strangled, around her neck, and with numerous wounds. The abdomen had been ripped open, and the intestines were hanging out. (von Krafft-Ebing, 1886/1965, p. 99)

He also quoted from Verzeni's confessions, actually first published by Cesar Lombroso, a noted Italian criminologist of the time, in his book, *Verzeni e Agnoletti*, 13 years earlier:

I had an unspeakable delight in strangling women, experiencing during the act erections and real sexual pleasure. It was even a pleasure only to smell female clothing. The feeling of pleasure while strangling them was much greater than that which I experienced while masturbating. (von Krafft-Ebing, 1886/1965, p. 101)

Relatively rare and sensational, these acts of sexual homicide, whether single or serial, became a focus of forensic and clinical interest over the next century. Scientific study has followed a predictable course: small clusterings of descriptive cases lead to certain theoretical formulations (De River, 1949; Gebhard et al., 1965; Groth, 1979; Guttmacher, 1951; Henderson, 1939; Hirschfeld, 1944; Karpman, 1954²; MacCulloch, Snowden, Wood, & Mills, 1983; Macdonald, 1961; Meloy, 1988; Stekel, 1929; Revitch, 1965); which are, in turn, superseded by nonrandom descriptive studies (both clinical and archival) of larger samples (Dietz, Hazelwood, & Warren, 1990; Geberth & Turco, 1997; Hickey, 1991; Holmes & DeBurger, 1988; Myers & Blashfield, 1997). Then comparative studies of nonrandom samples of sexual homicide cases are published, usually focusing on intragroup and intergroup similarities and differences in relation to other paraphilias, personality disorders, or homicides, in a search for sensitivity, specificity, and hopefully, prediction (Gratzer & Bradford, 1995; Grubin, 1994; Langevin, Ben-Aron, Wright, Marchese, & Handy, 1988; Meloy, Gacono, & Kenney, 1994; Prentky et al., 1989).

OFFENDER CHARACTERISTICS

Demographics

Most sexual homicides are committed by males, the first kill occurring prior to the age of 30. Although sociologists have speculated that sexual homicide, especially serial sexual homicide, is a product of socioeconomic dislocation (Leyton, 1986), the data do not necessarily support this formulation (Stone, 1994; Warren, Hazelwood, & Dietz, 1996).

Victims

Most victims of sexual homicide are female strangers or casual acquaintances, rather than consensual sexual intimates, of the perpetrator. They are usually the same race as the offender. In a recent series of sexual homicide cases we have gathered ($N = 38$), 86% of the victims were strangers or casual acquaintances, and the perpetrators' relationships to the rest of the victims were unknown. This finding is also robust, and has been commented upon by other researchers (Dietz et al., 1990; Meyers & Blashfield, 1997; Ressler et al., 1988).

² Internecine rivalry, however, never goes away. Karpman (1954) wrote, "The fact that any man would want to write and publish a book like that of De River's (1949) does not speak well for his own mental health (p. 660)."

The most likely victims of violent crime, including homicide, are males. Female victimization in *sexually* violent crimes, however, is expected. What is unusual about sexual homicide from a relational perspective is that it is similar to other paraphilias and dissimilar to other crimes of violence: some paraphilic individuals deliberately target strangers as their object choice (for example, those who prefer voyeurism, exhibitionism, or frottage), while most individuals who are nonsexually violent select victims well-known to, or intimately involved with them.

Sexual homicide perpetrators, even if intimately sexually involved with a partner at the time, will usually go outside the relationship and select another object to sexually assault and kill. The attachment, or bond, inhibits the extreme sexual aggression, and must, therefore, be circumvented (Meloy, 1992). A more practical reason is that apprehension is lessened if the crime victim is a complete stranger. Sexual homicide of sexual partners does occur, but is rare (Meloy, 1996).

Sexual sadists, as a subgroup of sexual homicide perpetrators, will sometimes practice their cruel acts on consenting partners, having shaped their behavior through various methods of reinforcement to ensure compliance (Dietz, Hazelwood, & Warren, 1990; Hazelwood, Warren, & Dietz, 1993; Warren, Hazelwood, & Dietz, 1996; Meloy, 1992). Sexual sadists may also use their consensual sex partners to assist them when they begin to kill stranger female victims:

Carol Bundy, a 37-year-old nurse sexually abused as a child, had an 8-month relationship with a man 10 years her junior, Douglas Clark. Although their domestic life was chaotic, their sexual life was unusually exciting, focusing upon the fantasy of capturing young women, subduing them, and using them sexually. Eventually, at Douglas' urging, they began to kill prostitutes in Los Angeles. The usual manipulation was to convince young prostitutes to enter their car with Karen in the back seat, so that they could perform fellatio on Douglas, and Karen could watch. During the course of the sex act, Douglas would shoot the woman in the back of the head with a .22 caliber revolver. Eventually they were both involved in acts of child molestation, necrophilia, and decapitation of two of the victims. Karen confessed to her involvement and was subsequently convicted of two counts of first degree murder and sentenced to life. Douglas Clark was sentenced to death and remains at San Quentin.

Crime Scene Typology

Sexual homicides are usually organized or disorganized in offense characteristics. This typology, originally developed by the Behavioral Sciences Unit of the FBI, has received some validation (Ressler et al., 1988). For example, it is very rare for a sexual sadist, who invariably leaves an organized crime scene, to engage in postmortem mutilation of the corpse (this is distinguished, of course, from dismemberment of a victim following death to dispose of the body). Table 2 lists the offense characteristics of organized and disorganized sexual homicides. Since the publication of this typology over a decade ago, subsequent research has suggested that (a) organized crime scenes are significantly more likely in serial sexual murders than single sexual murders (Prentky et al., 1989); and (b) organized crime scenes are highly suggestive of sexual sadism (Dietz et al., 1990; Gratzer & Bradford, 1995; Warren et al., 1996).

Although typologies attempt to construct categories to classify phenomena, often the variations in real events are continuous. In this typology, "mixed cases" do emerge, and it is likely that each of these variables is continuous, rather than dichotomous. Any one sexual homicide will often fall on a continuum between organized and disorganized, and

TABLE 2. Offense Characteristics of Organized and Disorganized Sexual Homicides

Organized	Disorganized
Offense planned	Spontaneous offense
Victim a targeted stranger	Victim or location known
Personalizes victim	Depersonalizes victim
Controlled conversation	Minimal conversation
Crime scene reflects control	Crime scene random and sloppy
Demands submissive victim	Sudden violence to victim
Restraints used	Minimal use of restraints
Aggressive acts before death	Sexual acts after death
Body hidden	Body left in view
Weapon/evidence absent	Weapon/evidence often present
Transports victim or body	Body left at death scene

From *Sexual Homicide: Patterns and Motives*, by R. Ressler, A. Burgess, and J. Douglas, 1988, Lexington, MA: D.C. Heath.

an investigator's clarity of thought is often helped if each of these variables is conceived as a continuum. A "mixed" case of sexual homicide is evident in the following facts:

The body of a 38-year-old Caucasian woman was found displayed in an open field approximately 100 yards from where she was stabbed in the back with a large, single-edged knife. The offense occurred at approximately midnight the evening before. The victim's left nipple had been removed, and a large portion of her labia majora had been excised with a smaller, surgical blade. She had not been anally, orally, or vaginally penetrated. There was no evidence of premortem sexual activity, and no evidence that the suspect had previously met the victim, although her walking path was in clear view of his bedroom window. Extensive productions of sexually violent fantasy (drawings and narratives) were found in his room, as well as an accumulation of knives consistent with the likely murder weapon. The perpetrator was 15 years old.

Disorganized Sexual Homicide and Catathymia

Disorganized sexual homicide (see Table 2) may involve a catathymic process (Wertham, 1937). Catathymia has a long and distinguished history in forensic thought (Schlesinger, 1996), but is not well-known. It is a motivational pattern, not a diagnosis, in which "an underlying emotional conflict creates an enormous amount of psychological tension, which is released through the violent act" (p. 307). In its acute form, it may be sexualized, explosive, and homicidal, paralleling the term *blitz attack* used by the FBI to characterize disorganized sexual homicides (Ressler et al., 1988). Catathymia is highly symbolic, transference-based, and in disorganized sexual homicide, is likely to be a displaced matricide (Revitch & Schlesinger, 1981). Observed sexual promiscuities of the mother when the perpetrator was a dependent and helpless boy may contribute to his maternal rage, especially when coupled with an emotionally absent father (Meloy, 1988, 1992; Schlesinger & Revitch, 1997).

Organized Sexual Homicide and Obsessive-Compulsion

Organized sexual homicide (see Table 2), although occurring in a minority of sexual murders, usually involves an obsessive-compulsive pattern of behavior. It is also significantly more likely to be perpetrated by a sexual sadist than a disorganized sexual homicide.

Although there is no research, as yet, on obsessive-compulsive disorder (OCD) or obsessive-compulsive personality disorder (OCPD) among sexual homicide perpetrators, there is clinical and forensic evidence that makes this a plausible hypothesis: (a) clinical descriptors of obsessive-compulsive traits among serial sexual murderers date back to von Krafft-Ebing (1886/1965); (b) patterns of serial sexual murder appear tied (classically paired) to cyclical variations in sexual arousal; (c) self-reports of obsessive-compulsive symptoms by serial sexual murderers are evident (Brittain, 1970; Frank, 1966; Michaud & Ainsworth, 1983); (d) Rorschach test measures indicate an inordinate amount of nonvolitional (obsessional) thoughts in sexual homicide perpetrators (Meloy et al., 1994; Revitch & Schlesinger, 1981); (e) cleanliness and orderliness abound at organized sexual homicide crime scenes; and (f) preferred anal rape among sexual sadists who commit organized sexual homicides (Dietz et al., 1990; Gratzler & Bradford, 1995) empirically supports Freudian theory of anality in compulsive disorders (Fenichel, 1945).

Absence of Psychosis

With few exceptions, usually case studies (Langevin et al., 1988; Lunde & Morgan, 1980; Meloy & Gacono, 1992a), most sexual homicide perpetrators are not psychotic and do not have a diagnosable psychotic disorder if evaluated (Meloy et al., 1994; Ressler et al., 1988; Warren et al., 1996). This is particularly true in organized sexual homicides, where the likely Axis I diagnosis (from the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition [*DSM-IV*]; American Psychiatric Association, 1994) is sexual sadism (302.84).

Other Axis I disorders, however, may be present, and need to be considered, including mood disorders and drug and alcohol dependencies. In the 118 victim cases considered by Ressler et al. (1988), 49% of the perpetrators reported consuming alcohol before the sexual killing, and 35% reported drug use. They wrote, "We suspect that these murderers are preoccupied with a kind of internal dialogue that sustains anger, discontent, irritability, or depression. Use of alcohol or drugs is an attempt to moderate such internal stress, but the fantasy continues" (p. 52). In our current series of sexual homicide perpetrators ($N = 38$), 68% had a history of depression and 37% scored positive on the Depression Index (Rorschach) when tested during incarceration.

Serial Murderers' Diagnoses

Recent evidence, predicted by earlier studies (Holmes & DeBurger, 1988), strongly suggests that a majority of serial murderers are sexually motivated, and when there is enough evidence, the *DSM-IV* dual diagnoses are sexual sadism and antisocial personality disorder (Geberth & Turco, 1997). Serial murder in the latter study ($N = 387$ subjects) was defined as the killing of three or more victims over a period of time.

Narcissism and Psychopathy

Virtually all sexual homicide perpetrators evidence narcissistic and psychopathic personality traits. The pathological narcissism, whether or not it meets the threshold for a *DSM-IV* diagnosis of narcissistic personality disorder, is usually seen in the perpetrator's sense of entitlement, grandiosity, and emotional detachment. The psychopathy, whether or not it meets the threshold for primary psychopathy (Hare, 1991), is usually manifested in the perpetrator's predation, cruelty toward others (at times diagnosed as sexual sadism), deceptiveness, and manipulation. In our series of sexual homicide perpetrators, approximately two thirds scored in the primary, or severe range of psychopathy on the Psychopathy

Checklist-Revised (Hare, 1991). There is also some research that psychometric measures of sadism significantly correlate with psychopathy (Hart, Forth, & Hare, 1991; Holt, Meloy, & Strack, 1999; Meloy & Gacono, 1992b).

The character pathology of the sexual homicide perpetrator, however, is often less adaptive, and more dysfunctional than other narcissistic and psychopathic individuals. For example, despite similar levels of anger and entitlement, sexual homicide perpetrators are significantly more obsessional, prone to dysphoric rumination, and affectionately hungry than nonsexually offending psychopaths (Gacono & Meloy, 1994; Meloy et al., 1994). Both groups evidence borderline reality testing and moderate amounts of formal thought disorder, expected at a borderline *level* (Kernberg, 1984) of personality organization (Gacono & Meloy, 1994; Meloy, Acklin, Gacono, Murray, & Peterson, 1997). These structural characteristics are also apparent in the sexual homicide perpetrator's use of more primitive defenses, such as projection, projective identification, and devaluation. We also found, somewhat paradoxically, that sexual homicide perpetrators are more whole-object seeking than other psychopaths (Meloy et al., 1994). There is also some suggestive work that they may be more schizoid than other psychopaths. Stone (1994) found in his biographical study of 42 serial murderers that 40% met criteria for schizoid personality disorder.

Fantasy

Fantasy appears to play a central role in sexual homicide, especially organized (likely serial) sexual homicide. Brittain (1970) detailed his personal clinical experience with an unknown number of sadistic murderers and wrote an anecdotal, yet influential paper, which described what he believed to be the personality characteristics of these offenders: "he is typically a day-dreamer with a very rich, active fantasy life. He imagines sadistic scenes and these he acts out in his killings (p. 199)." MacCulloch, Snowden, Wood, and Mills (1983) drew heavily from Brittain's work and described the criminal histories and sexual fantasies of a small sample ($N = 16$) of forensic patients, seven of whom were sexual murderers. Their sample was concordant with the "compulsive murderer" of Revitch (1965), and their emphasis upon sexual fantasy, first noted by Reinhardt (1957) and his term *lust murderer*, steered much of the subsequent research interest in fantasy as a primary drive mechanism in sexual homicide.

Prentky et al. (1989) defined fantasy as, "an elaborated set of cognitions (thoughts) characterized by preoccupation (or rehearsal), anchored in emotion, and originating in daydreams" (p. 889). They found violent fantasies of rape and/or murder present in 86% of serial sexual murderers and only 23% of single sexual murderers ($p = .001$), and theorized a functional relationship between fantasy and repetitive sexual assaults. They also presented a social learning model to account for the linking of sexual arousal to deviant fantasy. We found in our series of sexual homicide perpetrators ($N = 38$) that 39% produced more passive human movement than active human movement responses on the Rorschach, a validated index of fantasy abuse, rather than active problem-solving (Exner, 1993).

Hazelwood and Warren (1995) developed a detailed understanding of the *structure* of sexual fantasy as acted out in serial sexual crimes, and postulated five components that will often be present: relational, paraphilic, situational, self-perceptual, and demographic. For example, the perpetrator may imagine that a 15-year-old female (demographic) becomes his sex slave (relational), and he is able to anally and orally rape her at his whim (paraphilic) in his isolated mountain cabin (situational), thus enhancing his sense of omnipotence and gratifying himself sadistically (self-perception). I have described such

fantasy, particularly the relational and demographic components, as shaping the sexual homicide perpetrator's search for a suitable victim that achieves a "goodness of fit" with his fantasy (Meloy, 1988).³ This search, despite its deviancy and violence, is similar to normal human mating strategies during which the male (usually) searches for a female that matches his sexueroetic map or template (Money, 1986).

I propose that the structuring of such sexual fantasy, in turn, provides the sexual homicide perpetrator with certain positive reinforcements prior to, or between his sexual homicides: (a) it sustains pleasure (through memory or imagination) when coupled with masturbation; (b) it reduces behavioral inhibition while physiologically releasing orgasmic tension; (c) it stimulates grandiosity, since all fantasies are perfect (R. Hazelwood, personal communication, January, 1995), and thus compensates for any felt sexual or relational inadequacies; (d) it stimulates omnipotence, since the fantasy of omnipotent control of the victim is likely imaged; and (e) it allows the perpetrator to practice his paraphilia prior to, or between behavioral "tryouts" (MacCulloch et al., 1983) and the eventual consummation, or repetition of the sexual homicide.

The most difficult question when investigating the role of fantasy in sexual homicide, however, is to understand the factors that contribute to the behavioral acting out of the fantasy: the most important predictive data in sexual homicide cases. Ressler et al. (1988) referred to stress factors (conflict with females, parental conflict, financial stress, marital problems, conflict with males, birth of a child, physical injury, legal problems, employment problems, and stress from a death); frame of mind (frustration, hostility and anger, agitation, and excitement); and planning (who, when, and where the sexual homicide will occur) as dominant antecedent behaviors. Their data, coupled with other research (MacCulloch et al., 1983), indicate that most sexual homicides are not impulsive, and instead, are quite opportunistic: the act is intentionally planned, or at least there is a "congruent mood" (Ressler et al., 1988, p. 48) that is open to the prospect of sexual killing.

Sexually violent fantasy likely forms a "primary drive mechanism" (Prentky et al., 1989) that is affected by, and also alters the perception and emotion of the sexual homicide perpetrator in the face of situational stress. Sexual fantasy is central to deviant sexual arousal as documented in numerous penile plethysmograph studies (Laws & O'Donohue, 1997). Yet, masturbation to a deviant sexual fantasy will decrease in intensity over time as the frequency of its use for sexual gratification increases. As the intensity decreases, the *response tendency* increases (Hull, 1952), a measure of the motivation to act on the environment. At some point in time, a threshold is passed where the response tendency exceeds the intensity of the rehearsal fantasy, and the likelihood of sexual violence substantially increases, only dependent on opportunity (Gacono & Meloy, 1994). If a sexual homicide is committed this mechanism would "reset," but the high arousal of the actual sexual violence would have less propensity to extinguish over time.

The assessment of sexually violent fantasy, however, is notoriously difficult, because it is often dependent upon clinical interview, and therefore the willingness of the subject to articulate his fantasies. The Wilson Sexual Fantasy Questionnaire is recommended by a number of experts in the field (O'Donohue, Letourneau, & Dowling, 1997). It has been my experience that sexually violent fantasies in sexual homicide cases are much more

³ The case of the 15-year-old perpetrator mentioned earlier in this article is the first known successful prosecution of a sexual homicide in which the productions (drawings and narratives) of the defendant were utilized to show the structure of his pre-offense fantasies using the Hazelwood and Warren components (*People v. Timothy Masters*, 98 CR 1149, State of Colorado, Larimar County). The fantasies, in turn, were used to prove motive and intent.

likely to be articulated by the defendant after, rather than before, his criminal trial—not a surprising finding—but can be inferred pretrial by his productions, usually inanimate objects (dolls, clothing, photos, or videos), drawings, or narratives (Hazelwood & Warren, 1995). One 38-year-old man, convicted of both murder and sexual assault of a stranger adolescent girl, revealed the following sexually sadistic fantasy:

I'd tie up her mother and other girls, kitchen chairs by the bed, gagged and blindfolded, I'd rape mom first. I'd tie the youngest daughter on top of mom, tied to mom's knees, fuck the little girl, play with the mother's tits, do all the girls, take the mother and strangle her, stack cords of wood, pile it up around them, start a fire, like a burial scene . . . enough anger in me to do it.

This perpetrator's misogynistic fury was beyond the pale. One of his most vivid memories as a young adolescent was sitting in the front seat of the family car at a drive-in while his mother had sex with her boyfriend in the back seat. His father would counsel him to "never trust anything that bleeds once a month and lives."

Modus Operandi and Signature

Sexual homicides usually evidence a *modus operandi* and sometimes evidence a signature (Douglas & Munn, 1990). The *modus operandi* is typically dynamic (changeable) and serves the practical purposes of protecting the perpetrator's identity (e.g., using condoms during rape to contain DNA evidence); ensuring success (e.g., using a ruse that will accelerate movement of the victim to an isolated location); and facilitating escape (e.g., disposing of the body in a location separate from the kill site) (Hazelwood & Warren, 1995).

The signature is typically static (unchangeable) and infers the ritual or symbolic component of the sexual homicide that gratifies fantasy and remains psychosexually arousing (e.g., the perpetrator surgically removes a nipple from the victim following death). Keppel (1995) reported the use of signature to investigate and successfully link several sexual homicides.

One sexual homicide case from my files involved the death of a 14-year-old girl by a 13-year-old boy, and revealed that he had superficially carved onto her abdomen his highly stylized first initial after her death. The stylized initial was found inside one of his notebooks in his school locker, searched after his arrest. Unfortunately, there are no published reliability studies on the accurate identification of either signatures or *modus operandi* by forensic investigators.

Adolescent Sexual Homicide

Adolescents appear to commit sexual homicide at approximately the same rate as adults (Myers, Burgess, & Nelson, 1998). They are usually diagnosed with conduct disorder as per *DSM-IV* and are likely to have a *history* of psychotic symptoms, most commonly paranoia (Myers & Blashfield, 1997). Personality traits within Cluster A (schizoid, paranoid, and schizotypal) are more likely than Cluster B (borderline, antisocial, narcissistic, and histrionic), perhaps accounting for the psychotic symptoms and the absence of a psychotic diagnosis at the time of evaluation. They also appear to be moderately psychopathic, and most report sexually violent fantasies preceding the crime (Myers & Blashfield, 1997; Myers, 1994). Although they are reared in chaotic family environments and are physically abused, most do not have a history of child sexual abuse.

Although the database on adolescent sexual homicides is very limited at present, the typical victim appears to be an acquaintance female of the same race who lives near the

perpetrator and is approximately 10 years his senior. She is vaginally assaulted, stabbed, and bludgeoned to death, and is usually attacked in her own home.

The parents of a 15-year-old adolescent took a 24-year-old female boarder into their home. The youth found her sexually appealing, but she rebuffed him and accused him of stealing her marijuana. One evening, following her boyfriend's humiliating remarks, the youth went to the garage, picked up a hammer, and assaulted her in her bedroom. He then masturbated onto her thighs. He carried her to the backyard, buried her in a shallow grave, threw his clothes into the grave, and took a shower. The next day he confessed the crime to his mother after contemplating suicide with his stepfather's handgun.

Sexual Homicide and Other Paraphilias

Consistent with the research on paraphilias in general—where there is one there are likely to be several others—sexual homicide perpetrators are often diagnosed with other paraphilias. Prentky et al. (1989) reported a substantial frequency of exhibitionism, voyeurism, fetishism, and transvestism in their small sample of sexual murderers, the latter two significantly more present among the serial sexual murderers. We reported a case of a psychotic sexual psychopath who had a foot fetish (Meloy & Gacono, 1992a) who attempted a sexual homicide. Dietz et al. (1990) reported a 20% rate of transvestism, voyeurism, exhibitionism, and telephone scatologia in their sample of sexually sadistic criminals (subjects overlapped with the Prentky sample). Gratzler and Bradford (1995) reported an approximately 40% rate of transvestism, voyeurism, and exhibitionism in their sample of 28 sexually sadistic murderers. And Langevin et al. (1988) found a history of voyeurism (54%), exhibitionism (23%), frottage (31%), and transvestism (54%) in their small sample ($N = 13$) of “sex killers.” Although these are all relatively small, nonrandom samples of convenience, it is clear that paraphilias occur at a substantially higher rate in this population than in the general population.

One of the more interesting psychodynamic links that I have found is the high frequency of genital and gender dysphoria in sexual homicide perpetrators, and psychoanalytic theory surrounding these dysphorias and their relationship to two paraphilias: fetishism and transvestism, respectively (Stoller, 1985). An important point of inquiry in any interview of a sexual homicide perpetrator is his feelings and attitudes surrounding his genitals and his masculinity. One sexual murderer that I evaluated at the age of 34, thirteen years after his killing, was still preoccupied with the fantasy that his penis was shrinking. He would regularly measure its girth. Wilson and Gosselin (1980) noted an association between gender dysphoria and sadism, and Snow and Bluestone (1969) described fetishism as a defense against the impulse to kill.

Biological Anomalies

There is no evidence, as yet, of biological anomalies that predict sexual homicide. There are disparate findings that do suggest biological substrates that may contribute to sexually homicidal behavior. Hucker et al. (1988) found right temporal lobe abnormalities in a small sample of sexual sadists. Langevin et al. (1988) found abnormal computed tomography scans in 40% of their “sex killer” group and 60% of their “sex aggressors” (usually right temporal horn dilation), significantly more frequent ($p = .006$) than their comparison group of nonsexual killers; they also found a trend for the “sex killers” to have elevated testosterone levels. Gratzler and Bradford (1995) found “neurological abnormalities” in

55% of their sample ($N = 28$) of sexual sadists. Money (1995) theorized a parallel between the attacks of serial lust murderers and psychomotor seizures in temporal lobe epilepsy.

In two important studies to date, Raine et al. (1994) found significantly lower glucose metabolism in both the lateral and medial prefrontal cortex in a sample of murderers ($N = 22$) when compared to age and gender matched controls ($N = 22$). They used positron emission tomography (PET) during a continuous performance task. These findings have recently been replicated in an expanded sample of 39 subjects, of whom 13 were sexual murderers (A. Raine, personal communication, November, 1996). They discussed their findings in the context of neurophysiological, neurobehavioral, personality, social, and cognitive aspects of violence.

In one other follow-up study, 41 murderers were divided into predatory ($n = 15$) and affective ($n = 9$) subgroups (Meloy, 1988). Glucose metabolism using PET indicated predatory murderers were more equivalent to controls than affective murderers, the latter showing lower left and right prefrontal functioning, higher right hemisphere subcortical functioning, and lower right hemisphere prefrontal/subcortical ratios. Serial sexual homicide was represented in the predatory subgroup, but not the affective subgroup (Raine et al., 1998). There are no published magnetic resonance imaging studies of sexual homicide perpetrators.

The most compelling biological data that may predispose an individual to sexual homicide is the fact that most individuals who commit such acts are either psychopaths or evidence psychopathic traits, character pathology that is biologically predisposed (Meloy, 1988). Elsewhere we have discussed the impact of psychopathy on the *arousal patterns* of sexual murderers, and have hypothesized a bimodal distribution among this group: those that are hyporeactive and chronically emotionally detached, and, therefore, in need of high levels of stimulation, perhaps sexualized; and those that are hyperaroused, affectionately hungry, and would need little kindling to be activated (Gacono & Meloy, 1994). Our empirical research, in fact, suggests that sexual homicide perpetrators bimodally distribute when their propensity for attachment is measured (Meloy et al., 1994). No research has been done on autonomic reactivity among sexual murderers.

Other lines of research support theories of chronic cortical underarousal among habitual criminals and lower circulating levels of serotonin metabolites (5-hydroxyindoleacetic acid) in the cerebrospinal fluid of various samples of violent individuals (Volavka, 1995). Focused research on sexual homicide perpetrators and these functional measures of biology has also not been done.

Social Deviancies

There is no evidence, as yet, of social deviancies that predict sexual homicide. There is abundant evidence that sexual homicide perpetrators, like many other individuals who do not commit such acts, grow up in chaotic family environments and exhibit abnormal, usually antisocial behavior, in childhood and adolescence.

Ressler et al. (1988) were the first researchers to carefully study the social antecedents of sexual homicide. They found that a majority of perpetrators came from family backgrounds in which there was alcoholism, psychiatric illness, and criminality. A substantial minority also experienced physical abuse, sexual abuse, sexual violence, sexual injury and disease, and witnessed parental sex. These sociogenic factors (which may have hidden within them biogenic factors, e.g., chronic cortical underarousal as a predictor of habitual criminality) may contribute to the protean antisocial behavior in childhood and adolescence of the fledgling sexual homicide perpetrator (see Table 3).

TABLE 3. Frequency of Reported Behaviors (>50%) of Sexual Homicide Perpetrators (N = 28)

	Childhood (%)	Adolescence (%)
Isolation	71	77
Chronic lying	71	75
Enuresis	68	60
Rebelliousness	67	84
Nightmares	67	68
Destroying property	58	62
Firesetting	56	52
Stealing	56	81
Cruelty to children	54	64

From *Sexual Homicide: Patterns and Motives*, by R. Ressler, A. Burgess, and J. Douglas, 1988, Lexington, MA: D. C. Heath.

Although these behaviors are quite similar to *DSM-IV* conduct disorder (CD) criteria, careful scrutiny reveals an oscillating pattern of social withdrawal into fantasy and aggression against objects in the environment. Early retreat into fantasy, which is eventually sexualized and laced with violence in puberty, may be a risk factor for eventual sexual violence in CD children.

Two cautions, however, are in order. First, Ressler et al. (1988) used no comparison group. Therefore, none of these variables may be *specific* to sexual homicide perpetration in adulthood. And there are no data, even if they are specific, which suggest they *predict* sexual homicide. Unfortunately, this methodological limitation was never mentioned in the study, and may lead the unsophisticated reader astray.

Second, even though social deviance is quite frequent in the early lives of sexual homicide perpetrators, most of their sample did not experience such deviance, an aspect of the data also ignored. This absence of socially deviant backgrounds is even more apparent when sexual sadism is isolated as a diagnosis. Dietz et al. (1990) found in a majority of their sexually sadistic criminals ($n = 30$) *no* evidence of parent infidelity or divorce, no incest of their own children, no physical or sexual abuse, no other paraphilias, no shared sex partners, and no history of suicide attempts. Gratzler and Bradford (1996) also found in a majority of their sexually sadistic murderers ($n = 28$) *no* evidence of incest of their own children, no physical or sexual abuse, no other paraphilias, no shared sex partners, and no history of suicide attempts. As I wrote, “the banality of their known histories was only surpassed by the extraordinary cruelty of their offenses” (Meloy, 1997, p. 632).

If there is one social factor that may be specific to sexual homicide, it is likely to be the classical pairing of sexual arousal and extreme violence toward women. In one case of a 14-year-old sexual homicide perpetrator, he watched sadomasochistic pornographic videos with his father from age 5 to 9. In another case of a 21-year-old sexual homicide perpetrator, his mother would soothe him as a child by stroking his penis after his father would physically assault him, homogenizing his feelings of fear, rage, and sexual arousal. In still another case, the mother would tease her 7-year-old son in public restaurants with her girlfriends by rubbing his penis inside his jeans with her foot until he became erect. In all these examples, the classical Pavlovian pairing of sexual arousal and aggression should be obvious: coercion or violence, rather than affection and love, become the conditioned stimuli for sexual arousal.

In all sexual homicide evaluations, a careful history of sexual arousal should be taken, including structured interviews such as the Clarke Sex History Questionnaire (Langevin, 1990). The examiner should search for such classical pairings, especially during latency age and postpubescence (6–14 years). Events that are repetitive and suffused with intense emotion (anger, fear, shame, excitement) are most likely to be conditioning. Attention should be directed not only toward the familial relationships, but also repetitive exposure to classical pairings of sex and violence in the popular culture (music, movies, video games, computer games, and magazines).

Psychological Abnormalities

There are, as yet, no identified psychological factors that predict sexual homicide. Psychological aspects of sexual homicide, however, have been described for decades (Brittain, 1970; Revitch, 1965), and were usually based on the clinical-anecdotal experience of the writers.

The first attempt to organize psychological abnormalities in sexual homicide perpetration was done by Revitch and Schlesinger (1981), originating in the work of Revitch (1957, 1965, 1980). Building on their endogenous-exogenous motivational model of homicide, they identified nine risk factors for what they termed *compulsive murder* (cited in Litwack & Schlesinger, 1987):

1. A history of mistreatment of women or fantasies of assaulting women.
2. Breaking and entering committed alone and under bizarre circumstances.
3. Fetishism for female underclothing and destruction of female clothes.
4. Expression of hatred, contempt, or fear of women.
5. Dislike for cats or actual violence against cats or other animals.
6. Violent and primitive fantasy life.
7. Confusion of sexual identity on projective tests.
8. Sexual inhibitions and moral preoccupation with sexual conduct.
9. Feelings of isolation and poor reality testing.

Although these risk factors have never been subjected to any predictive tests, each item is a complex construction whose underlying empirical validity could be measured. For example, Revitch and Schlesinger (1981) believed, as I do, that many sexual homicides are displaced matricides, and items 1, 3, 4, and 7 speak to the evident maternal rage often seen in such violence. In two related empirical studies, in fact, sexual homicide perpetrators were found to commit their crimes against women who were, on average, 10 years older than they were (Grubin, 1994; Myers & Blashfield, 1997).

This maternal rage is likely a product of a lack of differentiation from the mother when the perpetrator was a boy. Many social factors could contribute to this, including aggression, dominance, control, manipulation, or sexualization by the mother; these are often coupled with the absence, either physical or emotional, of a masculine figure, usually the father. Continuous hostility toward women, particularly as emotional and physical intimacy *increases*, has been shown to play a role in certain domestically violent men (Dutton, 1995). In extreme cases, the continuous attempt to disidentify with the mother (Greenson, 1968), felt as mistrust and rage toward the solicitous adult female, and the concomitant symbiotic anxiety (Stoller, 1974) necessary for masculine identification, felt as inadequacy and fear of engulfment by the adult woman, may result in a catathymic sexual homicide. What should have been normatively accomplished as an angry and rebellious male toddler is explosively recapitulated by a homicidal and sexually aroused

adult male, narcissistically sensitive to the victim's *perceived* sexual overtures, rejections, and omnipotent control.

The most detailed motivational model of sexual homicide was developed by Burgess, Ressler, Douglas, and McCormack (1986) and elaborated upon in Ressler et al. (1988):

1. Ineffective Social Environment. Parents of sexual homicide perpetrators do not nurture, protect, and consistently discipline. Attachment is likely to be pathological, or abnormal, a finding apparent in other research on the relationship between bonding and violence (Meloy, 1992). Chronic emotional detachment is expected in primary psychopathy, which, as noted earlier, we have found in two thirds of our sexual homicide perpetrator sample ($N = 38$).

2. Formative Traumatic Events. The child is likely to experience physical or sexual assault, creating a trauma response (van der Kolk, 1987), which is often biphasic, alternating between hyperarousal and intrusive thoughts, and emotional numbing or constriction. This may lead to an addiction to trauma. Real helplessness may psychologically stimulate compensatory and grandiose fantasies to reassert against internalized objects a sense of dominance and control (Gacono, 1992; MacCulloch et al., 1983). At a biological level, inescapable stress lowers catecholamine levels in the central nervous system, leaving receptors hypersensitive to subsequent stimulation. This can, in turn, create a kindling effect (Goddard, McIntyre, & Leech, 1969) or behavioral sensitization. Opioid-induced analgesia, moreover, immediately follows various stressors that are intense, inescapable, and consciously perceived (van der Kolk, 1987). We theorized (Gacono & Meloy, 1994) that the traumatic pairing of sexual arousal and violence in the childhood of the sexual homicide perpetrator could predispose him to act on the environment as an adult to both master trauma and evoke this endogenous opioid response, felt most intensely immediately following the sexual homicide.

3. Patterned Responses: Personality. Table 3 outlined the behavioral and personality traits that often first appear in sexual homicide perpetrators during childhood. Relationships are primarily fantasy-based, which provides both emotional stimulation and narcissistic gratification (entitlement and grandiosity), often in the face of a depleted and barren reality. The characteristics noted by Burgess et al. (1986) parallel nicely the two factor model of psychopathy proposed by Hare (1991): callous and remorseless disregard of others and chronic antisocial behavior.

4. Patterned Responses: Cognitions. Conscious cognitive processes have received extensive attention as a focus for treatment of sexual offenders in general (Laws & O'Donohue, 1997). Ressler et al. (1988) emphasized the fixed, negative, and repetitive organization of thought in the sexual homicide perpetrator, motivated by a desire to control and dominate others. The complexity of cognitions, and derivative fantasies, are likely to be greater in compulsive (organized) than in catathymic (disorganized) sexual homicides. In one case in which I consulted, a sexual sadist tortured and killed six young men over the course of 3 years. His seventh victim escaped after 4 days in captivity, which eventually led to the perpetrator's apprehension. This is a portion of his testimony as he recounted his restraint, torture with disinfectants and electricity, and sexual assault:

Q. Now during this time that you were a captive, tell us in your words what seemed to you, from your perspective, he was wanting most or enjoying most about his experience?

A. Seemed to be enjoying the fact that I was powerless and that he had control totally.

TABLE 4. A Clinical Typology of Sexual Homicide Perpetrators

	Compulsive	Catathymic
Nature of sexual homicide	Organized	Disorganized
Axis I diagnosis	Sexual sadism	Mood disorder
Axis II diagnosis	ASPD/NPD	Various traits and PDs
Psychopathy	Severe (primary)	Mild-moderate
Attachment pathology	Chronically detached	Attachment hunger
ANS	Hyporeactive	Hyperreactive
Early trauma	Often absent	Often present

ASPD = antisocial personality disorder; NPD = narcissistic personality disorder; PD = personality disorder; ANS = Autonomic Nervous System.

Q. Anything else that he seemed to be really interested in with you?

A. The sex. It was nonnegotiable. (Gacono & Meloy, 1994, p. 283)

5. Patterned Responses: Arousal. Ressler et al. (1988) hypothesized both hyperarousal, consistent with early trauma, and hypoarousal, consistent with psychopathy, in sexual murderers.

These hypotheses are contradictory, unless one assumes, as I do, that sexual homicide perpetrators may bimodally distribute: most are autonomically hyporeactive, the quintessential sensation-seeker, and some are hyperaroused, damaged products of early and extreme physical and sexual trauma. As mentioned earlier, our data do support such a distribution when pathological attachment is measured (although we have no direct measure of physiological differences in subgroups of sexual homicide perpetrators). Approximately two thirds of our sexual homicide sample ($N = 38$) are psychopaths, suggesting autonomic hyporeactivity and chronic emotional detachment; while the remaining one third are not psychopaths and are affectionally hungry for an attachment (Gacono et al., in press). Further research into this promising hypothesis is necessary. Characteristics of the two subgroups I am postulating are indicated in Table 4.

6. Antisocial Acts. Childhood and adolescent antisocial behavior are likely and appear to represent a displacement of aggression from the parents (both mother and father) onto other children, animals, and property (see Table 3). Such behavior is sexualized during puberty, and its intermittent reinforcement predicts its continuation and escalation into adulthood, especially if the child is chronically cortically underaroused (Raine, 1993). Ressler et al. (1988) noted that such behavior also discourages friendship, and, therefore, facilitates isolation and a dependence on fantasy for gratification. A *subterranean* fantasy life may also develop, imbued with both sexual and violent themes, that is never articulated, but is reinforced through masturbation. Figure 1 is the drawing of a 13-year-old developing sexual sadist who committed a sexual homicide of a 14-year-old female friend. He stabbed her 74 times, including her eyes, and had a long history of preoccupation with and collection of knives. He said to me during the evaluation, "It has always been clear to me that one day I would kill somebody." When I asked him if he would do so again, he said, "for my defense I should say 'no', but I'm not sure." He recounted during the murder, "one side of me was animal, one was calculating where to attack." These subterranean fantasies are often evident *after* the sexual homicide in the narrative or drawing products of the perpetrator seized by law enforcement.

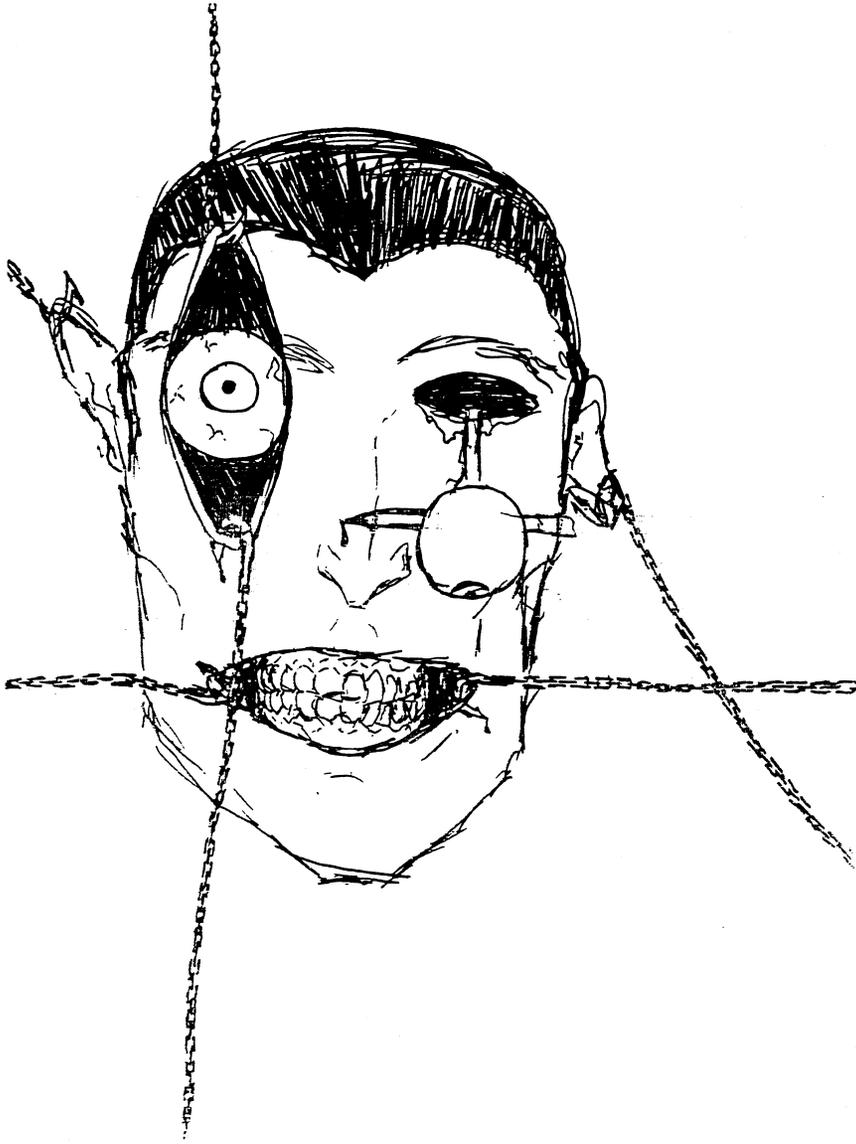


FIGURE 1. Drawing by a 13-year-old developing sexual sadist who committed a sexual homicide of a 14-year-old female.

7. Feedback Filter (Learning). Practice makes perfect; or in these cases, practice makes the crime more closely fit the perfect fantasy. The sexual homicide perpetrator, especially if he is compulsive, organized, and brighter than average, will learn from his mistakes and improve his abduction, sexual assault, killing, and disposing behaviors. Recording of the crime (video, audio, or writing), found in a majority of the Dietz et al. (1990) sample of sexual sadists (53%), can also be used to refine technique. Like psychopaths in general, sexual homicide perpetrators do learn; they just do not learn what we want them to.

This motivational model of sexual homicide (Ressler et al., 1988) is quite useful for heuristic purposes, although it is quite limited as a scientific study. Despite the psychological focus of the research, there were no standardized psychological tests administered to

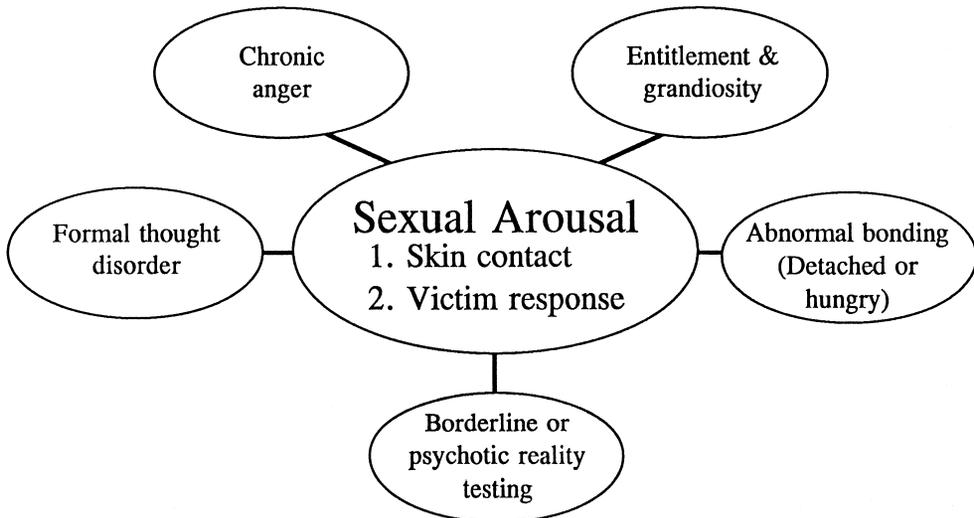


FIGURE 2. Psychodynamics of sexual homicide perpetrators ($N = 38$) based upon Rorschach data.

any of the subjects; and, as I noted above, there was no comparison group so we do not know if their motivational model is specific to sexual homicide. It is more likely a generic model that applies to many different kinds of serial sexual aggressors.

Our work has focused on understanding the phenomenology of sexual homicide from a psychological perspective, utilizing the Rorschach test to measure the internal operations (psychodynamics) of sexual homicide perpetrators (Gacono, 1992; Gacono & Meloy, 1988; Gacono et al., in press; Meloy, 1988; Meloy & Gacono, 1992a; Meloy et al., 1994). Figure 2 outlines the measurable characteristics of a sample of sexual homicide perpetrators ($N = 38$) based upon an analysis and interpretation of various Rorschach indices. In our first Rorschach study (Gacono & Meloy, 1994; Meloy et al., 1994), we compared a sample of sexual homicide perpetrators to a comparison group of nonsexually offending psychopaths to measure ways in which they were similar and different. We have recently compared our expanded sample of sexual homicide perpetrators to a larger sample of psychopaths and a third sample of pedophiles to measure the specificity of differences across the three groups (Gacono et al., in press).

Our findings to date indicate that sexual homicide perpetrators exhibit abnormal personality structure when Rorschach indices are used to measure affects, cognitions, self-perception, and object relations. Moving clockwise around Figure 2, sexual homicide perpetrators are chronically angry, much like psychopaths, and are also pathologically narcissistic. This second characteristic, or psychodynamic, is often evident in their sense of entitlement—a belief that they are owed whatever they want—and their grandiosity—a belief that they are a legend in their own mind. The third characteristic is an abnormal bonding pattern that I have already discussed, most commonly the chronic emotional detachment that is also evident in psychopaths. The real world correlate of this third psychodynamic is the absence of a history of stable, positive, and secure attachments; instead, there is likely to be a history of neglectful or cruel parenting as a child, and chaotic, superficially imitative, or absent relationships as an adult.

Moving further clockwise, the sexual homicide perpetrator evidences impaired reality testing, usually at a borderline level. This psychodynamic, quantitatively measured with

the Rorschach X-%, indicates that the sexual homicide perpetrator will confuse the origin and meaning of perceptual stimuli. For example, he might misconstrue friendly behavior by a woman as a sexual invitation; or rejection by a woman as intentional sexual humiliation. Most disturbingly, he might projectively identify his own rage toward women into the woman he is with, and believe that *she* is raging at him, and must be controlled or dominated at all costs.

The fifth psychodynamic is formal thought disorder. The sexual homicide perpetrator will not organize his thinking in a logical or sequential manner, which can further contribute to his emotional dysregulation. For example, if he is genitally dysphoric, he might perceive with his impaired reality testing that when a woman glances at his waist, she is scrutinizing the size of his penis. He may then illogically conclude that all women are scrutinizing the size of his penis when they glance at him, and believe, as he does, that it is too small. This may anger him, and further isolate him from normative social contact with women. On the other hand, after viewing violent pornography as an adolescent, and having witnessed his father rape his mother as a child, he may conclude that all women want *forced sex*. If violence has become a conditioned stimulus for his own sexual arousal, he may find that when a woman resists his sexual advances, he becomes more excited and more erect.

These five characteristics, or psychodynamics, could coalesce in certain situations where physiological sexual arousal is anticipated or unexpected. They embrace certain components of affect, character, perception, and cognition, and establish psychological operations that could predispose a sexual homicide.

Our Rorschach research also identified another characteristic of sexual homicide perpetrators that we did not expect: evidence of an inordinate amount of nonvolitional ideation, or obsessions. This is measured using the feral movement (FM) response. Our sample of sexual homicide perpetrators are significantly more obsessional than psychopathic and normal males, a finding that empirically supports the repetitive clinical observation of obsessive-compulsion in sexual murderers (Brittain, 1970; Revitch & Schlesinger, 1981), especially those that commit serial sexual killing.

SUMMARY AND CONCLUSIONS

This review has focused on the definitions, epidemiology, evolving research, and offender characteristics of sexual homicide, a rare but very disturbing form of intentional killing. Although the extant research has its limitations—very few comparative studies, repetitive use of small, nonrandom samples, retrospective data, virtually no biopsychosocial studies, and the absence of more sophisticated statistical analyses—the yield in review is impressive. It is unlikely, however, that, given the low base rate for this form of homicide, it will ever be able to be predicted; but with current understanding, and future research, the risk management of such individuals should greatly improve. As Robert Brittain wrote nearly 30 years ago, “we cannot treat, except empirically, what we do not understand and we cannot prevent, except fortuitously, what we do not comprehend” (Brittain, 1970, p. 206).

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REFERENCES

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

- Brittain, R. (1970). The sadistic murderer. *Medicine, Science and the Law*, *10*, 198–207.
- Burgess, A., Hartman, C., Ressler, R., Douglas, J., & McCormack, A. (1986). Sexual homicide: A motivational model. *Journal of Interpersonal Violence*, *1*, 251–272.
- De River, P. (1949). *The sexual criminal*. Springfield, IL: Charles C Thomas.
- Dietz, P., Hazelwood, R., & Warren, J. (1990). The sexually sadistic criminal and his offenses. *Bulletin of the American Academy of Psychiatry and the Law*, *18*, 163–178.
- Douglas, J., Burgess, A., Burgess A., & Ressler, R. (1992). *Crime classification manual*. New York: Lexington Books.
- Douglas, J., & Munn, C. (1990). Violent crime scene analysis: Modus operandi, signature and staging. *FBI Law Enforcement Bulletin*, *1*, 61.
- Dutton, D. (1995). *The domestic assault of women*. Vancouver: University of British Columbia Press.
- Eliot, T. S. (1963). *Collected poems, 1909–1935*. New York: Harcourt Brace.
- Exner, J. (1993). *The Rorschach: A comprehensive system. Vol. 1: Basic foundations* (3rd ed.). New York: John Wiley.
- Federal Bureau of Investigation. (1996). *Uniform crime reports*. Washington, DC: Department of Justice.
- Fenichel, O. (1945). *Psychoanalytic theory of neurosis*. New York: Norton.
- Frank, G. (1966). *The Boston strangler*. New York: New American Library.
- Freud, S. (1905/1953). Three essays on the theory of sexuality. *Standard Edition*, *7*, 124–245. London: Hogarth Press.
- Gacono, C. B. (1992). A Rorschach case study of sexual homicide. *British Journal of Projective Psychology*, *37*, 1–21.
- Gacono, C. B., & Meloy, J. R. (1994). *The Rorschach assessment of aggressive and psychopathic personalities*. Hillsdale, NJ: Lawrence Erlbaum.
- Gacono, C. B., Meloy, J. R., & Bridges, M. (in press). A Rorschach investigation of psychopaths, sexual murderers, and pedophiles. *Journal of Clinical Psychology*.
- Geberth, V. J., & Turco, R. N. (1997). Antisocial personality disorder, sexual sadism, malignant narcissism, and serial murder. *Journal of Forensic Sciences*, *42*, 49–60.
- Gebhard, P., Gagnon, J., Pomeroy, W., & Christenson, C. (1965). *Sex offenders: An analysis of types*. New York: Harper and Row.
- Goddard, C., McIntyre, D., & Leech, C. (1969). A permanent change in brain functioning resulting from daily electrical stimulation. *Experimental Neurology*, *25*, 295–330.
- Gratzer, T., & Bradford, J. (1995). Offender and offense characteristics of sexual sadists: a comparative study. *Journal of Forensic Sciences*, *40*, 450–455.
- Greenson, R. (1968). Dis-identifying from mother. *International Journal of Psychoanalysis*, *49*, 370–374.
- Groth, N. (1979). *Men who rape: The psychology of the offender*. New York: Plenum Press.
- Grubin, D. (1994). Sexual murder. *British Journal of Psychiatry*, *165*, 624–629.
- Guttmacher, M. S. (1951). *Sex offenses—The problem, causes, and prevention*. New York: Norton.
- Hare, R. D. (1991). *Manual for the Psychopathy Checklist-Revised*. Toronto: Multi-Health Systems.
- Hart, S., Forth, A., & Hare, R. (1991). The MCMI-II as a measure of psychopathy. *Journal of Personality Disorders*, *5*, 318–327.
- Hazelwood, R., & Warren, J. (1995). The relevance of fantasy in serial sexual crime investigation. In R. Hazelwood & A. Burgess (Eds.), *Practical aspects of rape investigation* (2nd ed., pp. 127–138). New York: CRC Press.
- Hazelwood, R., Warren, J., & Dietz, P. (1993). Compliant victims of the sexual sadist. *Australian Family Physician*, *22*, 474–479.
- Henderson, D. K. (1939). *Psychopathic states*. New York: Norton.
- Hickey, E. (1991). *Serial murderers and their victims*. Pacific Grove, CA: Brooks/Cole.
- Hirschfeld, M. (1944). *Sexual anomalies*. London: Francis Aldor Publishing.
- Holmes, R., & DeBurger, J. (1988). *Serial murder*. Newbury Park, CA: Sage.
- Holt, S., Meloy, J. R., & Strack, S. (1999). Sadism and psychopathy in violent and sexually violent offenders. *Journal of American Academy of Psychiatry and the Law*, *27*, 23–32.
- Hucker, S., Langevin, R., Dickey, R., Handy, L., Chambers, J., & Wright, S. (1988). Cerebral damage and dysfunction in sexually aggressive men. *Annals of Sex Research*, *1*, 33–47.
- Hull, C. (1952). *A behavior system*. New Haven, CT: Yale University Press.
- Karpman, B. (1954). *The sexual offender and his offenses*. New York: Julian Press.
- Keppel, R. (1995). Signature murders: A report of several related cases. *Journal of Forensic Sciences*, *40*, 670–674.
- Kernberg, O. (1984). *Severe personality disorders*. New Haven, CT: Yale University Press.
- Langevin, R. (1990). *Clarke Sex History Questionnaire for Males*. Oakville, ONT: Juniper Press.
- Langevin, R., Ben-Aron, M., Wright, P., Marchese, V., & Handy, L. (1988). The sex killer. *Annals of Sex Research*, *1*, 263–301.
- Laws, D. R., & O'Donohue, W. (Eds.). (1997). *Sexual deviance*. New York: Guilford Press.
- Leyton, E. (1986). *Compulsive killers: The story of modern multiple murder*. New York: New York University Press.
- Litwack, T., & Schlesinger, L. (1987). Assessing and predicting violence: Research, law, and applications. In I. Weiner & A. Hess (Eds.), *Handbook of forensic psychology* (pp. 205–257). New York: John Wiley.
- Lunde, D., & Morgan, J. (1980). *The die song*. New York: Norton.

- MacCulloch, M., Snowden, P., Wood, P., & Mills, H. (1983). Sadistic fantasy, sadistic behavior and offending. *British Journal of Psychiatry*, *143*, 20–29.
- Macdonald, J. (1961). *The murderer and his victim*. Springfield, IL: Charles C Thomas.
- Meloy, J. R. (1988). *The psychopathic mind: Origins, dynamics and treatment*. Northvale, NJ: Jason Aronson.
- Meloy, J. R. (1992). *Violent attachments*. Northvale, NJ: Jason Aronson.
- Meloy, J. R. (1996). Pseudonecrophilia following spousal homicide. *Journal of Forensic Sciences*, *41*, 706–708.
- Meloy, J. R. (1997). The psychology of wickedness: Psychopathy and sadism. *Psychiatric Annals*, *27*, 630–633.
- Meloy, J. R., Acklin, M., Gacono, C. B., Murray, J., & Peterson, C. (1997). *Contemporary Rorschach interpretation*. Mahwah, NJ: Lawrence Erlbaum.
- Meloy, J. R., & Gacono, C. B. (1992a). A psychotic (sexual) psychopath: “I just had a violent thought . . .” *Journal of Personality Assessment*, *58*, 480–493.
- Meloy, J. R., & Gacono, C. B. (1992b). The aggression response and the Rorschach. *Journal of Clinical Psychology*, *48*, 104–114.
- Meloy, J. R., Gacono, C. B., & Kenney, L. (1994). A Rorschach investigation of sexual homicide. *Journal of Personality Assessment*, *62*, 58–67.
- Michaud, S., & Ainesworth, H. (1983). *The only living witness*. New York: New American Library.
- Money, J. (1986). *Lovemaps*. New York: Irvington.
- Money, J. (1995). Forensic sexology: Paraphilic serial rape (biastophilia) and lust murder (erotophonophilia). *Acta Sexologica*, *1*, 47–62.
- Myers, W. (1994). Sexual homicide by adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, *33*, 962–969.
- Myers, W., & Blashfield, R. (1997). Psychopathology and personality in juvenile sexual homicide offenders. *Journal of the American Academy of Psychiatry and the Law*, *25*, 497–508.
- Myers, W., Burgess, A., & Nelson, J. (1998). Criminal and behavioral aspects of juvenile sexual homicide. *Journal of Forensic Sciences*, *43*, 340–347.
- O’Donohue, W., Letourneau, E., & Dowling, H. (1997). Development and preliminary validation of a paraphilic sexual fantasy questionnaire. *Sexual Abuse: A Journal of Research and Treatment*, *9*, 167–178.
- Prentky, R., Burgess, A., Rokous, F., Lee, A., Hartman, C., Ressler, R., & Douglas, J. (1989). The presumptive role of fantasy in serial sexual homicide. *American Journal of Psychiatry*, *146*, 887–891.
- Raine, A. (1993). *The psychopathology of crime*. San Diego: Academic Press.
- Raine, A., Buchsbaum, M., Stanley, J., Lottenberg, S., Abel, L., & Stoddard, J. (1994). Selective reductions in prefrontal glucose metabolism in murderers. *Biological Psychiatry*, *36*, 365–373.
- Raine, A., Meloy, J. R., Bihrie, S., Stoddard, J., LaCasse, L., & Buchsbaum, M. (1998). Reduced prefrontal and increased subcortical brain functioning assessed during positron emission tomography in predatory and affective murderers. *Behavioral Sciences and the Law*, *16*, 319–332.
- Reinhardt, R. (1957). Sex perversion and sex crimes: A psychocultural examination of the causes, nature and criminal manifestations of sex perversions. *Police Science Series*. Springfield, IL: Charles C Thomas.
- Ressler, R., Burgess, A., & Douglas, J. (1988). *Sexual homicide: Patterns and motives*. Lexington, MA: D. C. Heath.
- Revitch, E. (1957). Sex murder and sex aggression. *Journal of the Medical Society of New Jersey*, *54*, 519–524.
- Revitch, E. (1965). Sex murder and the potential sex murderer. *Diseases of the Nervous System*, *26*, 640–648.
- Revitch, E. (1980). Gynocide and unprovoked attacks on women. *Journal of Correctional and Social Psychiatry*, *26*, 6–11.
- Revitch, E., & Schlesinger, L. (1981). *The psychopathology of homicide*. Springfield, IL: Charles C Thomas.
- Schlesinger, L. (1996). The catathymic crisis, 1912–present: A review and clinical study. *Aggression and Violent Behavior*, *1*, 307–316.
- Schlesinger, L., & Revitch, E. (Eds.). (1997). *Sexual dynamics of anti-social behavior* (2nd ed.). Springfield, IL: Charles C Thomas.
- Snow, E., & Bluestone, M. (1969). Fetishism and murder. In J. Masserman (Ed.), *Dynamics of deviant sexuality* (pp. 88–100). New York: Grune and Stratton.
- Stekel, W. (1929). *Sadism and masochism: The psychology of hatred and cruelty*. Translated by L. Brink. New York: Horace Liveright.
- Stoller, R. (1974). Symbiosis anxiety and the development of masculinity. *Archives of General Psychiatry*, *30*, 164–172.
- Stoller, R. (1985). *Presentations of gender*. New Haven, CT: Yale University Press.
- Stone, M. H. (1994). Early traumatic factors in the lives of serial murderers. *American Journal of Forensic Psychiatry*, *15*, 5–26.
- van der Kolk, B. (1987). *Psychological trauma*. Washington, DC: American Psychiatric Press.
- Volavka, J. (1995). *Neurobiology of violence*. Washington, DC: American Psychiatric Press.
- von Krafft-Ebing, R. (1886/1965). *Psychopathia sexualis: A medico-forensic study*. New York: G.P. Putnam’s Sons.

- Warren, J., Hazelwood, R., & Dietz, P. (1996). The sexually sadistic serial killer. *Journal of Forensic Sciences*, *41*, 970–974.
- Wertham, F. (1937). The catathymic crisis: A clinical entity. *Archives of Neurology and Psychiatry*, *2*, 669–678.
- Wilson, G. D., & Gosselin, C. (1980). Personality characteristics of fetishists, transvestites and sadomasochists. *Personality and Individual Differences*, *1*, 289–295.