

identity. Although this kind of crime has existed throughout history (Lunde, 1977), the number of such murders has never been as high (Ressler et al., 1985). According to the 1984 FBI Uniform Crime Report, 22.1% of murders committed in the reporting year had an unknown motive as analyzed by law enforcement. This figure takes on added meaning when it is compared to earlier reporting figures. In 1976, murders with an unknown motive represented 8.5% of all murders, 17.8% in 1981, and 22.1% in 1984 or an increase of 160% in an 8-year period.

Such seemingly motiveless murders were first covered extensively by the news media when New York City's "Son of Sam" killer David Berkowitz stalked victims, apparently chosen at random, and killed them with a .44 caliber pistol. Since then there has been considerable attention to these types of murders. People fear becoming the next random victim of these violent, often grisly crimes.

Sexual homicide results from one person killing another in the context of power, control, sexuality, and aggressive brutality. The psychiatric diagnosis of sexual sadism, sometimes applied to the victimizer, states that the essential feature of this deviant behavior (i.e., paraphilia) is the infliction of physical or psychological suffering on another person in order to achieve sexual excitement.

It has been difficult to gather dependable statistics on the number of sexual homicide victims for several reasons: (1) the victim is officially reported as a homicide statistic and not as a rape assault (Brownmiller, 1975; MacDonald, 1971), (2) there is a failure to recognize any underlying sexual dynamics in a seemingly "ordinary" murder (Cormier & Simons, 1969; Revitch, 1965), (3) those agencies that investigate, apprehend, and assess the murderer often fail to share their findings, curtailing the collective pool of knowledge on the subject (Ressler, Douglas, Groth, & Burgess, 1980), and (4) conventional evidence of the crime's sexual nature may be absent.

When law enforcement officials cannot readily determine a motive for murder, they examine its behavioral aspects. In developing techniques for profiling murderers, FBI agents have found that they need to understand the thought patterns of murderers in order to make sense of crime scene evidence and victim information. Characteristics of evidence and victims can reveal much about the murderer's intensity of planning, preparation, and follow-through. From these observations, the agents begin to uncover the murderer's motivation, recognizing how dependent motivation is to the killer's dominant thinking patterns. In many instances, a hidden, sexual motive emerges, a motive that has its origins in fantasy.

The role of fantasy in the motive and behavior of suspects is an important factor in violent crimes, especially sexual murders (Ressler et al., in press). In the last 20 years, the role of sadistic fantasy has been explored in several studies (Brittain, 1970; Reinhardt, 1957; Revitch, 1965, 1980; West, Roy, &

Nicholas, 1978), with MacCulloch and colleagues (1983) suggesting that sadistic acts and fantasy are linked and that fantasy drives the sadistic behavior. Current realization of cognitive structures, which help maintain behavior patterns (Beck, 1976), combine with investigation of sadistic fantasies (Brittain, 1970; MacCulloch, Snowden, Wood, & Mills, 1983; Ressler et al., 1985), criminal reasoning (Yochelson & Samenow, 1977; Samenow, 1984), and criminal fantasy (Schlesinger & Kutash, 1981), and serve as primary foundations for our conceptualization of a motivational model of sexual murder.

### THE STUDY

Many people have speculated on various aspects of murder: epidemiological studies report on demographic data concerning victims and perpetrators (Constantino, Kuller, Perper, & Cypress, 1977) and patterns of homicide (Rushforth, Ford, Hirsch, Rushforth, & Adelson, 1977; Wolfgang, 1958); murderers have been categorized in terms of motive (Revitch, 1965), intent (Kahn, 1971), number of victims (Frazier, 1974) and type of victim (Cormier & Simons, 1969). Our study of 36 sexual killers was not designed to examine motivation, yet our research yielded rich descriptive data about what moved these men to kill.

The basis for the Patterns of Homicide Crime Scene Project, from which this article is derived, has been reported elsewhere in this journal (Ressler, Burgess, Douglas, Hartman, & D'Agostino, this issue). The project can be traced to the early 1970s, when agents of the FBI's Behavioral Science Unit (BSU) began, on an informal basis, to deduce certain offender characteristics by examining crime scene information. As a result, a preliminary framework for crime scene analysis and criminal profiling was formulated. Concurrent with the development of the criminal profiling project, a study was proposed to analyze crime scene patterns. Using case record review, direct observation, and first-hand investigative interviews, the study would examine convicted, incarcerated offenders.

This law enforcement study focused on analyzing crime scene evidence in order to identify the murderer. Data collection, which took place in various U.S. prisons between 1979 and 1983, was performed by special agents of the FBI. The data set for each murderer consisted of the best available data from two types of sources: official records (psychiatric and criminal records, pre-trial records, court transcripts, and/or prison records) and interviews with the offenders. The majority of offenders provided written consent to be interviewed. Interviews were all conducted in prisons with the cooperation of officials at the various correctional institutions.

Standard data collection forms were used. The forms not only provided guidelines for interviewing subjects but also established a system of recording and coding relevant data to permit computer analysis and retrieval. Information was requested about the offender and his background, about the offense, about the victim, and about the crime scene. Subjects were asked questions about childhood, adolescent, and adult behaviors or experiences that might be related to violence. In this article, we present a motivational model of sexual homicide based on (1) quantitative analysis of background data, and (2) qualitative analysis of interview data from murderers.

This was an exploratory descriptive study of a small available sample of 36 sexual murderers. Because of the limitations of the study design, we present critical variables not for generalization purposes, but as hypotheses for examination in subsequent research of sexual and "motiveless" murders. We have no data on a comparable control group; thus these findings should not be interpreted as showing a predictive role for certain childhood or adolescent experiences. Instead, we use the data in developing a motivational matrix for sexual murder.

## FINDINGS

### The Murderers

The 36 men in the study began their lives with certain advantages. Most of them grew up in the 1940s and 1950s, a period when attitudes in the United States favored oldest, white male children; all subjects were male, the majority (33) were white, and many were eldest sons (4 were only children, and 4 were adopted). They were of good intelligence, with 29% classified in the average range, 36% in the bright normal and superior range, and 15% in the very superior range. These attributes fostered in the offenders a certain sense of privilege and entitlement.

Initially, the majority of the men began life in two-parent homes. Half of the mothers were homemakers; three-quarters of the fathers earned stable salaries. Over 80% of the offenders described their family socioeconomic levels as average (self-sufficient) or better. Thus mothers were in the home raising the children; fathers were earning stable incomes; poverty was not a factor in the financial status of families.

Although the families initially appeared to be functional with both parents present, problems were noted within the parents' backgrounds. Families had criminal (50.0%), psychiatric (53.3%), alcohol abuse (69.0%), drug abuse (33.3%), or sexual (46.2%) problems in their histories. It appears that parents of these men were often absorbed in their own problems. Thus, while being offered little guidance because of their parents' preoccupation with

their troubles, the murderers as young boys were witness to these deviant role patterns of criminal behavior, substance abuse, and poor interpersonal relationships.

In 47% of cases, the father left the home before the subject was 12; in 43% of the cases at least one parent was absent at some time prior to the subject's reaching age 18. This loss of the father required many of the offenders to adjust to a new male caretaker during childhood and adolescent years.

Instability in the family residence was also noted in many cases (68%). In addition, 40% of the subjects lived outside the family home before age 18. Locations included foster homes, state homes, detention centers, and mental hospitals. The histories of frequent moving reduced the boys' opportunities to develop positive outside relationships that might have compensated for family instability.

Examination of performance behaviors of the subjects revealed that despite their intelligence and potential in many areas, performance in academics, employment, and military was often poor. Only one-third did average or better in school, with 68% receiving a fair to poor academic rating. The majority did not finish high school. Thus, although these men were intellectually bright, they did not perform to their abilities.

There was confirming evidence of abuse in the childhood histories of the 36 murderers. Physical abuse (13/31), psychological abuse (23/31), and sexual abuse (12/28) were noted. This reveals that many of the men experienced some type of childhood abuse. It is noteworthy that 25 of the 36 men had some type of psychiatric assessment or confinement as a child or adolescent.

### **Behavioral Indicators**

Our analysis examined the results of a checklist of symptoms and behavioral experiences (see Table 1). This checklist was derived from a standard list of self-report indicators, used in research on a wide variety of psychosocial studies, and also included indicators of thinking patterns (daydreams) and behaviors derived from the FBI profilers' understanding of criminal behavior. However, readers should keep in mind that many of these behavioral symptoms have no consistent definitions or ways of measurement. For example, there is no method of measuring a pattern of lying or masturbation.

*Childhood.* An analysis of 24 checklist items indicates that over 50% of the murderers reported the following present in childhood: daydreaming (82%), masturbation (82%), isolation (71%), chronic lying (71%), enuresis (68%), rebelliousness (67%), nightmares (67%), destruction of property (58%), fire-setting (56%), cruelty to children (54%), and poor body image (52%).

*Adolescence.* An analysis of 24 checklist items indicates that over 50% of murderers reported the following behaviors: assaultive to adults (84%), rebel-

liousness (84%), masturbation (82%), stealing (81%), daydreaming (81%), isolation (77%), chronic lying (75%), nightmares (68%), poor body image (63%), cruelty to children (64%), destroying of property (62%), enuresis (60%), and firesetting (52%).

*Adulthood.* An analysis of 24 checklist items indicates that over 50% of murderers reported that during adulthood, the following behaviors were present: assaultive to adults (86%), daydreaming (81%), masturbation (81%), isolation (73%), rebelliousness (72%), chronic lying (68%), poor body image (62%), stealing (56%), and nightmares (52%).

For descriptive purposes, we use the terms *internal behaviors* and *external behaviors*. Internal behaviors include thinking patterns and experiences within or unique to the individual; external behaviors are those overt actions that can be observed by others. The internal behaviors most consistently reported over the three developmental periods are daydreaming, compulsive masturbation, and isolation. The external behaviors most consistently reported include chronic lying, rebelliousness, stealing, cruelty to children, and assault on adults.

### ROLE OF FANTASY

The central role of daydreaming and fantasy in the lives of the 36 murderers is critical to what motivated them to kill. Daydreaming has been defined as any cognitive activity representing a shift of attention away from a task (Singer, 1966). A fantasy, as we define it, is an elaborate thought with great preoccupation, anchored with emotion and having origins in daydreams. A fantasy is generally experienced as thoughts, although the individual may be aware of images, feelings, and internal dialogue. Some people may be conscious only of thoughts, whereas others are conscious only of feelings. Fantasy is a normal way for adults as well as children to obtain and maintain control of an imagined situation.

However, the level of fantasy development may differ among people and is generally based on the individual's ability to identify certain thoughts as daydreams, to articulate their content, and retrospectively to recall this content. Singer (1966) observed that 96% of adults report that they daydream several times a day, and Beres (1961) noted that fantasy may either substitute or prepare for action. For various groups of people, fantasies may be sadistic (MacCulloch et al., 1983). It is not known how many people activate their sadistic fantasies and in what context this may occur, but Schlesinger & Revitch (1980) caution that once the fantasy builds to a point where inner stress is unbearable, the way for action is prepared.

Whereas psychological motives for violent behavior are usually conceptualized in the literature as having roots beginning with trauma, insult,



TABLE 1  
Frequency of Reported Behavior Indicators in  
Childhood, Adolescence, and Adulthood  
for Sexual Murders

Behavior	Frequency					
	Childhood		Adolescence		Adulthood	
	n	(%)	n	(%)	n	(%)
Daydreaming	28	82	27	81	27	81
Compulsive masturbation	28	82	28	82	27	81
Isolation	28	71	26	77	26	73
Chronic lying	28	71	28	75	28	68
Enuresis	22	68	20	60	20	15
Rebellious	27	67	25	84	25	72
Nightmares	24	67	22	68	21	52
Destroying property	26	58	26	62	23	35
Fire setting	25	56	25	52	25	28
Stealing	27	56	27	81	25	56
Cruelty to children	28	54	28	64	27	44
Poor body image	27	52	27	63	26	62
Temper tantrums	27	48	26	50	25	44
Sleep problems	23	48	22	50	22	50
Assaultive to adults	25	38	25	84	28	86
Phobias	24	38	23	43	24	50
Running away	28	36	26	46	26	11
Cruelty to animals	28	36	26	46	25	36
Accident prone	24	29	22	32	22	27
Headaches	21	29	21	33	22	45
Destroying possessions	25	28	23	35	23	35
Eating problems	26	27	25	36	26	35
Convulsions	26	19	24	21	23	13
Self-mutilation	26	19	24	21	25	32

NOTE: n = number of subjects with data.

and/or overstimulation in early childhood, our thesis is different. We hypothesize that these men are motivated to murder by their way of thinking. Over time, their thinking patterns emerged from or were influenced by early life experiences. For example, a child abused by an adult caretaker begins to think about being hit every time an adult comes near him, dwelling on the hitting. He may imagine (fantasize) about someone coming to help him by beating up the adult. This thinking pattern may bring relief, because someone has protected him in his fantasy. In addition, while being abused the child may psychologically remove himself from the pain. He may pride himself on his control over pain in the face of abuse; for example, while being beaten he does not flinch or blink. This thinking pattern gives the child a sense of control and, as a result, tension is relieved. The child can increase or decrease terror

with different levels of arousal through fantasy. Development of this type of thinking pattern does not necessarily mean a child will grow up to be an abuser; our example illustrates the role of fantasy and its development.

In analyzing the data we obtained through interviews with the murderers, we attempted to link our quantifiable findings with indications from the murderers themselves of long-standing, aggressive thoughts and fantasies directed toward sexualized death. The findings suggest that these thought patterns were established early and existed in a context of social isolation.

Murderers were consciously aware of the central role of fantasy in their lives and of their preference for fantasy over reality. Even those men unaware of this reported that their thoughts became retaliatory or vengeful when they perceived themselves as being slighted, rejected, frustrated, or betrayed. Such thinking becomes an important component in the maintenance of sexually aggressive violent behavior.

The central role that fantasy plays in the thinking patterns of these men is noted in one of the subject's statements: "All my life I knew I was going to end up killing." It also was observed in the statement of a parent who, after her son was convicted of fetish robberies, feared the outcome of her son's moodiness and isolation would be "something really terrible and tragic."

### **Early Fantasy Development**

It is important to keep in mind that not all children respond to their environment with violent fantasies and not all children who fantasize violence act out these fantasies. Nevertheless, from our interviews with the murderers in our study, the high degree of egocentricity in the murderer's negative, aggressive, sexualized fantasy and play is revealed.

As children, the murderers often thought of other children and family members as extensions of their inner worlds. The revealed intermittent awareness of the impact of their early childhood behavior on others. They were not influenced by the response of others to their behavior. It continued and repeated itself. They recounted tying up a smaller child and scaring him or destroying another child's toy. A man who eventually beheaded his victims did not associate that action with his early childhood activities that involved the systematic decapitation of his sister's dolls. He saw his actions as a response to his annoyance with his sister, not to his desire to dominate, bully, and hurt. Ritualistic play of tying up and scaring a younger child was not associated to one murderer's abuse as a child. His play was a reenactment. Murderers recounting violent and sadistic behavior as adolescents were more aware of the intentionality of their acts.

The interviews with the offenders are remarkable in the absence of any accounts of positive childhood fantasies. However, it is unclear whether such fantasies were actually nonexistent or whether early positive fantasies were

lost in later negative perspectives and behaviors. The following example illustrates the pervasive nature of the child's negative daydreaming:

I felt guilty for having those thoughts [toward family] and submerged them and built up lots of hostility and then it got off into fantasy. . . . They should have noticed it at school, so excessive was my daydreaming that it was always in my report cards. . . . I was dreaming about wiping out the whole school.

### **Early Sexualization of Fantasy**

The childhood onset of sexual fetish interests was noted in the subjects. Several subjects described strong interest and attraction at approximately the age of five to high heeled shoes, female underwear, and rope. The men were aware of the carryover of sexualized fantasies about these items into adolescence and adulthood. When the subjects began to murder, these items took on importance in ritualized aspects of their murders.

Evidence of childhood sexualized play in the lives of the murderers was also revealed by parents and caretakers. Some parents provided information about preschool sexual fantasies. In one case, a mother recalled finding her 3-year-old son, with one end of a string tied to his penis and the other end of the string shut in a bureau drawer, leaning backward to exert a pulling sensation on his penis. The boy's behavior suggested he had engaged in such activity earlier. It is most likely that this behavior was introduced initially by an older person; evidence suggests the boy's babysitter was responsible.

### **Aggressive Components of Early Fantasy**

When murderers were asked to describe their early favorite play activities, some revealed a repetitive acting out of a core aggressive fantasy. These childhood fantasies were so dominant that they became persistent themes in play with other children or alone. In some cases, an original violation or assault was expressed. For example, one subject at age 15 took younger boys into the bathroom of his residential facility and forced oral and anal sex on them, reenacting his own victimization at age 10 but reversing his role from victim to victimizer. However, he did not consciously connect this behavior with his own earlier assaults. The assaultive rituals were his attempts at mastery and control over people and situations.

Another offender as an adolescent openly masturbated in his home, especially in front of his sisters, using their underwear in his masturbation rituals. He appeared oblivious to the inappropriate nature of his acts, and was offended by his family's response, feeling that family members were rejecting, intolerant, and unfair. It is speculated that his behavior represented a hyper-arousal state derived from a repressed memory from childhood.

Aggressive content in the form of death themes was also noted for those murderers who described their early fantasies. Death is an example of ulti-



mate control. When directed toward oneself in childhood, it can be a counter-reaction to overwhelming fear, and its dominance in thought and play reveals the child's troubled state of mind.

In one case, the 12-year-old subject repeatedly played "gas chamber" with his sister. This game required his sister to tie him up in a chair, throw an imaginary switch, and when "gas" was introduced, the subject would grasp at his throat, drop to the floor, writhe convulsively, and "die." This game combined a sexual theme (compression of the carotid arteries for a sexual sensation) and death theme fantasy.

#### **Early Expressions of Sexual and Aggressive Fantasy**

Early fantasies often give rise to behavior tryouts that are precursors to criminal behavior (MacCulloch, 1983). These precursor behaviors have the capacity to move the child into pain-inflicting acts and to break through in subtle, as well as overt, ways. They may emerge as play-engagement behaviors with others (i.e., bullying younger children or putting pins in the rug for a sister to walk on) or actions involving only themselves (i.e., tying ropes around their necks or cutting parts of their bodies). Such behavior was noted in the reported cruelty to other children by the offenders as youths as well as in the offender's earliest encounters with law enforcement. Although such encounters are often dismissed as adolescent adjustment problems, they may be evidence of an escalation in aggressive acts toward others.

Especially illustrative of such escalation of fantasy expression is the previously cited example of the 3-year-old boy who was observed by his mother with his penis tied to a bureau drawer. As a young adolescent, he was found by his parents in the bathtub practicing autoerotic asphyxia with his penis and neck tied to the cross-bar of the faucets. At age 14 his parents took him to a psychiatrist after noticing rope burns on his neck. At age 17 this same subject abducted a girl at knife-point, took her to a deserted area where he kept her all night, and released her in the morning. The adolescent was apprehended and then released; the charge on his record was "girl trouble." Of importance is the offender's shift in the object of aggression from himself to a woman. Not until late adolescence, when the offender began following women, confronting them with a knife, binding them, and fondling them was the offender sent to prison. After release from prison, his crimes escalated to the murder of three young women by asphyxia.

The early expressions of aggressive fantasies were often painful memories for the offenders to reveal and the ones, for various reasons, that were never discussed. They may have realized that they could have controlled their actions and that they were aware that they had crossed the line between fantasy and reality. In cases where the men were not apprehended for their early crimes, they learned they were not controlled by authority and that they

could act violently and kill with impunity. Of the 36, 10 murdered as juveniles, thus realizing that they had the power over life.

### MOTIVATIONAL MODEL OF SEXUAL HOMICIDE

To illustrate our hypothesis of the various factors that influenced the 36 sexual murderers to kill, we present a motivational model for understanding sexually oriented murder and sadistic violence. In addition to the data we collected, the interviews with the murderers serve as a basis for this model. The murderers' early development of an active, aggressive fantasy life (daydreams) combined with later sexual reinforcement (compulsive masturbation) and increasing detachment from social rules of conduct (social isolation) provide a framework that reinforces his subsequent violent behavior.

The model has five interacting components emphasizing interrelationships among (1) the murderer's ineffective social environment, (2) child and adolescent formative events, (3) patterned responses to these events, (4) resultant actions toward others, and (5) the killer's reactions, via a mental "feedback filter," to his murderous acts (see Figure 1).

#### (1) Ineffective Social Environment

It is often suggested by child and family theorists that the structure and quality of family and social interaction, especially in the way the child perceives family members and their interaction with him and with each other, are important factors in a child's development. For children growing up, the quality of their attachments to parents and to other members of the family is most important in how these children later as adults relate to and value other members of society. Essentially, these early life attachments (sometimes called "bonding") translate into a blueprint of how the child will perceive situations outside of the family. Thus one of the primary functions of family life is to develop a child who has a positive bonding with his social environment.

In our population of murderers, this social bonding fails or becomes narrow and selective. Caretakers either ignore, rationalize, or normalize various behaviors in the developing boy or, through their own problems (e.g., criminal behavior or substance abuse), support the child's developing distortions and projections ("I was framed"). People significant to the boy do not provide nurture and protection; rather, they impose adult expectations on the boy ("Boys should be strong and take care of themselves"). Adults are nonprotective and nonintervening on behalf of the boy. The boy may be punished for a specific antisocial act but the social restriction does not register in an experiential and cognitive way; that is, the boy is reprimanded or brought to court but he normalizes the behavior as, "All boys get into

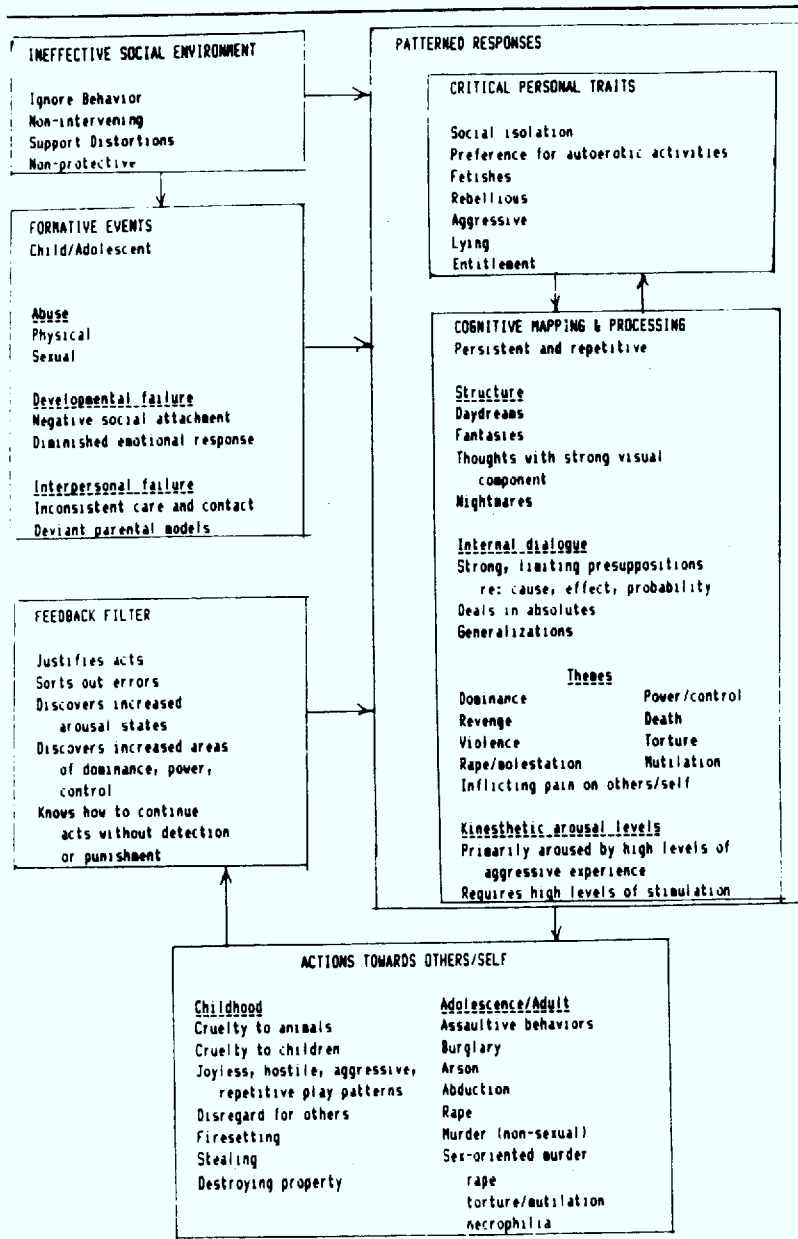


Figure 1: Sexual Homicide: Motivational Model

trouble." The ineffective social environment expands from caretakers to individuals in a community whose work brings them into contact with the young person (e.g., teachers, counselors, ministers, police).

## (2) Formative Events

There are three factors that contribute to the formative events component of our model. The first of these is trauma, in the form of physical or sexual abuse. The developing child encounters a variety of life events, some normative (e.g., illness, death) and others nonnormative. Those nonnormative events in the murderer sample include direct trauma (physical and/or sexual abuse) and indirect trauma (witnessed family violence). Within the context of the child's ineffective social environment, the child's distress caused by the trauma is neglected. The child is neither protected nor assisted in recovery from the abusive and overwhelming events; the external environment does not address the negative consequences of the events.

One assumption regarding early traumatic events is that the child's memories of frightening and upsetting life experiences shape the child's developing thought patterns. The type of thinking that emerges develops structured, patterned behaviors that in turn help generate daydreams and fantasies. The literature on children traumatized by sexual and physical abuse and by witnessing violence reports the occurrence of dreams, nightmares, and disturbing memories of the trauma (Burgess & Holmstrom, 1974, 1979; Conte, 1984; Pynoos & Eth, 1985). Other studies have documented these children engaging in painful, repetitive acting-out of the traumas (Axline, 1969; Gardner, 1971; Terr, 1979, 1981a, 1981b, 1983). Play of emotionally disturbed and troubled children often contains conflicted and obsessive themes, contrasting with the creative and flexible themes noted in nondisturbed children. We believe the traumatized child's play remains fixed on thoughts associated with the traumatic event and is held separate or encapsulated (Hartman & Burgess, in press) rather than integrated in play activities or in art expression through drawings (Wood, Burgess, & McCormack, in press). Successful resolution of traumatic events results in the child being able to talk about the event in the past tense and with equanimity. Unsuccessful resolution of the trauma underscores the victim's helplessness often with the emergence of aggressive fantasies aimed at achieving the dominance and control absent from reality (Burgess, Hartman, McCausland, & Powers, 1984; MacCulloch et al., 1983; Pynoos & Eth, 1985).

A second assumption regarding early traumatic events is that manifestations of the impact of distressing events, such as direct sexual and physical abuse, are influential in the child's social development (Burgess et al., 1984; Conte, 1984; Pynoos & Eth, 1985). Concurrent with the abusive event, the child may experience a sustained emotional/physiological arousal level. When this sustained arousal level interacts with repetitive thoughts about the

trauma, the child's perceptions and patterns of interpersonal relationships may be altered. For example, the child may show hyperaggressive behavior by striking out at parents or repeatedly assaulting a favorite pet.

The second factor contributing to the formative events component of our model is developmental failure. For some reason the child does not readily attach to his adult caretaker. This is the child who does not listen or respond to any limit setting and who often is described as aloof, cold, and uncaring. As a result of this negative social attachment (bonding), the caretaker has no influence initially over the child and later over the adolescent. In cases where the child has been psychologically deprived or neglected, he may feel a diminished emotional response.

Interpersonal failure, the third factor in this model component, is the failure of the caretaking adult to serve as a role model for the developing child. There are various reasons for this failure including the caretaker being absent or serving as an inadequate role model (e.g., a parent with problems of substance abuse or an abusive parent). The child may experience a violent home environment where he sees aggression (drunken fights) associated with sexual behavior of adults.

### **(3) Patterned Responses**

The patterned responses component of the motivational model includes two subcategories: (1) critical personal traits, and (2) cognitive mapping and processing. These subcategories interact with each other to generate fantasies.

#### *Critical Personal Traits*

In the normal growth and development of a child, positive personality traits of warmth, trust, and security help establish the child's relationships with others. These critical traits, in combination with an effective social environment, allow the child to develop competence and autonomy.

In the murderer group, there was a propensity for the 36 men to develop negative rather than positive personal traits. These negative personal traits interfere with the formation of social relationships and the development of an emotional capacity within the context of human encounters. Increased social isolation encourages a reliance on fantasy as a substitute for human encounter. In turn, individual personality development becomes dependent on the fantasy life and its dominant themes, rather than on social interaction. Without human encounters and negotiations, there is failure to develop the corresponding social values, such as respect for others' lives and property.

The personal traits critical to the development of the murderers in our study include a sense of social isolation, preferences for autoerotic activities and fetishes, rebelliousness, aggression, chronic lying, and a sense of entitlement. The offenders' chronic lying underscores their lack of trust and commitment to a world of rules and negotiation. Rather, distrust and a sense of



entitlement to whatever they can get dominate their perceptions. Their social isolation and aggression interact, restricting sexual development based on caring, pleasure, and companionship. Because they are so isolated, the men have little opportunity for interpersonal experiences that might modify their misconceptions about themselves and others. Their personal affective lives become dependent on fantasy for development. In turn, fantasy becomes the primary source of emotional arousal and that emotion is a confused mixture of sex and aggression.

### *Cognitive Mapping and Processing*

Cognitive mapping refers to the structure and development of thinking patterns that give both control and development to one's internal life (e.g., one's sense of self and beliefs about the world) and link the individual to the social environment (e.g., one's interpretation of others). The process of cognitive mapping generates the meaning of events for an individual and mediates sensory arousal patterns. Additionally, it is a filtering system that allows for interpretation of new information (e.g., "I'm always being singled out"; "It's my life and I can live it my own way"). Cognitive mapping and processing are aimed at self-preservation and equilibrium through the reduction of the negative affects of helplessness, terror, and pervasive anxiety.

In the murderers, the mapping is repetitive and lacking socially enhancing cognitions, moving the individual to an antisocial position and view of the world. What emerges is a primary sense of entitlement to express oneself regardless of its impact on others. The thought and action are justified through the cognitive mapping of the murderer. The individual does not experience a positive impact with the social environment. This occurs because his fantasies and thinking patterns are a substitute for social relationships. They are designed to stimulate and reduce tension. A sense of self is developed and bolstered by the fantasies. The self-image is terrifying to imagined others and contributes to further social isolation. The process continues and becomes the primary source of energy for the psychological life of the individual. Imagined outcomes of control and dominance over others become a substitute for a sense of mastery of internal and external experience.

Parallel with the repetition of ideation of cognitive mapping is the neurohormonal influence on sensory arousal levels. The neurohormonal basis of the pleasure associated with aggressive fantasy activity is unknown. There is, however, substantial evidence that stressors elicit a central nervous system (CNS) opioid responses in both animals (stress-induced analgesia) and human beings (van der Kolk, Greenberg, Boyd, & Krystal, 1984). Elevated plasma levels of endogenous opiates have been documented in marathon runners (Colt, Wardlaw, & Frantz, 1981), individuals who have undergone surgery (Cohen, 1982), and patients who engage in self-mutilation (Coid, 1983). This suggests that the source of the stressor may be external or internal. It also has

been reported that removal of the stressor may be associated with opiate withdrawal-like symptoms: anxiety and irritability (Backland, 1970; van der Kolk et al., 1984). In a recent analysis of the psychobiology of posttraumatic stress (PTS), van der Kolk et al. (1984) have suggested that the stress-approach behavior consistently displayed by individuals who suffer from PTS disorders may involve a conditioned CNS opiod response followed by withdrawal hyperreactivity. By analogy, compulsive aggressive fantasy activity may also involve such a psychobiological mechanism. In this case individuals re-expose themselves to traumatic situations through fantasy activity. The internally induced stressor elicits the opiod response, which brings relief and/or pleasure as well as avoidance of the noxious symptoms of opiate withdrawal.

Structures of cognitive mapping and processing include daydreams, nightmares, fantasies, and thoughts with strong visual components. There is internal dialogue of limiting beliefs regarding cause, effect, and probability. The subjects deal in absolutes and generalizations. The themes of their fantasies include dominance, revenge, violence, rape, molestation, power, control, torture, mutilation, inflicting pain on self/others, and death. High sensory arousal levels become the preferred state. The preoccupation with the aggressive themes, the detailed cognitive activity, and elevated kinesthetic arousal state eventually move the person into actions.

#### **(4) Actions Toward Others**

Childhood actions are based on the child's regard and caring for others as well as on self-respect and flexibility. In other words, behavior patterns reflect the private, internal world of the child.

Interviews with the murderers in our study revealed that their internal world is often preoccupied with troublesome, joyless thoughts of dominance over others. These thoughts are expressed through a wide range of actions toward others. In childhood, these include cruelty toward animals, abuse of other children, negative play patterns, disregard for others, firesetting, stealing, and destroying property. In adolescence and adulthood, the murderer's actions become more violent: assaultive behaviors, burglary, arson, abduction, rape, nonsexual murder, and finally sexual murder involving rape, torture, mutilation, and necrophilia.

The early expression of cruelty toward both animals and humans when not intervened and stopped, we believe, sets the stage for the future abusing behavior in two ways. First, the early violent acts are reinforced, as the murderers either are able to express rage without experiencing negative consequences or are impassive to any prohibitions against these actions. Second, impulsive and erratic behavior discourages friendships. The failure to make friends leads to isolation and interferes with the ability to resolve conflicts, to

develop positive empathy, and to control impulses. Furthermore, there is no challenge to their beliefs that they were entitled to act the way they do. The men either as children or adolescents feel estranged from people. Although that does not mean that superficially they cannot relate to people, it does indicate that in terms of socially effective learning, they have major deficits. They are loners; they are self-preoccupied. Either by daydreaming or fantasies, they become absorbed in their own thoughts.

#### (5) Feedback Filter

Given the detailed and repetitive thinking patterns of these murderers, it is not surprising to learn that the murderer reacts to and evaluates his actions toward others and toward himself. These reactions and evaluations influence his future actions. We term this reacting the *feedback filter*, because it both feeds back into the killer's patterned responses and filters his earlier actions into a continued way of thinking.

Through the feedback filter, the murderer's earlier actions are justified, errors are sorted out, and corrections are made to preserve and protect the internal fantasy world and to avoid restrictions from the external environment. The murderer experiences increased arousal states via fantasy variations on the violent actions. Feelings of dominance, power, and control are increased. The murderer develops increased knowledge of how to avoid punishment and detection. All this feeds back into the patterned responses and enhances the details of the fantasy life. For example, one of the murderers reported how he sat in prison ruminating on his fantasies regarding killing women and dismembering their bodies. As time went on, he became much more excited by his thoughts of disposing of the victims' bodies and tricking law enforcement agents. In this peculiar evolution of events, he now experienced himself as more involved in the social world.

#### Model Summary

When adolescent and adult criminals are studied in terms of the contribution of past events to their criminality, emphasis previously has been on the event itself rather than on the subject's response and reaction to the event. In part, psychological models of motivation for sexual murder have focused on models of displacement of rage and frustration from primary caretakers in the lives of sexual murderers. Although these symbolic artifacts may operate, a more direct understanding of the potential for violence and criminal behavior resides in the fantasy life and basic cognitive operations of murderers. A context of justifying socially abhorrent acts provides support for the murderers' aggressive, violent fantasies. This structure, limited to its sensory arousal capacities, maintains and perpetuates the destructive acts.

Our motivational model suggests that traumatic and early damaging experiences to the murderers as children set into motion patterns of cognition. Although there may be initial attempts to work through the troublesome effects of the experience, attempts to do so become patterns for limiting choices such as aggression being the only method for dealing with conflict. In addition, a structure of thinking that motivates and sustains deviant behavior through developmental and interpersonal failure and through the alliance of distorted perceptions and affect begins to emerge. Of particular importance is the activation of aggression and its link with sexual expression. The lack of attachment to others gives a randomness to the sexual crimes; however, scrutiny of the thinking patterns of the offenders indicates that there is planning of the crimes whether they rely on chance encounters with any victim or whether they are planned to snare victims.

#### IMPLICATIONS

There are clinical implications from this study. Understanding the reinforcing quality of actions, be they in fantasy, play, or acting out behaviors, may lead to different notions regarding not only motivation but also behavior change. Exploratory efforts by clinicians are needed for methods to alter the structure of these fantasies. For example, the offender might be forced to relate to the victim position in the fantasy as a way to stimulate compassion for rather than violence to the victim.

This study raises concern about how to deal therapeutically with the notion of fantasy in the criminal population. We note that some levels of dwelling on fantasies has the capacity to escalate rather than diminish the power of the fantasy. Unless one alters the structure of the fantasy that moves toward the aggressive acts, the power can be increased.

This exploratory study suggests avenues for further research. Basic research in biological and psychosocial factors is necessary to explore the biochemical hormonal sensory levels associated with deviant fantasies of both youth and adults. We know that pessimistic cognitions are associated with lowered epinephrine levels in endogenous depression; what might research suggest regarding violent sexualized fantasies?

Basic research on the sensory arousal levels of people during fantasy might answer the question: Is there a basis of hormonal release addicting the person to violent fantasy and violent acts? And does the structure of fantasy differ between various groups of deviant offenders?

Research on a longitudinal basis of children's response to and recovery from sexual and physical/psychological abuse and research on the social context in which the child survives and recovers from abuse are important to any understanding of motivational factors. In this context, a control group



of abused males who do not commit criminal acts is essential to identify the factors that help the victim recover and survive the abuse.

Our work and the research of others (Prentky et al., 1985) suggest that a typology of murderers is essential to investigate for a variety of reasons. First, any understanding of the typology may enhance law enforcement efforts both at persuading certain offenders to turn themselves in and at more narrowly focusing investigative efforts. Second, a classification system will give professionals working to curtail violent behavior a focus for intervention efforts that address the need to monitor, evaluate, and change salient personality characteristics. Measurements of these characteristics and methods of evaluating positive change are essential to prevent the tragic reality of released violent criminals repeating their crimes. Third, a classification system would facilitate dialogue between the various disciplines working with offenders and would encourage research into profiling of suspects from crime scene evidence, a technique currently in progress at the National Center for the Analysis of Violent Crime (Douglas, in preparation). Further, behavioral research efforts by law enforcement agencies are important to their development of an additional skill in reading the seemingly inert characteristics of crime scene evidence. Understanding the motivational and behavioral matrix of the offender increases law enforcement's utilization of the connection between patterns of thinking and behavior.

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*Ann W. Burgess, R.N., D.N.Sc., is van Ameringen Professor of Psychiatric Mental Health Nursing, University of Pennsylvania, Philadelphia, and Associate Director of Nursing Research, Boston City Hospital, Boston.*

*Carol R. Hartman, R.N., D.N.Sc., is Associate Professor and Coordinator of the Graduate Program in Psychiatric Mental Health Nursing, Boston College, Chestnut Hill, MA.*

*Robert K. Ressler, M.S., is Supervisory Special Agent, Federal Bureau of Investigation, and Program Manager, Violent Criminal Apprehension Program, National Center for the Analysis of Violent Crime, FBI Academy, Quantico, VA.*