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Volitional Impairment and the Sexually Violent Predator*

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ABSTRACT: This article discusses psychiatry's limited conceptualization of volitional capacity and its application to sexually violent predator laws by exploring two legal opinions critical to predator case law (Kansas v. Hendricks and Kansas v. Crane). The author reviewed pertinent psychiatric literature on impaired volition to identify potential contributions and limitations that psychiatry may offer the legal field.

Assessment of the ego dystonic nature of impaired self-regulation, utilization of recent advances in self-assessment and laboratory evaluation of impulsive behavior, and dimensional categorization of a volitional capacity construct are recommended as an approach to the assessment and understanding of an inability to control concept. This paper concludes that elements of volition may be psychiatrically evaluated in a way that contributes to the Court's understanding of that capacity. However, further study is needed to operationally define volitional capacity and address issues of assessment validity and reliability.

KEYWORDS: forensic science, forensic psychiatry, sexually violent predator, volitional capacity, mental abnormality, impulsivity

Recent U.S. legal opinion maintains that proof of serious difficulty in controlling behavior upholds the constitutionality required for civil commitment of a sexually violent predator (1). Lack of legislative definitions and judicial guidance (2) has left lower courts to turn to mental health professionals and the *Diagnostic Statistical Manual* (DSM) for clarification of specific legal terminology (3).

Impulse control has been an ongoing subject of controversy in forensic psychiatry (4–6). The Court's utilization of the term *volitional impairment* as a means for civil commitment (3,7) has reignited debate within the mental health community (8,9). This article reviews two legal opinions critical to sexually violent predator case law (Kansas v. Hendricks and Kansas v. Crane) to elucidate problems inherent in applying vague concepts of behavior control to legal contexts. This article further attempts to summarize available psychiatric information pertaining to volitional impairment and suggests that if volitional capacity is indeed the linchpin for civil commitment of the sexually violent predator, the limiting factor is our understanding of that capacity.

The field of psychiatry does not have a valid or reliable means to describe a patient's volitional capacity, as no uniform clinical definition exists. The medical literature supports a rudimentary understanding of volitional impairment through concepts such as impulse control and compulsive behavior and suggests that elements of volition may be psychiatrically evaluated in a way that contributes to the Court's understanding of its impairment. This article concludes that a clinical concept of volition has potential usefulness. However, further study is needed to operationally define volitional capacity, to facilitate valid and reliable research, and to improve effective communication across professional fields.

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History of the Sexually Violent Predator Laws

Commitment laws for sex offenders arose in the late 1930s and primarily focused on safeguards for societal protection through treatment of sex offenders in lieu of incarceration. By 1960, over 25 states had adopted civil commitment statutes for sex offenders. This number dwindled in the 1970s and 1980s due to lack of efficacy of sex offender treatment. After a series of highly publicized sexually violent acts, several states adopted new "sexually violent predator" laws modeled after Washington State's 1990 Community Protection Act. Under these statutes, civil commitment is based on previous criminal conviction and occurs after incarceration. These laws only require that the offender meet the definition of a sexually violent predator, unlike traditional civil commitment schemes that necessitate an element of imminent dangerousness and, in some states, require a recent act of violence for commitment (5,10,11).

In 1993, convicted rapist Donald Ray Gideon brutally raped and murdered Pittsburgh State University student, Stephanie Schmidt. This sparked the Kansas legislature to adopt the Sexually Violent Predator Act (the Act) (12,13). The Act targeted ". . . a small but extremely dangerous group of sexually violent predators . . . who do not have a mental disease or defect . . . [that] generally have antisocial personality features which are unamenable to existing mental illness treatment modalities." The Act also created ". . . a civil

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commitment procedure for the long-term care and treatment of the sexually violent predator" (13).

Hendricks

Leroy Hendricks first tested the Kansas Act in 1994. Hendricks had a substantial history of sexual violence. He was convicted of indecent exposure to two young girls in 1954, lewdness involving a young girl in 1957, molestation of two young boys in 1960, and sexual assault of a young girl and boy in 1967. He served ten years of a five- to twenty-year sentence for two counts of indecent liberties with two young boys in 1984 when Sedgwick County prosecutors filed a petition for involuntary commitment under the Sexually Violent Predator Act.

The Kansas legislature defined sexually violent predator as "any person who has been convicted of, or charged with, a sexually violent offense and who suffers from a mental abnormality or personality disorder which makes the person likely to engage in the predatory acts of sexual violence." Mental abnormality was defined as "a congenital or acquired condition affecting the emotional or volitional capacity, which predisposes the person to commit sexually violent offenses in a degree constituting such person a menace to the health and safety of others." *Personality disorder* was not defined by the Kansas legislature (7,14).

A jury trial held that Hendricks, diagnosed with pedophilia, met the sexually violent predator criteria. Hendricks appealed, and the Supreme Court of Kansas, in a four to three decision, reversed the trial court ruling. The Court held that the Act violated the Due Process Clause of the Fourteenth Amendment to the U.S. Constitution and noted that "mental abnormality or personality disorder" is not a mental illness and, "Absent such a finding, the act does not satisfy the constitutional standard . . . " (14).

In 1996, the U.S. Supreme Court granted certiorari, and although their opinion was split five to four on ex post facto and double jeopardy issues, the Court was unanimous in rejecting the Supreme Court of Kansas' rationale regarding due process. The U.S. Supreme Court upheld the law as a constitutional exercise of the State's civil commitment authority because it required proof of something more than dangerousness, namely, a mental condition that causes the individual to be dangerous.

Leroy Hendricks stated that the only way to stop his pedophilic tendencies was "to die." Whether or not Hendricks suffered from volitional impairment, the U.S. Supreme Court took him at his word. They noted, "This admitted lack of volitional control, coupled with a prediction of future dangerousness, adequately distinguishes Hendricks from other dangerous persons who are perhaps more properly dealt with exclusively through criminal proceedings." Justice Breyer agreed with the majority opinion that the Act's definition of mental abnormality for civil commitment did not violate the Due Process Clause of the U.S. Constitution. He distinguished Hendricks' "abnormality" (pedophilia) by stating that it does "not consist simply of a long course of antisocial behavior, but rather it includes a specific, serious, and highly unusual inability to control his actions". However, in his concurring opinion, U.S. Supreme Court Justice Kennedy warned, ". . . if it were shown that mental abnormality is too imprecise a category to offer a solid basis for concluding that civil detention is justified, our precedents would not suffice to validate it." (7)

Crane

Three years after the U.S. Supreme Court decision in Kansas v. Hendricks, the Supreme Court of Kansas reviewed a district court decision to determine if that Johnson County violated due process by holding that the Act does not require the finding of volitional impairment rendering dangerousness beyond control (3).

On January 6, 1993, Michael T. Crane was convicted of lewd and lascivious behavior after exposing himself to a tanning salon attendant. He was convicted of aggravated sexual battery for exposing his genitals to a video store clerk 30 min after the tanning salon incident (15). After serving four years, the state filed a petition seeking to have Crane evaluated and adjudicated a sexually violent predator.

In 1998, mental health experts testified that Crane suffered from Exhibitionism and Antisocial Personality Disorder, and that the combination of these two diagnoses formed the basis for finding him a sexually violent predator. Crane was committed to custody under the Sexually Violent Predator Act. The Johnson County District Court held that the Act did not require a mental disorder that impaired volition capacity. The jury was instructed that in order to establish Crane as a sexually violent predator, the State must prove that Crane had an aggravated sexual battery conviction and "that he 'suffers from a mental abnormality or personality disorder, which makes the respondent likely to engage in future predatory acts of sexual violence, if not confined in a secure facility.'" Although *personality disorder* was not defined by the Kansas Act, the Johnson County District Court described personality disorder as a "condition recognized by the . . . [DSM IV], and includes antisocial personality disorder."

Crane appealed and the Supreme Court of Kansas granted review stating, "Crane raises several issues on appeal; however, the controlling issue is whether it is constitutionally permissible to commit Crane as a sexual predator absent a showing that he was unable to control his dangerous behavior." The Supreme Court of Kansas cited multiple references to impaired behavioral control in the U.S. Supreme Court's majority opinion of Kansas v. Hendricks. Specifically, the Court cited, "It [the Kansas Act] requires a finding of future dangerousness, and then links that finding to the existence of a 'mental abnormality' or 'personality disorder' that makes it difficult, if not impossible, for the person to control his dangerous behavior."

The Supreme Court of Kansas opined that, "Crane's behavior was a combination of willful and uncontrollable behavior." This attempt to quantify volitional impairment as partial in nature may have influenced the Court's opinion rejecting Crane as a sexually violent predator. Ultimately, the Court arrived at the "inescapable conclusion that commitment under the Act is unconstitutional absent a finding that the defendant cannot control his dangerous behavior" (3).

The U.S. Supreme Court granted a petition for writ of certiorari to address the issue of volitional capacity in the Crane case. In a seven to two split decision, the Court ruled that inability to control behavior need not be absolute, but ". . . in cases where it is at issue . . . there must be proof of serious difficulty in controlling behavior" (1).

Legislation of Medical Terminology

Some investigators argue that the lack of legal definition for medical terminology used in sexually violent predator statutes creates a fundamental deficiency within the statutes (2). Referring to the DSM for vocabulary utilized by the Kansas legislators, the Johnson County District Court applied a medically descriptive classification of distinct clinical syndromes (personality disorder to legal terminology. DSM constructs tend to depict specific conduct and do not necessarily define the etiology of behavior nor lend credence to prediction of behavior (16,17). Courts assume a definition designed to enhance communication between medical personnel,

then application of that definition to legal concepts such as prediction and responsibility may become problematic.

Mental Abnormality

The term *mental abnormality* was created by the legislature specifically for sexually violent predator statutes. There is little clinical information regarding mental abnormality, as the psychiatric community does not frequently use this term. Becker and Murphy suggest operationalizing the concept of mental abnormality. They propose that sexually violent predator laws should be applied most frequently to those with a definable mental disorder. In the context of sexual predators, the most appropriate conditions would be a subset of paraphilic disorders (18).

Paraphilias constitute a set of recurrent, intense sexually arousing fantasies, sexual urges or behaviors generally involving nonhuman objects, suffering or humiliation, or nonconsenting persons such as children. DSM IV paraphilic diagnoses focus on the pathological features of sexual behavior (16) and associated guilt, shame, and depression suggest an emotional component that may affect volitional capacity. However, the diagnoses do not necessarily imply significant cognitive or emotional dysfunction that would account for volitional incapacitation that is seen in those committed under traditional commitment schemes (18–20). This lack of obvious debilitating psychopathology in sex offenders (10) blurs the threshold for determination of civil commitment.

Personality Disorder

Unlike mental abnormality, the term *personality disorder*, also utilized by the legislature, has specific medical meaning within the psychiatric community. *Antisocial personality disorder* is a descriptive term with a broad range of symptomatology that applies clinically to approximately 3% of males (16). This disorder has also been labeled sociopathic, psychopathic, deviant, amoral, dyssocial, and criminal personality (21). In the DSM IV, antisocial personality disorder describes a "pervasive pattern of disregard for and violation of the rights of others. . ." (16).

A review of impulsivity in psychiatric disorders noted that high levels of impulsivity occur frequently as a component of antisocial personality disorder (22). Furthermore, some authors suggest that crime arises from lack of self-control and that most criminals display multifaceted patterns of inadequate self-control (23). However, Yochelson and Samenow argue that the criminal personality is far from impulsive. They maintain that, "When a specific crime, such as an assault, has not been planned in advance, it is a matter of the criminal's responding in a habitual manner. He still maintains control of his behavior. All of us are habituated to doing some things in a specific way, such as driving an automobile; but we maintain control over what we do. To say that a pattern is ingrained or habitual does not diminish personal responsibility or decision-making capacity . . . . What has been so striking and consistent is that, to a man, our criminals have eventually revealed to us that what they did was an exercise of choice, and that all crimes were products of prior thinking" (21). It is important to note that "impulsivity or failure to plan ahead" is one possible criterion included in the DSM-IV diagnosis of antisocial personality disorder, however, it is not necessary for diagnosing the disorder (16).

The Inability to Control Concept

The medical community regards the concept of volition as controversial and has yet to establish a specific medical definition. Scattered elements of impaired volition are implied in descriptions of DSM diagnostic criteria such as "clinically significant maladaptive behavior," "repetitive behaviors that the person feels driven to perform," "sexual urges, or behaviors," "failure to resist aggressive impulses," and "marked impulsivity" (16). Some mental health investigators have suggested that there is no scientific basis for measuring a person's capacity for self-control or for quantifying any impairment of that capacity (24). Still others indicate that volitional impairment is as easily tested with a structured instrument as cognitive impairment (25). In order to reach a conclusion regarding either of these opinions, there must first be a consensus on the definition of such a capacity.

The interchange of legal terminology such as volitional capacity and inability to control has caused confusion within the medical and legal professions (26). For purposes of this article, an inability to control concept will be used synonymously with the term *volitional impairment*. Beginning with a brief history, the following discussion attempts to advance a clinical approach to an inability to control concept.

Forensic History of Volitional Impairment

Forensic psychiatry has a rich history of determining volitional capacity for the criminal court system. Aristotle stated that involuntary actions occur due to ignorance or compulsion and he debated exculpability for both cognitive and volitional impairments (27,28).

Early English case law recognized impairment of cognition and volition as bases for excusable insanity. In 1760, Earl Ferrer presented an insanity plea that was based on lack of impulse control. His defense was acknowledged by the court but rejected as a matter of fact, not as a matter of law (27,28). Later in 1799, James Hadfield, a British ex-militiaman, acting under the influence of a delusion that he was the savior of the world and must be sacrificed to redeem humanity, attempted to assassinate King George III in order to ensure his own execution. Basing his defense on Ferrer's case, Thomas Erskine, counsel for the defense, argued that Hadfield should be acquitted because the criminal act was performed under "the dominion of uncontrollable disease." The record shows that Hadfield understood the difference between right and wrong; however, with prosecution in agreement he was acquitted based on his diseased mind and subsequent volitional incapacitation (27,28). In 1840 Edward Oxford committed the first of seven attempted assassinations of Queen Victoria. Lord Denman instructed the jury, "If some controlling disease was in truth the acting power within Oxford which he could not resist, then he will not be responsible." The jury found Oxford, "Not guilty, he being insane at the time" (29).

American case law also contributed to the development of impaired volitional capacity as an excuse for criminal action. The use of an impulse control test was strengthened by Parsons v. State in which insanity as a defense was described as ". . . if, by reason of the duress of mental disease, he has so far lost the power to choose between right and wrong as not to avoid doing the act in question, so that his free agency was at the time destroyed . . .". The Supreme Court of Alabama reversed the conviction of two murder defendants whose jury had been instructed that a cognitive test was the only means for exculpation (30).

Numerous other American courts have recognized the link between exoneration and lack of impulse control. U.S. v. Kunak highlighted the intricacies of the irresistible impulse rule defined by the military. The "policeman at the elbow" test described one way to potentially assess irresistibility. Military instruction held, "If the

accused would not have committed the act had there been a military or civilian policeman present, he cannot be said to have acted under an irresistible impulse." In May 1953, the instruction manual replaced the "policeman at the elbow" concept with the following: "If the medical officer is satisfied that the accused would not have committed the act had the circumstances been such that immediate detection and apprehension was certain, he will not testify that the act occurred as the result of an 'irresistible impulse.'" The court of military appeals found no substantial difference between the "policeman at the elbow" concept and "presence of a high risk of detection and apprehension" (31).

Bernard L. Diamond, M.D., a psychiatrist who was influential in the development of the diminished capacity defense, testified to the significance of compulsive behavior in the case of People v. Gorshen. The Court noted, "In the opinion of the doctor, defendant acted almost as an automaton . . .". His testimony suggested that the defendant's actions, which were considered indicative of free will and deliberation in normal individuals, were in fact symptoms of the defendant's mental illness. The California Supreme Court accepted this inability to choose or retain free will as evidence that the defendant did not possess the mental state required for conviction (32,33).

In 1962 the American Law Institute formally adopted its 1955 formulation, which contained both a cognitive and volitional prong for criminal responsibility. Under this formulation, "A person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or mental defect he lacks substantial capacity either to appreciate the criminality of his conduct or to conform his conduct to the requirements of law" (33,34).

After the acquittal of John Hinckley, Jr., in 1981 for attempted assassination of President Ronald Reagan, the Insanity Defense Reform Act of 1984 essentially eliminated any federal provision for excusing volitionally impaired offenders (33). Several states rejected that defense as well. However, as of 1995, approximately 20 states continued to use a form of impaired volitional capacity as a means for exculpation (5).

Elements of Assessment

While undoubtedly a complicated and controversial subject, the concept of a volitional capacity evaluation resides in more than forensic criminal history. First, psychodynamic concepts such as ego-dystonic and ego-syntonic impulses contribute to the understanding of motivation and intent inherent in the concept of volition. Second, degree of behavioral control impairment is routinely assessed. Emergency room, military, and occupational providers assess the degree of impaired behavioral control for determination of dangerousness, weapons-bearing status, and fitness for duty (35,36). Finally, the etiological nature of volitional impairment can be considered through current research. Measurable outcomes of volitional concepts such as impulsivity have been linked to specific brain pathways and neurotransmitter systems (22).

Dynamics: Ego-Syntonic Versus Ego-Dystonic Characteristics

In his dissenting opinion on In re Matter of Dennis Darol Linehan, Minnesota Supreme Court Justice Gardebring stated, "Either appellant has the capacity to intend his vicious acts, in which case he is properly held accountable in the criminal justice system, or he suffers from the 'utter lack of power to control [his] sexual impulses,' and is therefore subject to commitment as a psychopathic personality. How can he simultaneously intend his actions and manifest an inability to control his behavior?" (37). This statement suggests that if a behavior is intended, then there is no issue of control. If a behavior occurs as a result of impaired volition, there must be an intention not to perform the action and it is the failure of the intention that defines the strength of the impairment.

Important in the determination of impulse control is the concept of ego-dystonic versus ego-syntonic behavior. The term ego-dystonic refers to "aspects of a person's thoughts, impulses, attitudes, and behaviors that are felt to be repugnant, distressing, unacceptable, or inconsistent with the rest of their personality." Conversely, the term ego-syntonic refers to "aspects of a person's thoughts, impulses, attitude, and behaviors that are felt to be acceptable and consistent with the rest of their personality" (38). If an impulse is in harmony with the will of an individual, then there is no intention to resist the impulse. However, if an impulse is ego-dystonic, genuine attempts are made to resist the urge that is inconsistent with the individual's conception of himself. In order to determine the degree of control over a sexually violent impulse, the perpetrator must first attempt to resist the behavior. This concept might be illustrated as follows:

Ego-Dystonic Impulse → Volition Tested → Volition Impaired → Violent Act

Ego-Syntonic Impulse → Volition Not Tested → Intact Volition → Violent Act

The U.S Supreme Court noted that as a pedophile, Hendricks "admitted that he had repeatedly abused children . . .he 'can't control the urge' to molest children . . . and, he hoped he would not sexually molest children again. . ." (7). This passage suggests an element of ego-dystonic behavior.

In severe disease, such as psychosis or mania, behavior may appear ego-syntonic despite an obvious inability to control conduct secondary to overt cognitive or emotional disturbance. Under such circumstances, regardless of the ego-syntonic nature of the behavior, one may consider volition impaired secondary to severe cognitive or emotional dysfunction.

Ego-Syntonic or Dystonic Impulse → Impaired Volition Secondary to Cognitive or Emotional Dysfunction → Violent Act

In his attempt to propose a typology of an inability to control, Janus describes three types of incapacitation regarding behavioral control. The "strong urges" paradigm posits that an impulse is so strong that it cannot be resisted. This model is similar to an overwhelming compulsion that, despite an ego-dystonic nature, anyone with a normal ability to resist would be unable to control such behavior. The impaired self-regulation model describes a less intense impulse coupled with impairment of impulse regulation. These two models will be discussed in the following section. The character model postulates that behavior is so central to one's personality, or ego-syntonic, that the person was unable to have acted any other way (26).

Features of personality disorders are often ego-syntonic, that is, they are not experienced as distressing, so that no efforts of resistance are made (39). The concept of the character model is akin to psychic determinism. Psychic determinism asserts that behaviors are manifestations of unconscious processes inside ourselves that are acted upon like characters reading a script (40). However, under the pretext we are who we are, an inability to control behavior based on ingrained values and unwavering personality structure may be ascribed to all conduct. Overgeneralization of this concept

undermines the assumption of free will and fosters a culture of victim hood (26).

Paraphilic fantasies and their associated behavior between consenting adults are common in the nonclinical population (10,39). The DSM does not consider such ego-syntonic behavior uncontrollable or even pathological. In other words, there is room for choice within the concept of psychic determinism (40) and, from a clinical standpoint, unless there is evidence of emotional distress or impaired function then concept of volitional capacity is not an issue. Some psychopharmacologic treatments of paraphilic disorders attempt to utilize the theory that paraphilic fantasies and urges are experienced as ego-dystonic. The goal is to manifest nondeviant sexual behavior by suppressing the deviant elements of fantasy, urges, and behavior through medications that are used to treat ego-dystonic compulsions such as in obsessive-compulsive disorder. These medications show some efficacy in the treatment of impulse control disorders (10).

Degree of Volitional Impairment

The Supreme Court of Minnesota narrowed its state definition of psychopathic personality by quantifying volitional control. They noted, ". . . the act is intended to include those persons who, by a habitual course of misconduct in sexual matters, have evidenced an utter lack of power to control their sexual impulses . . .". The U.S. Supreme court affirmed, stating, "This construction of the statute destroys the contention that it is too vague and indefinite to constitute valid legislation" (41).

The Supreme Court of Kansas' opinion in the Crane case used phrases such as "unable to control" and "volitional impairment rendering dangerousness beyond control," implying a needed threshold degree of control impairment. They noted ". . . if a volitional impairment were required for commitment under the Act, there was evidence of some inability on Crane's part to control his behavior" (3). This description of Crane's volition has a distinct quantitative element.

The clinical evaluation of volitional capacity has similarly been thought of in terms of "threshold determination." The degree of behavioral control impairment necessary for civil commitment differs from that needed for a plea of not guilty by reason of insanity (18). In addition, terminology within the medical field alludes to the measurement of degrees of volitional impairment. The medical community has traditionally made a distinction between an automatism, compulsion, and impulse. If conceptualized on a spectrum of quantitatively defined impairment, the automatism lies at one end of the spectrum. This action is without intent or conscious control and implies absolute impairment of volition (5,38). The middle of the spectrum describes compulsive and impulsive behavior. Compulsive behavior represents an act that is cognizant, but also uncontrollable, repetitive, and aimed at reducing distress such as behavior seen in obsessive-compulsive disorder (39). Impulsive behavior describes a predisposition toward unplanned reactions to stimuli and occurs when very little time has occurred between thought and action. These behaviors have both conscious (awareness of action) and unconscious (rapid impulse) processes that imply partial impairment of volition (22,42). At the other end of the spectrum lies well thought out and decisive behavior. This behavior is conscious and implies no volitional impairment.

Automatism Compulsion Impulsive Behavior Willful Behavior
←------l---------------l----------------l---------------------l----------→
Impairment (Unconscious) Partial Impairment No Impairment (Conscious)

A quantitative conceptualization of an inability to control concept is consistent with the typology of the "strong urge" paradigm and the impaired self-regulation model described above. The spectrum of impairment is determined by assessment of strength of impulse, as well as the individual's ability to self regulate behavior. Strength of the impulse may be assessed by understanding how hard the patient tries to resist. From a legal standpoint, Janus argues that the problem of acquiescence, or how much effort one must exert before the impulse is considered uncontrollable, contains a heavily normative judgment (26).

Emergency room physicians make similar clinical judgments regarding the ability to control behavior. In 198 psychiatric emergency patients evaluated for determination of involuntary admission, the assessment of impulse control was the symptom most strongly related to perceived dangerousness. Evaluation of impulsiveness was found to be more influential in disposition determination than diagnostic category or treatment history (43,44).

The question then becomes: can impulsivity be quantitatively and reliably evaluated? Three main classes of instruments used to measure key aspects of impulsiveness include self-reported measures, behavioral laboratory measures, and event-related potentials (22). Self-reported measures include the Barratt Impulsiveness Scale. The Barratt Impulsiveness Scale Version 11 was administered to 412 college undergraduates, 248 psychiatric inpatients, and 73 male prison inmates. The results suggest that the BIS-11 is an internally consistent measure of impulsivity with clinical utility for measuring impulsiveness in selected patient and inmate populations (45). Behavioral laboratory measures of impulsivity include trials utilizing the Continuous Performance Test (CPT). With CPT, narrowly defined commission errors (false alarms) appear to reflect impulsivity and correlate with the Barratt Impulsivity Scale (46,47). These laboratory measurements show promise with regard to treatment studies and comparative studies with laboratory animals; however, they need further validation on the impulsive human populations. Event-related potentials record specific waveforms as potential measures of biological predispositions to impulsiveness but are associated with a variety of conditions and are not specific to impulsivity (22). And, finally, a recent study attempting to correlate impulsivity and neuropsychological impairment suggests that impulsivity shows a significant relationship with executive/frontal function as measured by composite executive neuropsychological scores (48).

Studies vary regarding the amount of agreement between psychiatrists evaluating impulse control problems in the emergency room (44,49). One study suggested that causes of disagreement between psychiatric assessments of impulsiveness are due to the use of different "mental models". There may also be disagreement on what objective pieces of information available should be selected and how they should be weighed (49). Though impulsivity appears to be a clinical correlate to the legally determined volitional capacity construct, it does not necessarily equate to volitional impairment. Nevertheless, the struggle to forensically define an inability to control concept may prove advantageous to other areas of psychiatry.

The Etiology of Volitional Impairment

It is obvious that patients with severe thought and mood disturbance may experience an inability to control their behavior based on the severity of their disorder. In an attempt to define an inability to control concept, the idea that normal behavior is based on one's own rational decision-making capacity is apparent. However, when an intention to act is based on pathological conditions such as

a delusion or the expansive affect associated with acute mania, then the ability to control is clouded by that pathology. Based on this viewpoint, a topology of volitional impairment can be described.

1. *Volitional impairment secondary to cognitive disturbance*: Psychosis, substance use, mental retardation, or a variety of other conditions pathological to the process of thought may disrupt volition despite the apparent intention to act accordingly.
2. *Volitional impairment secondary to emotional disturbance*: Decisions to act based on pathology of affective disorders disrupt the integrity of an individual's volitional capacity.
3. *Primary disorder of volition*: Disorders that have little or no pathological cognitive or emotional disturbance yet are associated with an apparent inability to control behavior may be considered primarily volitional in nature.

Considerable overlap occurs between a psychotic patient's understanding or appreciation and his ability to control his behavior (4). Consider the case of Daniel M'Naghten, who shot Edward Drumond, private secretary to Prime Minister Peel. There is little doubt that M'Naghten knew he was firing a pistol, knew he was shooting a person, and had intention of killing that person. It also appears that M'Naghten knew that it was unlawful to shoot another human being despite the introduction of evidence regarding his delusions of persecution directly related to the shooting. In the strictest sense, M'Naghten knew the nature of his act and that it was wrong. The inability of M'Naghten to appreciate or understand his reality has been considered a broader interpretation of the cognitive test for insanity (5). The American Psychiatric Association Statement on the Insanity notes that defendants "who lack the ability (the capacity) to rationally control their behavior" are separate from other criminal defendants. Also, "Most psychotic persons who fail a volitional test for insanity will also fail a cognitive-type test . . ." (4). This lack of an ability to rationally control behavior describes a volitionally impaired capacity based on a primary thought disorder.

Some authors suggest that the concept of volitional impairment might be another way of excusing the cognitively impaired (6,50). For instance, inability to control behavior may simply be due to a degree of cognitive impairment as suggested by progressive behavioral dyscontrol with increasing cognitive disturbance in patients with Alzheimer's disease (51). As an understanding of the neurophysiology of the brain expands, disordered behavior may become increasingly classified as biological in nature. For example, animal and human studies suggest that an increase in noradrenergic activity results in increased aggressive behavior (52). Serotonergic activity seems to be inhibitory for aggression and low serotonin synthesis in corticostriatal pathways may contribute to impulsive behavior (48,52,53).

Disorders significant to the disturbance of emotion have been shown to display symptoms of behavioral dyscontrol. Negative mood symptoms in women with borderline personalities show increased rates of aggressive response to provocation (54). Furthermore, affective lability is a shared trait by both borderline personality disorder and bipolar disorder with possible evidence of neurobiological dysregulation (55). Bipolar disorder appears to relate strongly to impulsivity. A model of impulsivity in bipolar disorder implicates a faulty feedback mechanism involving the prefrontal cortex and the amygdala that inhibits the patient from considering a behavior just prior to action, resulting in increased impulsivity (42,56).

Certain nomenclature used in the behavioral sciences suggests the existence of primary disorders of volition. As noted above, an automatism by definition exemplifies a pure volitional impairment not necessarily associated with cognitive or emotional dysfunction. Less definitive examples of primarily impaired volition include impulse-control disorders.

The DSM defines *impulse-control disorders* as "the failure to resist an impulse, drive, or temptation to perform an act that is harmful to the person or to others" (16). As early as 1838, behaviors associated with impulsiveness have been recognized as irresistible urges without motive (39). In most cases, the impulsive behavior is also associated with an increase in tension or arousal before commiting the act and gratification or relief during the act. Consequently, some investigators conclude that these disorders are secondary to emotional distress (57). Despite the association with heightened emotional states, the DSM IV distinguishes these disorders from impulsive behavior associated with disorders of mood and thought. The descriptive nature of the DSM dodges the complex question of etiology by using the term "failure to resist" and avoids terms that imply a volitional etiology such as inability to resist (16).

Conclusion

Forensic psychiatry is defined as the application of psychiatry to the law (28). Conflict inherent in this application stems from fundamental philosophical differences between medical and legal professions. Psychiatry, and medicine in general, is a deterministic science. Principles of law, on the other hand, presume behavior to be the product of free will such that the individual is held accountable for his or her behavior. This fundamental difference between legal and medical philosophies highlights the controversy of a volitional capacity issue surrounding sexually violent predator laws.

Current legal opinion suggests the need for an operational definition of volitional impairment (58). Difficulties inherent in attempting to operationalize a concept of volitional capacity stem from problems associated with our current psychiatric nosology, vague legislative constructs, and a history of political and clinical dispute associated with the valid assessment of impaired behavior. Techniques such as actuarial tests and plesthmography may help with risk assessment for dangerousness, but they have limited value in addressing an inability to control concept (59).

Furthermore, clinical use of impulse control dysfunction in the criminal arena has been fraught with controversy (5,33). The American Psychiatric Association Statement on the Insanity Defense described, "The line between an irresistible impulse and an impulse not resisted is probably no sharper than that between twilight and dusk . . . The concept of volition is the subject of some disagreement among psychiatrists" (4). Ethical dilemmas associated with addressing ultimate issues of guilt or innocence compound the struggle between the mental health expert and the evaluation of motivation, intention, and will.

Though many states have rejected a purely volitional prong of the insanity defense, some states continue to utilize volitional impairment as a means for exculpation (5). Rogers notes that reliability coefficients for individual assessment criteria for cognitive and volitional prongs of the insanity defense were identical, and he concluded that clinicians' judgments were highly reliable for insanity determination of both volitional and cognitive prongs (25).

There is little information in the psychiatric literature regarding a volitional capacity concept as applied to contemporary com-

mitment standards. These standards necessitate a mental condition and a degree of dangerousness to ensure the substantive requirement of due process (60). Some suggest that there is a qualitative difference between an evaluation for traditional civil commitment and evaluation for commitment of a sexually violent predator (9). Certainly the magnitude and imminence of dangerousness has quantitative differences. There are also differences between the terminology used to describe mental illness and mental abnormality. However, determination for disposition of both types of evaluation is generally based on how a mental condition affects a patient's potential dangerousness and the controllability of that dangerous behavior. Not all psychotic patients are forced into the hospital. The ability to safely control behavior determines disposition. Similarly, serious difficulty controlling behavior distinguishes the committed sexually violent predator from other sex offenders.

The field of psychiatry in this context, cannot, reliably assess volitional capacity, as there is no established working paradigm. Nonetheless, an inability to control model is not without merit. Compare this concept with the use of the terms compulsion and impulsivity. The psychiatric literature recognizes the importance of these constructs as significant to various diagnoses and approaches to treatment. However, despite routine use of these terms in assessment, treatment, and means for traditional civil commitment, the mental health field appears to lack a consensus regarding definition and assessment of impulsivity and compulsion. A volitional capacity concept may have similar usefulness in areas of diagnosis and contemporary sexually violent predator commitment, despite current limitations regarding reliable assessment.

According to emergency psychiatry literature, the focus of psychiatry should be on the frequently used but less reliable concepts such as impulse control problems (35,49). Building a consensus on the meaning of these key concepts would be a process to increase reliability. I propose three distinct clinical concepts to approach an understanding of a volitional capacity construct. First, the ego dystonic nature of compulsive behavior and impaired self-regulation can be utilized to address the problem of acquiescence. Second, advances in self-assessment and laboratory evaluation of impulsive behavior approach a quantification of an inability to control. And finally, recent attempts to define and categorize an inability to control concept suggest the need for a dimensional nosology. As noted by the U.S. Supreme Court ". . . where it is at issue, 'inability to control behavior' will not be demonstrable with mathematical precision.'" It is a standard without bright line rules allowing leeway for, among other reasons, the ever-advancing nature of psychiatry (1).

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