# PSYCHOPATHOLOGY IN SUPERMAX PRISONS:

# A NEW YORK STATE STUDY

by

JENNIFER R. WYNN

A dissertation submitted to the Graduate Faculty in Criminal Justice in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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Todd R. Clear

Date — Chair of Examining Committee

Todd R. Clear

Date — Executive Officer

Dr. Todd R. Clear

Dr. Michael P. Jacobson

Dr. Barry Spunt
Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

Abstract

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Adviser: Professor Todd R. Clear

Supermax prisoners are among the most isolated and understudied populations in the criminal justice system. Few researchers are permitted access to supermax units; little public oversight exists. Despite the country's rapid build-up of supermax prisons in recent years, less than a dozen empirical studies have measured their impact on institutional safety, inmate behavior or the psychological harm they pose. Nevertheless, extant research demonstrates that supermax prisons are filled disproportionately with mentally ill inmates and that the restrictive conditions may contribute to symptoms of psychopathology where none existed previously. However, findings are weakened by small samples, lack of comparison groups and interviewer bias.

This dissertation makes a substantive contribution to the supermax literature through an empirical analysis of data from personally administered surveys to a large sample of supermax inmates (N = 175) in the country's fourth largest prison system, the New York State Department of Correctional Services, which has one of the highest percentages of inmates in supermax housing, and where it is estimated that up to 60% of inmates suffer from mental illness. Because the sample included both inmates who were and were not on the mental health caseload, it was possible to control for the effect of

preexisting mental illness on inmates' differential experiences in and adaptation to the general prison population and supermax confinement.

Findings showed that while mentally ill and non-mentally ill supermax inmates resembled each other on correlates of violence in the community and in general population, mentally ill inmates were significantly more likely than other inmates to attempt suicide, engage in self-harm, experience victimization and receive disciplinary infractions for symptomatic behavior. In addition, findings showed that behavior among all inmates worsened rather than improved in supermax.

The hypothesis that mentally ill inmates manifested significantly more behavioral pathology and psychiatric distress in supermax than non-mentally ill inmates was also supported. The effect of mental illness on psychiatric distress was large, with mental illness explaining nearly 50% of the variance. Finally, findings showed that inmates with no mental health problems in the community or in general population manifested symptoms of psychopathology once in supermax.

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# CHAPTER 1: INTRODUCTION

Over the past 35 years, the downsizing of state psychiatric hospitals and the concomitant boom in prison construction have resulted in the massive confinement of people with mental illness. “The number of incarcerated men and women with severe mental illness has grown so tremendously in the last few decades that prisons may now be the largest mental health providers in the United States,” notes Fellner (2006, p. 391).

In the wake of deinstitutionalization that began in the mid-1950s, state psychiatric hospitals downsized from approximately 560,000 patients to 80,000 in 1999—representing a 7-fold decrease in inpatient capacity (Kupers, 1999). Meanwhile, America’s incarcerated population grew by roughly the same magnitude, soaring from approximately 300,000 inmates in 1975 to over 2 million by the year 2000 (Jacobson, 2005).

The surge in prisoners with mental illness is due in part to the “crisis” in America’s mental health system, which a 2003 presidential advisory commission described as “in disarray”—fragmented, under-funded and compromised by barriers to access, particularly in poor minority communities where publicly financed mental health care is in short supply (Fellner, 2006). Government funding earmarked for community mental health care in the wake of deinstitutionalization never fully materialized, leaving thousands of mentally ill people homeless and untreated (Pfeiffer, 2004). As a report by the Council of State Governments’ Criminal Justice / Mental Health Consensus Project stated:

> [I]f many of the people with mental illness received the services they needed they would not end up under arrest, in jail, or facing charges in court. . . [T]he ideal mechanism to prevent people with mental illness from entering the criminal justice system is the mental health system itself—if it can be counted on to function effectively (Criminal Justice / Mental Health 2002, p. 26).

Equally significant, the nation's aggressive crime-fighting policies, harsher drug laws, rigid sentencing schemes and zero tolerance policing contributed to the widespread incarceration of nonviolent offenders, many of whom had coexisting mental and substance abuse disorders. The convergence of these trends—the criminalization of mental illness during an era hyper-incarceration—turned the notion of deinstitutionalization on its head. What resulted was "trans-institutionalization"—the movement of people with mental illness out of psychiatric hospitals into prisons and jails.

## From Deinstitutionalization to Trans-institutionalization

According to Torrey, an expert on U.S. mental health policy, "The magnitude of deinstitutionalization of the severely mentally ill qualifies it as one of the largest social experiments in American history" (1997, p. 14). The general estimate is that there are roughly three times more people with mental illness in U.S. prisons and jails than in psychiatric hospitals. According to Human Rights Watch, the rate of mental illness among prisoners is two to four times greater than that of the general public (2003). For example, a review of eight prevalence studies using rigorous sampling methods found, on average, that 18% of inmates experienced serious disorders such as schizophrenia, bipolar disorder, or major depression at some point in their lives, compared to about 5% of the general population (Pinta, 1999). In a 1998 survey of 31 state departments of

correction, 19 reported a disproportionate increase in seriously mentally ill inmates during the previous five years (Fellner, 2006).

Similar to the country at large, the New York State Department of Correctional Services (NYS DOCS) houses an increasing number of inmates with mental illness. In 2006, nearly 8,000 of the state's 63,000 inmates (12.6% of the total inmate population) were on the mental health caseload, an increase of 78% since 1991 and three times the rate of increase of the general prison population during the same period (Pfeiffer, 2006).

Certainly, while some of the increase in mental health caseloads can be attributed to better screening and diagnosis in prison, corrections and mental health experts attribute the increase to the two major policy shifts previously noted—deinstitutionalization and the criminalization of mental illness. Following is a more detailed analysis of the emergence and impact of these trends.

Torrey traces the beginning of deinstitutionalization to 1955 when the first effective antipsychotic medication, Thorazine, became available and allowed people with schizophrenia and other psychotic disorders to function more competently in a less restrictive environment. Another impetus came a decade later when the Federal government enacted Medicaid and Medicare. At the same time, investigative reports of deplorable conditions in state mental hospitals surfaced and captured the attention of the American public. State officials and legislators came under pressure to treat severe mental illness in the least restrictive setting possible. Essentially, the policy of deinstitutionalization was founded on benign principles, defined by President Jimmy Carter's Commission on Mental Health as "maintaining the greatest degree of freedom,

self-determination, autonomy, dignity, and integrity of body, mind and spirit" (as cited in Torrey, 1997, p. 18).

Not fully considered at the time, however, was the prevalence of severe mental illness and various forms of brain dysfunction such as epilepsy and Alzheimer's disease among deinstitutionalized individuals, over half of whom suffered from schizophrenia. Although federal funding absorbed some of the medication costs for the poor and the elderly, it did not come close to covering the array of outpatient, housing and rehabilitation services that were needed by the hundreds of thousands of discharged mental patients.

With the permanent closing of psychiatric facilities across the country, the situation worsened as future generations of seriously mentally ill individuals confronted a shortage of inpatient care. Around the same time, street drugs such as cocaine and crack became more available, and with availability came the opportunity to "self-medicate." By the 1990s, the growing number of mentally ill addicted to street drugs had earned their own classification: these dually-diagnosed individuals became known by mental health professionals as "MICA" patients, short for mentally ill, chemically addicted.

Compounding the situation was the punitive turn in criminal justice policy. The nation's war on drugs that began in the late 1970s was followed by the enactment of mandatory sentences and zero tolerance policing in the 1980s and 1990s. As Fellner notes, "These tough-on-crime approaches dominant in U.S. criminal justice policy have resulted in a quadrupling of prison and jail populations in three decades. Persons with mental illness are among those masses swept behind bars" (2006, p. 394).

It is interesting to note that the phenomenon known today as trans-institutionalization was observed as early as 1939. Examining the relationship between mental disease and crime in European countries, researcher Lionel Penrose found that psychiatric and prison populations were inversely correlated: increases in one population corresponded to decreases in the other, which Penrose referred to as the "balloon theory." When one part is compressed, another part expands.

Torrey found support for the balloon theory in America shortly after California, the first state to undertake deinstitutionalization, passed the Lanterman-Petris-Short (LPS) Act in 1969. One year after the enactment of LPS, the number of mentally ill persons entering the criminal justice system doubled.

More recently, a professor of law and criminology at the University of Chicago, Bernard Harcourt, compared the proportion of the adult population currently institutionalized in prisons and jails to those held in state and county mental hospitals before deinstitutionalization. Harcourt found that the current incarceration rate of over 600 inmates per 100,000 adults resembles the rate of mental hospitalization at its height in 1955, before the onset of deinstitutionalization. According to Harcourt, "It should be clear why there is such a large proportion of mentally ill persons in our prisons. Individuals who used to be tracked for mental health treatment are now getting a one-way ticket to jail" (2007).

*Conceptual and Definitional Problems*

"If you talk to God, you are praying;
If God talks to you, you have schizophrenia."

–Thomas S. Szasz, M.D.

Before proceeding, it is important to discuss the inherent problems with the term "mental illness" and its corollary, "mentally ill." At the most basic level, there are definitional problems. The issue of whether mental illness is an actual disease of the brain that can be measured in a clinically valid way or, by contrast, is a socially constructed classification based on subjective observations of behavior has been debated since the 1961 publication of *The Myth of Mental Illness* by psychiatrist Thomas Szasz. According to Szasz and his contemporaries, for something to be classified as an illness or a disease there must be evidence of an underlying physical defect; behavior itself is never a disease.

Despite promising research in brain imaging and genetics, there are no precise biological markers of mental illness, nor is there a blood test that can detect the presence of mental illness as there is for most bodily diseases (Cary, 2005). Diagnosis, therefore, is relegated to clinicians' observations of behavior and patients' reporting of symptoms.

The official text upon which clinicians rely for determining the presence and contours of mental illness is the *Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition (DSM-IV)*. Published by the American Psychiatric Association and updated every decade or so, the manual has come under increasing attack

for its expansion of mental illness, the medicalization of basic living problems (i.e., people once considered shy are now said to have "social anxiety disorder"), and the way in which a cluster of symptoms becomes defined as a mental illness—by the vote of a panel of experts to include it in the manual.

According to Kutchings & Kirk, authors of *Making Us Crazy—DSM: The Psychiatric Bible and the Creation of Mental Disorders* (1997), "The developers of the DSM assume that if a group of psychiatrists agree on a list of atypical behaviors, the behaviors constitute a valid mental disorder." Similarly, Hagen (2003) criticized the DSM as "nothing more than science by decree. They say it is science, so it is."

In hypothetical (but possible) terms, such arbitrary determinations could lead to a psychiatrist diagnosing as mentally ill a person with wildly divergent beliefs than his—basically the same thing as saying someone suffers from delusional thinking.

Similarly, within correctional facilities there is little agreement over what constitutes mental illness. Some agencies limit the definition to serious mental illnesses, classified by the DSM-IV as Axis I disorders, whereas others include personality disorders, known as Axis II disorders. Axis I disorders include traditional psychiatric disorders such as schizophrenia, major depression, and bipolar disorder. Axis II disorders, also known as character disorders, include anti-social personality disorder and borderline personality disorder, both of which are more prevalent among prisoners (Andrews & Bonta, 1994).

According to the National Institute of Corrections, a mentally ill offender is one who displays "a substantial disorder of thought or mood which significantly impairs judgment, behavior, capacity to recognize reality or cope with the ordinary demands of

life within the prison environment" (2004, p. 2). Aside from the question of whether any demands of prison life can truly be considered ordinary, the more relevant question is who makes these determinations? In the New York state prison system, initial screening is performed by an entry-level counselor's aide (Wynn, Szatrowski & Warner, 2004).

The lack of a unified definition of mental illness has led to serious discrepancies in prevalence rates not only in the community but also in prisons. Consider the divergent national estimates of mental illness among prisoners reported by the Bureau of Justice Statistics (BJS). In 1999, the agency reported that 16% of state and jail inmates were identified as mentally ill. Seven years later, the same agency reported that 56% of inmates had mental health problems (2006, BJS Press Release). This discrepancy—a 250% increase in prevalence—did not stem from actual numbers but from an expanded definition of mental illness.

Specifically, the authors of the 2006 BJS study used a modified version of the DSM-IV to survey prisoners. The survey "covered a range of feelings and behaviors, such as persistent sadness, loss of interest in activities, insomnia or hypersomnia" as well as "persistent anger or irritability" (p. 2). Given the serious safety problems in America's prisons (Vera Institute of Justice, 2006), today's longer sentence lengths and reduced opportunities for parole, one wonders how any inmate, unless he or she *were* delusional, might not report feeling "persistently sad, angry or irritable."

Aside from measurement and definitional problems, factors such as prison capacity and political pressure can influence mental health classification. During a site visit to the NYS DOCS reception center Downstate Correctional Facility, where new admissions are assessed for mental illness and other conditions, I interviewed a

psychologist who spoke of "being pressured" to change inmates' mental health classification levels (P. Simon, personal communication, January 10, 2002).

First, however, it is important to provide an introduction to New York's prison mental health system. A separate state agency, the Office of Mental Health (OMH), is responsible for providing mental health care to prisoners. A maximum-security hospital located in the middle of the state, Central New York Psychiatric Center, serves as the hub for the network of mental health services in state prisons.

Each of New York's 70 prisons has a mental health classification level depending on the level of services. Levels range from 1 to 6 (there is no level 5). Level 1 facilities offer the most intensive services, including inpatient and outpatient care and full-time clinical staff. Level 2 facilities have full-time clinical staff but provide outpatient care only, meaning there are no mental health units or observation cells for suicidal inmates. Level 3 and 4 facilities provide outpatient care and part-time clinical staff. Level 6 facilities have no mental health services on site (Wynn et al., 2004).

When defining the mental health needs of inmates, OMH uses the same classification system, so an inmate diagnosed with a serious mental illness such as schizophrenia would be classified as an OMH Level 1 inmate.

One of the problems with this classification system is that all of the Level 1 facilities are located in maximum-security prisons. Thus, if a nonviolent drug offender whose security classification would place him in a medium-security prison also had schizophrenia, he would be housed in a maximum-security prison. Obviously, this creates inmate safety risks, but it also creates prison management problems. The aforementioned psychologist explained how this occurs:

> There's pressure from DOCS not to place men in higher-security facilities because they're more costly and cell space is at a premium, so they encourage us to make 1's into 2's. Now, if a person is stable and willing to take his meds, he can be a 2, but the problem is getting appropriate services at a Level 2 facility if the inmate becomes unstable.

The psychologist added that it is not uncommon for the receiving facility to change an inmate's classification level upon arrival. "When I worked at Sing Sing [a Level 1 facility], I changed inmates' levels all the time."

To illustrate how political pressure can influence classification levels, consider the statements of Dr. Terry Kupers, M.D., the court-appointed plaintiff's expert in the *Disability Advocates* litigation. Discussing the prevalence of serious mental illness among inmates in punitive segregation, Kupers reported, "We have good reason to believe that any estimate of the prevalence of serious mental illness that is based on OMH's figures is unreliable" (Supplemental Report of Plaintiff's Expert, Nov. 29, 2005, p. 10). Kupers based his conclusion on OMH's claim that the number of seriously mentally ill inmates in punitive segregation had dropped by 40% between 2002 and 2004, which he subsequently discovered was due to inmates being "undiagnosed." In his report to the court, Kupers explained:

> In other words, the diagnosis for these 22 individuals had been downgraded from an Axis 1 diagnosis of SMI [serious mental illness] in 2002, usually to an Axis II diagnosis such as Antisocial Personality Disorder in 2004. Seven of those who were inappropriately 'undiagnosed' were among the prisoners I had personally interviewed and concluded were suffering from a serious mental illness. (p. 10)

Finally, another problem in attempting to determine baseline prevalence rates of mental illness in prison is the extent to which the prison environment itself contributes to the condition. It is difficult to conceive how the chaos, lack of privacy, fear of being

extorted, attacked or raped, the poor medical care, separation from intimate partners and children, the monotonous diet, and occasionally sadistic guards among other deprivations, could not compromise one's mental health.

The purpose of the preceding section was to situate the term "mentally ill inmate" (which will be used repeatedly in the sections that follow) within a more nuanced and accurate context with its many limitations exposed. Moreover, the reader should bear in mind that when the term is used in the following pages in reference to a NYS DOCS inmate, it means that the inmate was on the mental health caseload due to a clinician's diagnosis of mental illness. OMH figures from the time of the study show that 44% of inmates on the mental health caseload were diagnosed with a mood disorder (Bipolar Disorder or Major Depression) and 22% were diagnosed with Schizophrenia or other psychotic disorder. Information about the remaining 34% was unspecified (Smith, Sawyer & Way, 2003, p. 29).

## Living in Prison with Mental Illness

Irrespective of classification discrepancies, the broader problem is that prisons were never intended to be mental hospitals. Prisons operate within a paradigm of punishment; psychiatric hospitals operate within a paradigm of treatment. Moreover, fiscally strained departments of correction increasingly lack the resources to provide adequate mental health care and to attract qualified personnel who are willing to work in the difficult prison environment. Research indicates that the psychologist-to-inmate ratio in the early 2000s was half of what it was during the 1980s (Dvoskin & Spiers, 2004).

Not only are prisons poorly equipped to treat the mentally ill, the prison environment itself poses tremendous challenges to people with mental impairments and

limited coping skills (Haney, 1997; Irwin, 2004; Kupers, 1999). The collective mood in most prisons is marked by tension, suspicion and hopelessness. The environment can change from monotonous to terrifying within seconds. Other environmental stressors include overcrowding, noise, lack of privacy, isolation from family and friends and uncertainty about life after prison (Fellner, 2006). As Torrey observed, "Being in jail or prison when your brain is working normally is, at best, an unpleasant experience. Being in jail or prison when your brain is playing tricks on you is often brutal" (1997, p. 31).

Undoubtedly, following the myriad rules and regulations in the paramilitary environment of prison presents special problems for people whose thinking, emotions and responses are impaired by schizophrenia, paranoia or post-traumatic stress disorder. "Many inmates with mental illness have difficulty adapting to the structure, routine and social milieu of prisons. Some become overly passive, withdrawn, and dependent. Others act out their illness in antisocial ways" (Hills, Siegfried & Ickowitz, 2004, p. 5).

Moreover, research suggests that inmates with mental illness are more likely to be victimized, exploited and ostracized by other inmates (Human Rights Watch, 2003; Toch & Adams, 1986; Wynn, et al., 2004). Irritated by their unpredictable behavior and poor personal hygiene, other prisoners may try to force their removal from a cellblock, say by provoking an altercation or planting a weapon in their cell. Some prisoners use the mentally ill as "mules" to transport drugs throughout the prison. A correction officer at Auburn Correctional Facility in New York reported that inmates with mental illness "get set up by the drug dealers. They think the dealer is their friend. And the drug dealers think it's no big deal if these guys get caught because to them, they're just 'bugs.'" (Wynn, et al., p. 24).

Finally, correction officers without clinical training can confuse symptoms of psychosis with obstinate refusals, thereby increasing the potential for uses of force and the overuse of segregation to isolate disruptive inmates (Weisman, 2000). Indeed, the literature suggests that prison disciplinary committees are more likely to respond to behavior that is symptomatic of mental illness with punitive segregation rather than treatment in a psychiatric unit, even when the inmate is known have a psychiatric history (Adams, 1986; Grassian, 1999; Lovell et. al, 2000; Pfeiffer, 2004; Wynn & Szatrowski, 2004). According to Haney (2003), in some states inmates with mental illness account for *more than half* of the prisoners in punitive segregation. What happens to inmates in these settings is the focus of this dissertation.

## The Growth and Goals of Supermax Prisons

As noted, the phenomenon of trans-institutionalization coincided with another major shift in corrections: the rise of supermax prisons. British criminologist Roy King described the supermax build-up as "one of the most dramatic features of the great American experiment with mass incarceration. . ." (1999, p. 163).

Roy's reference to supermax as a "feature of incarceration" is apt and should be kept in mind throughout this reading. In many respects, supermax refers more to a philosophy and method of imprisonment than a specific type of prison. In fact, depending on the jurisdiction, a so-called supermax could be known as a SHU (special housing unit), a SMU (special management unit), a CMU (close management unit), or simply just a prison.

In the first survey of these units, conducted by the National Institute of Corrections in 1997, the authors noted the terminology problem and settled on "supermax" because of its wider usage and name recognition. They defined supermax as:

> A highly restrictive, high-custody housing unit within a secure facility, or an entire secure facility, that isolates inmates from the general prison population and from each other due to grievous crimes, repetitive assaultive or violent institutional behavior, the threat of escape or actual escape from high-custody facility(s), or inciting or threatening to incite disturbances in a correctional institution.

New York illustrates how politics can influence prison nomenclature. Since the opening of the state's first supermax in 1991, correction officials have resisted the term "supermax." The previous commissioner, during whose tenure 10 supermaxes were built, took pains to explain in two published documents why New York's Special Housing Units were not in fact supermaxes (see Goord, 2000; 2006), a discrepancy that was subsequently noted in the literature and dismissed by outside researchers.

"The New York Department of Corrections refuses to acknowledge that any of its Special Housing Units fit the definition of supermax, though clearly they do," wrote the late criminologist Norval Morris (2001). Similarly, in his extensive analysis of the National Institute of Corrections survey, King reported that:

> At least one state—New York—claimed both in its response to the NIC and to my initial inquiries that it had no supermax provision according to the NIC definition of the term, although it did have a number of special housing units said to be for disciplinary segregation. On visiting New York facilities, including the prototype for several new 100-cell maximum-security units, however, it was clear that some existing and much of the very extensive planned accommodation had all the design characteristics and many of the operating procedures of what other states defined as supermax (1999, p. 173).

Terminology aside, supermax prisons perform essentially the same function: isolating inmates who threaten institutional order from other inmates and staff. According to Haney, "Most of these units, whatever they are called, have enough distinctive features in common to be analyzed together" (2003, p. 151).

Inmates are sent to supermax prisons for administrative or disciplinary purposes,[1] and they can be housed in them indefinitely as there is no constitutional limit to the amount of time one can be sentenced to isolation (Wynn & Szatrowski, 2004). While conditions vary depending on jurisdiction, at the most restrictive level supermax inmates live in near-total isolation locked in cells behind heavy steel doors 23 hours a day (Collins, 2004). Phone calls are restricted or banned altogether. Visits, if granted, are limited to immediate family members and conducted behind Plexiglas shields to prevent physical contact. Recreation takes place in an isolated outdoor cage containing no exercise equipment, not even a ball (Wynn & Szatrowski, 2004).

Beginning in the early 1980s, the rehabilitative model that had defined penology since the 1960s gave way to retribution, incapacitation and risk management (Haney, 2003). Simon and Feeley (1992) describe the goals of this "new penology" as follows:

> The new penology is markedly less concerned with responsibility, fault, moral sensibility, diagnosis, or intervention and treatment of the individual offender. The task is managerial, not transformative. . . It seeks to sort and classify, to separate the less from the more dangerous, and to deploy control strategies rationally . . . .The new penology is not about punishing nor rehabilitating individuals. It is about identifying and managing unruly groups (p. 452)

[1]Prisoners may be confined in segregation units administratively—meaning based on an administrative decision that continues indefinitely until correctional authorities decide to release the inmate back to general population. Prisoners may also be segregated as punishment for a disciplinary offense. Disciplinary segregation is usually for a fixed term set by an internal prison hearing process.

Along with modern day chain gangs and boot camps, Garland (2001) identifies supermax prisons as symbols of a "strategy of punitive segregation" that characterize the new penology. Indeed, a recent study by the Vera Institute of Justice (2006) found that between 1995 and 2000, the growth rate in the number of inmates confined in segregation far exceeded the growth rate of the overall prison population: 40% compared with 28%.

In 1984, there was only one supermax in America, the United States Penitentiary in Marion, Illinois (USP Marion), which held approximately 500 prisoners.[2] Twenty years later, there were 57 supermax facilities located in more than 30 states, with more supermaxes slated for construction (Mears & Castro, 2006). The most recent estimate of supermax prisoners was calculated by King (1999), who placed the total count in 1998 at 20,000. If one were to include inmates in all forms of segregation (disciplinary and administrative) in prisons but not jails, the number in 2000 exceeded 80,000 (Vera, 2006).

**Table 1: THE NATION'S FIVE LARGEST STATE PRISON SYSTEMS AND NUMBER OF INMATES REPORTED TO BE IN SEGREGATION IN 2005**

| State | Inmate Population | Number in Isolation | Percent in Isolation |
|---|---|---|---|
| California | 163,000 | 7,135 | 4.4 |
| Texas | 150,000 | 9,867 | 6.6 |
| Florida | 84,000 | 6,242 | 7.4 |
| New York | 63,242 | 4,680 | 7.4 |
| Illinois | 43,418 | 2,789 | 6.4 |

*Source*: U.S. Department of Justice

[2] In October 2006, USP Marion was converted to a medium-security prison due to a need for additional lower-security housing and the high cost of running the unit (*Marion Daily Republican*, Oct. 23, 2006).

New York has been part of this trend. Between 1997 and 2000—in three years alone—the state built 10 freestanding supermax prisons, representing the most dramatic expansion of maximum-security housing in 70 years (Wynn & Szatrowski, 2004). Unlike some states such as California, where supermax placement is based primarily on administrative reasons, New York sends prisoners to supermax units for disciplinary reasons.

Including New York's first supermax prison, Southport Correctional Facility which opened in 1991 for 789 inmates, the state's 11 supermaxes have a current combined capacity for 3,889 inmates. In addition to these supermax beds, New York has 1,447 punitive segregation beds in units known as SHUs (Special Housing Units)—separate cellblocks in maximum-security prisons where inmates are locked down 23 hours a day for disciplinary reasons. In December 2005, the number of inmates in disciplinary housing (either supermaxes or SHUs) stood at 4,680, out of a total of 5,366 disciplinary housing beds (Goord, 2006, p. 18).

Interestingly, New York's supermax build-up occurred despite repeated requests from the Office of Mental Health (OMH) to increase the number of beds at the lone psychiatric hospital for inmates. Capacity at this hospital, Central New York Psychiatric Center (CNYPC), has not been expanded since it opened in 1980, despite a 78% increase in the number of mentally ill inmates during that time (Pfeiffer, 2006).

State officials did, however, expand outpatient mental health services within the prison system in response to the burgeoning inmate caseload. Based on the "community model" of mental health care (Smith, 2003), which seeks to reduce the time patients spend in hospital settings, state officials made psychotropic medication more available to

general population inmates, hired additional mental health staff in prisons and opened residential treatment programs for approximately 500 inmates (Toch & Adams, 2002). One problem with the community model of mental health care when replicated in a correctional environment is that the "community" in which patients are treated is prison, where security will always trump treatment.

### *Factors behind the Supermax Build-Up*

Similar to the formulation of criminal justice policy in America generally, the build-up of supermax prisons did not stem from research supporting their effectiveness but in reaction to events within and outside of the criminal justice system as well as potent political forces (Irwin, 2005; Toch, 2005).

Specifically, penal experts attribute the build-up to the convergence of three trends: the abandonment of the rehabilitative goal of prisons; an increase in prison violence and overcrowding; and a punitive turn in criminal justice policy in response to growing crime rates and public fear (Haney, 1997; King, 1999; Simon, 2000; Garland, 2000; Irwin, 2005).

As noted by Simon and other criminologists, United States' correctional policy underwent "a wholesale rearrangement of mission and ideology" over the past 30 years (2000, p. 302). Part of this "rearrangement" involved cuts in vocational, educational and therapeutic programs from the late 1970s onward as public confidence in rehabilitation eroded following the publication of criminologist John Martinson's influential study, "Nothing Works" in 1974. These program cuts came at unfortunate time, however (Haney, 2003). Changes in sentencing laws requiring longer, fixed sentences were filling prisons to capacity and beyond. Meanwhile, the inmates crowded inside had less to do

and fewer places to turn for the multiple services they needed (Haney, 2003; Human Rights Watch, 2003).

Meanwhile, the unprecedented growth in the prison population that started in the mid-1970s had led to widespread overcrowding and system disorder in the decades that followed. The rate of incarceration, which had remained stable over the 50-year period from 1925 to 1975, quintupled over the next 25-year period (Haney, 2003, p. 128). Not surprisingly, the crisis in overcrowding coupled with high inmate idleness in the wake of program cuts drove up prison violence (Ward & Werlich, 2003).

During the 1980s and 1990s, a spate of particularly gruesome riots erupted in prisons across the country and received widespread media coverage. For example, the riot at New Mexico State Prison in 1980 cost 33 lives and hundreds of beaten, raped and psychologically scarred prisoners, including three guards who were taken hostage (and beaten and raped into unconsciousness) when inmates stormed the prison's control room. At USP Marion, inmates killed two correction officers on the same day in October 1983, leading to the permanent lockdown of the prison (Ward & Werlich, 2003).

In the face of this violence, policymakers were in no position to "look soft" on prisoners (Haney, 2003). As Garland observes, "The trauma of powerlessness in the face of fear prompts the demand for action. The feeling that 'something must be done' and 'someone must be blamed' increasingly finds political representation and fuels political action" (2000, p. 368).

Not surprisingly, elected officials advancing tough-on-crime policies and "no-frills prison bills" in the 1990s found little public resistance to the build-up of supermax prisons. At the opening of Wisconsin's supermax in 1996, then Governor Tommy

Thompson declared that "the supermax will be a criminal's worst nightmare" (as cited in Pfeiffer, 2004). Today, reports Haney (1997):

> This 'rage to punish' has been indulged so completely that it threatens to override any competing concern for humane justice. We have entered the 'mean season' of corrections in which penal philosophy amounts to little more than devising 'creative strategies' to make offenders suffer (127).

Within the corrections industry, however, supermax prisons were heralded as the hallmark of a progressive regime justifiably concerned with the safety of inmates and staff (Mears & Reisig, 2006). Not only did the supermax model support the highest goal of corrections—establishing and maintaining system-wide order—it seemed to offer a straightforward solution to the complex problems generated by radical changes in correctional policy during the era of hyper-incarceration. According to Ward and Werlich (2003):

> The core idea underlying the supermax prison is that inmates, the prison itself, and the prison system of which it is a part, will function better if the most assaultive and escape-prone prisoners are isolated from each other as well as from the main body of less problematic prisoners. (58)

Similar to the "concentration strategy" of prison management, in which a prison system's most dangerous inmates are concentrated in a single, high-security facility (Riveland, 1999b), supermax prisons aim to reduce institutional violence by limiting opportunity for offending (Briggs et al., 2003). They are consistent with the "warehousing" approach to prison management embraced by the new penology (Irwin, 2005; Lipke, 2004).

### *The Goals of Supermax Prisons*

Mears and Watson (2006) provided the first theoretical framework for analyzing the objectives of supermax prisons and the extent to which these objectives can be met. Based on survey interviews with 60 correctional policymakers and practitioners, the authors found that increasing system-wide safety and order was the most frequently cited reason for building a supermax prison.

Theoretically, the authors concluded that this goal could be achieved through three mechanisms: (1) selective incapacitation of the most dangerous and disruptive inmates, (2) general deterrence, i.e. deterring other inmates from committing acts that would land them in supermax, and (3) specific deterrence, i.e. deterring inmates released from supermax from engaging in future misconduct (2006, p. 253).

As the authors discuss, for selective incapacitation to be successful, a system's most high-risk inmates must be accurately identified and not be replaced by other high-risk inmates. However, research suggests that few states, if any, employ a uniform set of criteria by which to identify supermax inmates (Lovell, D., K. Cloyes, D. Allen & L. Rhodes, 2000; Kurki and Morris, 2001), and that little is known about the types of inmates actually placed in supermax settings. According to Mears & Watson, "systems may fail to identify the prisoners appropriate for a supermax. Placement of the mentally ill, for example, may aggravate existing mental illness and in turn may increase their misconduct" (p. 257).

The second most frequently cited goal in Mears & Watson's survey was improving the behavior of inmates sent to supermax prisons. As one correctional respondent explained, 'The goal is that inmates change their behavior and return to the

general population and improve their behavior following their return' (p. 243). However, given the lack of programming, treatment and social interaction in supermax units, the suggestion that inmate behavior will somehow improve in such settings is questionable. "The limited evidence to date suggests that, if anything, extended isolation reduces inmate sociability and mental heath, which belies the notion that supermax prisons improve inmate behavior" (Mears & Watson, p. 256).

### *Criticisms of the Build-Up*

Among the most widespread criticism of supermax prisons is the paucity of research that accompanied their swift build-up. King suggests that the rise of supermaxes occurred not only "in spite of" but perhaps "because of" the absence of independent research in the field (1999, p. 164). Human Rights Watch and others (see Haney, 2003; Irwin, 2005; Lovell & Johnson, 2004; Toch, 2003) have criticized policymakers for promoting supermax prisons regardless of actual need and tremendously high cost[3].

According to Mears and Reisig, "Theoretical or empirical accounts of supermax prisons are almost nonexistent" (2006, p. 34). Similarly, Lovell and Johnson observed, "It is remarkable how little systematic research has been conducted on who gets assigned to supermax, how it affects them while they're there, whether it has any bearing on their later behavior, and whether such facilities actually reduce violence within prison systems" (2004, p. 1). Mears and Watson asserted, "no solid empirical foundation exists to say with confidence that they are either effective or ineffective" (p. 206). Moreover, they delineated a set of "unintended impacts" of supermax regimes, including decreasing

[3] On average, supermaxes cost about $50,000 per inmate per year, compared with $20,000 to $30,000 for lower-security prisons (Abramsky, 2002).

system-wide order, decreasing the quality of staff-inmate relations, increasing mental illness among supermax-confined inmates and increasing recidivism rates. “These and other unintended impacts may be rare, isolated events,” the authors concluded. “Or they may be common. Without empirical research, there simply is no way to tell” (2006, p. 261).

As of 2006, only one empirical study (Briggs, Sundt & Castellano, 2003) had examined the basis upon which supermax prisons were built: their presumed positive impact on prison safety. The study used an interrupted time series analysis to measure before and after effects of supermax construction in three state prison systems. Dependent variables were inmate-on-inmate and inmate-on-staff assault. Specifically, the authors found “no support…. for the hypothesis that supermaxes reduce levels of inmate-on-inmate violence” in any of the three systems (p. 1341). With regard to inmate-on-staff violence, supermax construction had no effect in one state, *increased* assaults in another state and reduced assaults in the third state. The authors concluded, “[T] he effectiveness of supermax prisons as a mechanism to enhance prison safety remains largely speculative” (p. 1371).

Using less sophisticated analytical techniques, Ward and Werlich (2003) explored the impact of supermax confinement on inmate behavior by examining the experiences of 1,020 inmates released from USP Marion to the general prison population. The authors found that only 16% of the inmates were recommitted to Marion. Based on this finding, they concluded that there was no support for the commonly held “rage hypothesis,” the notion that supermax inmates, upon release to general population, will be so “angry and

frustrated that they will attack other prisoners or seek revenge against employees of the system that so confined them" (p. 62).

Contesting this conclusion, Mears and Reisig (2006) noted that the 16% return-to-Marion rate is, at best, an indirect measure of the effect of supermax confinement on inmate behavior. First, it presumes that the other 84% of prisoners adapted successfully in other prisons—a point the authors did not investigate. Moreover, it does not take into account other correlates of prison adaptation such as age (Toch & Adams, 2002) or environmental differences in the prisons where the Marion inmates were sent.

## The Supermax Build-Up in New York

In New York, unlike at USP Marion, no catastrophic events precipitated the build-up of supermax housing (Wynn & Szatrowski, 2004). Rather, the construction of 10 supermaxes in three years was driven primarily by three factors: a need for more space in maximum-security prisons, a prediction of violence in the prison system (Goord, 2006), and the availability of federal cash incentives for prison construction in return for ending parole for violent offenders (Wynn & Szatrowski, 2004).

### *Need for Maximum-Security Cells*

As New York's inmate population doubled from approximately 35,000 in the mid-1980s to over 70,000 a decade later, corrections officials accommodated the overflow by expanding capacity in medium-security prisons (Goord, 2006; Wynn & Szatrowski, 2004). However, punitive segregation capacity in these prisons was not expanded. Instead, correction officials transferred disruptive inmates to cells in maximum-security prisons and held them on 23-hour lockdown status. Because many of

the maximum-security prisons were already filled to capacity, the Department accommodated new admissions by granting wholesale time cuts from inmates' disciplinary sentences, a move that drew widespread criticism from correction officers (Goord, 2006; Wynn & Szatrowski, 2004).

The overcrowding in maximum-security prisons created another problem: As disciplinary inmates took up a greater share of needed cell space, inmates in country jails awaiting transfer to state prison (known as "state readies") were backing up in record numbers. Eventually, county corrections officials sued the state for the cost of housing state-ready inmates, leading to a court-ordered settlement exceeding $36 million (Wynn & Szatrowski, 2004).

The state's solution to the problem was the construction of 10 supermax prisons. According to then DOCS commissioner Glenn Goord, "That [expansion] allowed thousands of inmates serving disciplinary housing sentences in general confinement cells to be 'swapped' into the new SHUs" (2006, p. 18). Goord referred to this strategy as "right sizing" the prison system (p. 3).

### *Prediction of Violence in the System*

The commissioner's right-sizing strategy was tied to new sentencing changes, specifically the 1995 Sentencing Reform Act that eliminated parole for repeat violent offenders and the 1998 Jenna's Law that ended parole for first-time violent offenders (Wynn & Szatrowski, 2004). "These statutes established the need for more maximum-security disciplinary housing cells," reported the commissioner (2006, p. 3).

The causal logic of this statement—that an increase in violent felony offenders necessitates additional punitive segregation capacity—is questionable. It presumes that individuals convicted of a violent offense in the community will commit violence acts in prison serious enough to land them in 23-hour lockdown. Punitive segregation, as its name suggests, is designed for inmates who violate rules in prison, not for inmates convicted of a violent offense in the community. The Department might have expanded general population capacity in maximum-security prisons to accommodate the increase in violent offenders rather than building 10 supermax prisons.

### *Availability of Federal Funds for Prison Construction*

Finally, unknown to most people outside of criminal justice circles, the 1994 Omnibus Crime Bill contained a provision that provided state officials with federal grants for new prison construction if they required violent offenders to serve 85% of their sentence (Wynn & Szatrowski, 2004). Known as VOI-TIS (Violent Offender Incarceration-Truth-in-Sentencing) funds, these grants essentially paid states to end parole release and simultaneously build more prisons. Between 1996 and 2000, New York received nearly $200 million of VOI-TIS funds, all of which was spent on supermax construction (Wynn & Szatrowski, 2004).

### *Impact on Safety in New York*

Six months after the supermax build-up was complete, the commissioner reported that “housing disruptive inmates in SHUs has had an immediate and positive effect on the system . . . The rates of inmate-on-staff and inmate-on-inmate assaults are at a 15-year low” (*DOCS Today*, May 2000). The commissioner did not mention that in 1996, the

year before the supermax build-up began, the rate of inmate-on-staff assaults was the lowest it had been in a decade: 13 assaults per 1,000 inmates in 1996, compared to 23 per 1,000 in 1986 (Wynn & Szatrowski, 2004).

## Purpose and Scope of Dissertation

In the supermax literature and case law, the issue of psychological harm is the most frequently raised criticism (Kurki & Morris, 2001; Smith, 2006). Although some researchers disagree on the psychological impact of supermax confinement (see Suedfeld et al., 1982; Ward & Werlich, 2003; and Zinger & Wichmann, 1999), as Lipke observes, "The arguments given on behalf of such facilities are few in number and almost embarrassingly brief" (2004, p. 109). Nevertheless, there is little empirical data to support the numerous claims of psychological harm discussed in the literature and case law. Existing studies suffer from serious methodological weaknesses such as small samples, lack of control groups and interviewer bias stemming from research conducted in connection with litigation.

According to the Urban Institute's costs-benefits analysis of supermax prisons (Collins, 2004), two overarching questions lie at the heart of the debate: 1) what are the psychological effects of supermax confinement? and 2) are the conditions so severe that they exacerbate existing mental illness or cause the appearance of mental illness where none existed previously?

Through an empirical analysis of findings based on face-to-face survey interviews with 175 inmates confined in 12 supermaxes and SHUs in the New York State prison system, this study attempts to answer these questions and others.

An extensive review of the supermax literature and case law identified the following research questions addressed in this study: 1) What accounts for the overrepresentation of mentally ill inmates in supermax? 2) Does inmate behavior improve or worsen in supermax confinement? 3) Are inmates with preexisting mental disorders more adversely affected by supermax confinement than non-mentally ill inmates? and 4) Does supermax confinement contribute to symptoms of mental illness where none existed previously?

Chapter four explains the study's methodology, briefly described below; chapters five and six discuss the study's findings, limitations and policy recommendations. The final chapter also presents observations from site visits to the Colorado State Penitentiary, a well-run supermax and potential model for those states committed to maintaining supermax facilities. Alternatively, for states with the political will to house inmates with mental illness in a more treatment-rich environment, a description of Central New York Psychiatric Center (CNYPC), New York's maximum-security hospital for state-sentenced inmates, is also provided.

The data for this study were collected as part of two previous studies (of which I served as principal investigator) that examined conditions in New York SHUs and supermaxes and the quality of mental health services system-wide.[4] The research generated a vast amount of qualitative and quantitative data, subsets of which were used

[4] See *Lockdown New York: Disciplinary Confinement in New York Prisons* (2003) and *Mental Illness in the House of Corrections* (2004) published by the Correctional Association of New York and available at www.correctionalassociation.org. The Correctional Association is a nonprofit organization with statutory authority to visit New York state prisons and issue reports on conditions of confinement. Because I was the primary author of these reports, I have taken the liberty of using some of the same language, quotations and information that appeared in them here. Where material from the aforementioned reports is used, I have included proper citation.

in the current study. The size of the sample is one of the largest in the supermax literature.

Similar to accounts by other supermax researchers (Fellner, 1997; 1999; 2003; Grassian & Friedman, 1986; Haney, 2003; Lovell et al., 2000; Rhodes, 2004; Toch, 2001), observations from 17 site visits to 12 New York supermaxes and SHUs revealed not only a disproportionate number of mentally ill inmates but extraordinary cases of human suffering. In nearly every unit, it was not unusual to encounter several inmates who were actively psychotic, delusional or paranoid.[5]

Some prisoners had smeared feces on themselves or the walls of their cells; others had mutilated their own flesh or attempted suicide on multiple occasions. Some mumbled incoherently when we attempted to interview them; others ranted and raged at "the system" or at the guards whom they believed poisoned their food (Wynn & Szatrowski, 2004). Although these inmates represent the extreme end of psychological breakdown, they demonstrate the depth of pathology present in supermax confinement.

[5] These observations were confirmed by independent psychiatrists who accompanied us on five of the research visits.

# CHAPTER 2: LITERATURE REVIEW

> A [supermax unit] is the predictable end-of-the-line setting for the inmate who acts out, creates disturbances, violates disciplinary rules, and constantly causes problems . . . Absent some other alternative, strong pressures will develop in a prison system to transfer mentally troubled, acting-out inmates to increasingly secure facilities—a path leading inevitably to the supermax unit, if one exists.
>
> — *Supermax Prisons and the Constitution,* National Institute of Corrections, 2004

## The Mentally Ill in Supermax

The National Institute of Corrections warns against housing mentally ill inmates in supermax confinement:

> Insofar as possible, mentally ill inmates should be excluded from extended control facilities. Each inmate being considered for such a facility should have a mental health evaluation. Although some mentally ill offenders are assaultive and require control measures, much of the regime common to extended control facilities may be unnecessary, and even counterproductive, for this population (Riveland, 1999, p. 12)

Despite such advisements, supermax facilities are increasingly populated with mentally ill prisoners (Haney, 2003; Fellner, 2006; Vera, 2006). According to Haney, the percentage of mentally ill inmates in supermax housing may be twice as high as in the general prison population (2003). In 2002, for example, 28% of inmates in Oregon's supermax units, 32% of inmates in California's administrative segregation units and 29% of inmates in Washington State's supermax were on the mental health caseload (Human Rights Watch, 2003).

New York is another case in point. While mentally ill inmates constitute 11% of the general prison population, they represent anywhere from 30% to 60%[6] of inmates in supermaxes and SHUs. Put another way—at a minimum, mentally ill inmates in New York are over three times as likely to be housed in supermax settings as they are in general population.

The high number of mentally ill inmates in supermax is problematic for several reasons. At the most basic level, it calls into question the purported goal of supermax units—to isolate the most dangerous inmates who present the greatest threat to institutional order and safety. At a time when corrections administrators are required to do more with less as funds traditionally marked for services and programs are consumed by security and new construction, the rationale for using high-cost, super-secure housing for anything but "the worst of the worst" must be carefully considered.

The issue also bears analysis in light of the growing number of mentally ill inmates in correctional facilities across the country and the limited funds available for psychiatric treatment in prison. If supermax housing continues to be the default response to managing high-need, mentally ill inmates, corrections officials will find themselves increasingly at risk for litigation. Since 1995, federal court judges have called for the removal of mentally ill inmates from supermax units in at least six states—California, Connecticut, Indiana, Ohio, New Mexico and Wisconsin (Kluger, 2007).

Thus, from a practical and policy standpoint, it is important to understand how so many mentally ill inmates end up in supermax in the first place. In corrections, as in the

[6] The NYS Office of Mental Health reported that over 60% of inmates in SHUs in maximum-security facilities are on the mental health caseload ("Special Housing Units Mental Health Needs Studies, Draft 5/1/02).

real world, things rarely happen in a vacuum. The following section discusses the factors research suggests contribute to mentally ill inmates' overrepresentation in supermax.

### *Mental Illness and Rule Violations*

"Like other prisoners, those with mental illness navigate the prison environment as best they can, but their illness may leave them less able to conform to the rules" (Fellner, 2006, p. 396). In prison settings, institutional conduct is measured by disciplinary infractions—an administrative finding of guilt for violating a prison rule. Available data shows that mentally ill inmates incur significantly more infractions than non-mentally ill inmates.

For example, a nationally representative study by the Bureau of Justice Statistics (2006) found that 58% of mentally ill state prisoners had been charged with a rule violation compared to 43% of non-mentally ill inmates. In Washington State, mentally ill inmates comprise 19% of the prison population but account for 41% of the infractions (Fellner, 2006). Similarly, a study comparing prison adaptation between schizophrenic inmates and a control group found that inmates with schizophrenia incurred more infractions than non-schizophrenic inmates (Morgan, Edwards & Falukner, 1993).

In one of the largest studies on inmate behavior, Adams (1983) examined the institutional conduct of 3,426 federal prison inmates and found that the disciplinary infraction rate was 54% higher among those inmates who were former mental patients than other inmates. To rule out the possibility that other known correlates of prison misconduct were not influencing the observed relationship between mental illness and infractions, Adams reexamined the data to determine if the two groups differed significantly on age and prior convictions. While there was no significant difference on

age, Adams found that former mental patients had more extensive criminal histories than other inmates and were more likely to have been convicted of a violent crime.

Interestingly, when Adams controlled for these criminal history variables, he found that the differential infraction rate between the two groups persisted. In fact, even when mentally ill inmates had *no* prior convictions, they still accumulated almost twice as many disciplinary infractions as non-mentally ill inmates.

A second study by Adams (1986), this time of inmates who were "actively" mentally ill (i.e., on the mental health caseload), produced similar results. Of the study's 883 randomly selected inmates in two New York state correctional facilities, those who were mentally ill had significantly higher disciplinary infraction rates than other inmates (1986).[7] Again, the difference persisted even when controlling for known correlates of disciplinary involvement such as age and criminal history.

According to Adams, his findings suggested that something in the prison environment itself may serve as a catalyst to antisocial and/or violent behavior among mentally ill inmates. "From a theoretical perspective," Adams observed, "it appears that the nature of the prison as a total institution has an influence on the behavior of former mental patients" (p. 376).

### *Violence and Mental Illness*

Contrary to popular belief, mentally disordered individuals are not inherently more violent than other people. Several recent, large-scale studies conclude that there is only a weak statistical association between mental illness and violence (Council of State

[7] Mentally ill inmates at Clinton had an annual median infraction rate of 5.4, compared to a rate of 3.0 for non-mentally ill inmates. Mentally ill inmates at Auburn had a disciplinary infraction rate of 4.2, compared to a rate of 3.0 for non-mentally ill inmates.

Governments, 2002). With regard to violent behavior among prisoners, however, the literature shows mixed results.

As noted, Adams found that mentally ill inmates had more extensive criminal histories than other inmates and were more likely to have been convicted of a violent crime than other inmates (1983). By contrast, a national prison study by BJS (2006) found that mentally ill inmates were only slightly more likely to have been sentenced to prison for a violent offense than non-mentally ill inmates (49% compared to 46.5%). However, once incarcerated, mentally ill inmates were significantly more likely to be infracted for assault than non-mentally ill inmates (24% compared to 14%).

A study of supermax prisoners showed similar results (Lovell et al., 2000). While mentally ill inmates in Washington State resembled non-mentally ill inmates on predisposition to violence (measured by criminal history and sentence length), they had significantly higher infraction rates and more violent infractions than non-mentally ill inmates.

Considered together, these findings suggest an interesting paradox: Although mentally ill inmates appear similar to other prisoners in predisposition to violence *before* prison, they seem to engage in more violent behavior than other prisoners once *in* prison. This study will test this hypothesis.

### *Actor-Reactor Theory*

According to Adams, two "competing, though not mutually exclusive" explanations may account for the disproportionate number of mentally ill inmates in punitive segregation (1983, p. 376). "The weight of the explanation may lie either with the inmate committing the infraction [the actor], or with those responding to it [the

reactors]" (p. 376). Although Adams did not label his theory as such, it is referred to here as the "actor-reactor theory."

*The Actors*

The first theoretical component places the locus of explanation on "the actors," i.e., the mentally ill inmates themselves, whose "psychological abnormalities and vulnerabilities" impair their ability to navigate the prison environment and cope with stressful situations (Adams, 1983, p. 377). "For a variety of psychological reasons, [mentally ill] inmates may have difficulty in understanding the requirements of prison order and in complying with them" (p. 377).

According to Fellner, an attorney at Human Rights Watch who has published extensively on supermax prisons, "Mentally ill prisoners do not have the same capacity to comply with prison rules as do other prisoners," (2006, p. 395). For example:

> If they have schizophrenia or other serious 'Axis 1' disorders, inmates may suffer from delusions, hallucinations, chaotic thinking, or serious disruptions of consciousness, memory, and perception of the environment. They may experience debilitating fears or extreme and uncontrollable mood swings. As a result of their illness…they may suddenly refuse to follow routine orders, such as to come out of a cell, to stand up for the count, to remove clothes from cell bars, or to take showers. They may beat their heads against cell walls, smear themselves with feces, self-mutilate, and attempt suicide. (p. 395)

Clearly, prison conditions are taxing on mental health in general, but they are particularly taxing on mentally ill inmates with impaired coping ability. Studies on prison adjustment have shown that inmates with the greatest problems adjusting to prison are more likely to have histories of mental illness (Hills, Siegfried & Ickowitz, 2004; MacKenzie & Goodstein, 1985; Toch and Adams, 1986, 2002).

*The Reactors*

The second theoretical explanation places the explanatory variable on the "reactors," other inmates and staff who differentially react to mentally ill inmates (Adams, 1983, p. 378). Similar to labeling theory and stigma, the "reactor" explanation maintains that mentally ill inmates' status as social outcasts within the prison environment engenders differential responses from other inmates and correction officers. Such differential responses include victimization and antagonism by other inmates and punitive responses to symptomatic behavior by correction officials.

Sociological studies of prison order suggest that other inmates tend to regard the mentally ill as unpredictable, troublesome and dangerous (Irwin, 2005; Toch & Adams, 2002). As a result, Adams observed, "Fellow inmates may be inclined to interpret their acts as threatening and react defensively" (Adams, 1983, p. 378). On the other hand, "It is possible that [mentally ill inmates] are seen as easy targets for harassment and exploitation . . . . A higher infraction rate can then result from other inmates provoking [them] into rules violations" (p. 378).

*Victimization of mentally ill inmates.*

Although there is no nationally representative data on victimization among inmates with mental illness, research suggests that they are at greater risk than other inmates. The most relevant data, reported in a BJS survey (2006) of all prison and jail inmates, found that mentally ill inmates were twice as likely as non-mentally ill inmates to have been injured in a fight in prison (20% compared to 10%). According to a well-documented descriptive report of the experiences of mentally ill inmates in prison,

Human Rights Watch found that mentally ill prisoners "are vulnerable to assault, sexual abuse, exploitation and extortion" (p. 56). The literature also notes that mentally ill inmates become primary targets of attack during riots (Stone & Hirliman, 1982, as cited in Edwards, 2000).

Living in fear of victimization takes a toll on prisoners' mental health. A study of fear and victimization in a sample of 300 state prisoners by McCorkle (1993) found that "the strongest predictor of an inmate's mental health, far and away, was the level of fear regarding other prisoners" (p. 38). Dr. Terry Kupers, a prison expert and psychiatrist, elaborated on the interplay between mental illness, vulnerability and victimization as follows:

> For mentally disordered prisoners, danger lurks everywhere. They tend to have great difficulty coping with the prison code—either they are intimidated by staff into snitching or they are manipulated by other prisoners into doing things that get them into deep trouble…. Many voluntarily isolate themselves in their cells in order to avoid trouble. Prisoners who are clearly psychotic and chronically disturbed are called "dings' and 'bugs' by other prisoners, and victimized. [Their] anti-psychotic medications slow their reaction times, which makes them more vulnerable to 'blind-siding,' being attacked from the side or behind by another prisoner (1999, p. 20)

*Punished for symptomatic behavior.*

As previously noted, a component of Adams' "reactor" explanation involves differential responses by corrections officials to behavior that is symptomatic of mental illness. To test this assumption, Adams examined the types of disciplinary charges that landed inmates in punitive segregation. Notably, he found that "some of the disciplinary behaviors for which inmates on the mental health caseload are disproportionately cited reflect the presence of an emotional disturbance" (p. 307). These behaviors included

refusing to come out of one's cell, setting fire to one's cell, self-mutilation, health and hygiene offenses (e.g., throwing bodily fluids), and destroying state property.

Similarly, in the Washington State study (Lovell et al., 2000), the infractions that landed mentally ill inmates in supermax reflected "significantly more disturbed behavior" than that of other inmates. Like Adams, the authors operationalized disturbed behavior as throwing objects (generally urine or feces), threatening, destroying property and self-mutilation.

"Examples of prisoners accused of breaking rules and being punished for acts connected to mental illness are legion," wrote Fellner in the *Harvard Law Review* (2006). "Prisoners have been punished for self-mutilation because that behavior entailed the 'destruction of state property,' – to wit, the prisoner's body" (p. 397). Prisoners who rip up a bed sheet and use it to try to hang themselves are infracted for "misuse of state property." In New York, inmates who exhibit such obvious symptoms of mental illness as self-mutilation are issued infractions and sent to the SHU (Pfeiffer, 2004; 2006).

The court in *C.F. v. Terhune* discussed how punishing symptomatic behavior drives up the supermax population:

> As a result of the disciplinary process that all but criminalizes the most common symptoms of mental illness . . . mentally ill inmates are almost three times more likely to be found in administrative segregation than they are in general population (*C.F. v. Terhume,* 1998, p. 6)

## Conditions in Supermax Prisons

To understand the psychological effects of supermaxes, consider the conditions of confinement: near total isolation in a cell the size of a bathroom; no meaningful or sustained human interaction; no job to perform to occupy one's thoughts or give structure to daily existence.

Although conditions vary depending on jurisdiction, most supermax prisoners are locked in cells measuring 60- to 80-square feet for 23 hours a day, with an hour of "recreation" in an empty outdoor cage. Some supermax prisons grant inmates phone calls, televisions and radios, but not all do. In New York, inmates' communication with the outside world is limited to the prison radio system (the channels are chosen by correction officers), a privilege that can only be earned after 30 days of good behavior. One visit a month is granted to similarly infraction-free inmates and takes place behind a Plexiglas shield or mesh-wire barrier, thus preventing contact or touch with visitors.

When inmates leave their cells, they are secured with restraints (in New York, this involves handcuffs attached to a waist chain and "hobble chains" around the ankles) and escorted by two correction officers to their destination. If offered at all, programs are delivered via closed circuit TV or written correspondence with correctional counselors. According to psychologist Craig Haney, who has interviewed hundreds of inmates in supermax confinement across the country, "Prisoners in these units endure an unprecedented degree of involuntary, enforced idleness. Put simply: prisoners here have nothing to *do"* (1993, p. 465).

The psychological impact of idleness should not be underestimated. In McCorkle's study (1993) of prisoner well being (N = 300), boredom was found to be a significant predictor of poor mental health. "Life in prison appears to be particularly difficult for those who cannot find ways to fill their days with meaningful, stimulating activities," McCorkle concluded. "Unless the inmate finds external stimuli to order his consciousness and give his life structure, he is vulnerable to self-reflection and inevitably despair" (p. 30). Similarly, psychiatrist Stuart Grassian, the pioneer of supermax research,

observed: “The effects of such intense monotony can cause an individual to descend into a mental torpor, a kind of fog in which alertness, attention and concentration all become impaired” (as cited in Wynn et al., 2004, p. 47).

### *The Pains of Supermax Imprisonment*

In his classic work *The Society of Captives*, Gresham Sykes (1958) described the “pains of imprisonment” of life inside a maximum-security prison. He delineated the emotional and psychological distress that arises from prisoners’ loss of liberty and autonomy, the deprivation of heterosexual relationships and lack of goods and services.

Inarguably, Sykes’ pains of imprisonment are felt *doubly* by supermax prisoners. The small liberties and autonomy they once enjoyed in the general prison population—the ability to choose a program over a work assignment, say, or to walk unshackled from the mess hall to the yard—are all but extinguished in supermax prisons. The access prisoners once had to “goods and services” in the prison commissary is reduced to a short list of necessities (a toothbrush, bible, legal material) that can be kept in one’s cell. Sykes’ “deprivation of heterosexual contact” becomes a deprivation of *all* human contact in supermax units.

Finally, there is sensory deprivation, as supermax inmates are cut off from the spectrum of sights, sounds and the diurnal rhythms of the natural environment. The lack of daylight and sensory experience exacerbates the monotony of an existence devoid of meaningful activity. “Individuals experiencing such environmental restriction find it difficult to maintain a normal pattern of daytime alertness and nighttime sleep,” observed Grassian (as cited in Wynn et al., 2004). “They often find themselves during the day

incapable of resisting their bed—incapable of resisting the paralyzing effect of their stupor—and yet incapable at night of any restful sleep."

In summary, unlike earlier versions of supermax when solitary confinement was used sparingly and for the purpose of moral reformation rather than selective incapacitation, today's supermax prisons are flagships of the "new penology," emphasizing risk assessment and "waste management" over rehabilitation and treatment (Simon & Feeley, 1992). They are modern-day versions of Goffman's "total institutions" (1957), governing all aspects of life through extraordinary levels of social control. They are the prototypes of Irwin's "warehouse prisons," and they "isolate, regulate, and surveil more effectively than anything that has preceded them" (Haney, 1997).

## Psychopathology in Supermax Confinement

> "There are few if any forms of imprisonment that appear to produce so much psychological trauma and in which so many symptoms of psychopathology are manifested as supermax prisons."
>
> —Craig Haney, Mental Health Issues in Long-Term Solitary and Supermax Confinement, (2003)

### *Historical Findings*

It is important to note that supermax prisons, absent their technological spin, are not new inventions, nor is the research documenting their psychological harm. A study by Toch (2003) unearthed empirical pre- and post-intervention data collected by three prison wardens during the mid-1800s that documented the deleterious effects of solitary confinement. In a Rhode Island prison, the warden noted that 25% of the inmates in solitary 'manifested decided symptoms of

derangement' (as cited in Toch, 2003, p. 223). The proportion dropped to 15% when the same prisoners were permitted limited association.

In New York, the earliest recorded use of solitary confinement dates back to 1821, when the State Legislature directed prison officials at Auburn to place 80 of its worst offenders in "complete solitary confinement, free from all employment, all amusement, all pleasant objects of external contemplation" (Pfeiffer, 2004). According to Toch, "Though the inmates appeared resilient, several soon manifested dramatic symptomatology, including lethal suicide attempts and florid delusions" (2003, p. 222). One prisoner leapt from a gallery when his cell door was opened; another beat his head against the walls of his cell.

After learning of these developments, the governor of New York interviewed the prisoners and ended the experiment, concluding that "the health and constitutions of these surviving convicts had become alarmingly impaired" (p. 222). In 1890, the U.S. Supreme Court in *Re Medley* denounced (but did not ban) the use of solitary confinement, noting that:

> A considerable number of the prisoners fell, after even a short confinement, into a semi-fatuous condition, from which it was next to impossible to arouse them, and others became violently insane; others still, committed suicide; although those who stood the ordeal better were not generally reformed, and in most cases did not recover sufficient mental activity to be of any subsequent service to the community (p. 168).

## *Contemporary Research*

### *Grassian's SHU Syndrome*

Research on the psychological effects of modern forms of solitary confinement—supermax prisons—was spearheaded in 1979 by Stuart Grassian, a Harvard Medical School psychiatrist. After interviewing 14 of 15 inmate plaintiffs in a Walpole,

Massachusetts supermax, Grassian noticed numerous and severe symptoms that he asserted formed "a major, clinically distinguishable psychiatric syndrome" (1983, p. 1459). An inmate who had slashed his wrists could not remember entire days before the incident or recall his thoughts at the time he cut himself. Another described feelings of suffocation and panic. Several heard voices, were hypersensitive to sounds and obsessed over thoughts of torturing guards (Pfeiffer, 2004).

Although the study suffered obvious methodological problems (selection bias, lack of a control group and small sample size), Grassian bolstered his argument with a qualitative analysis of studies on the effects of sensory deprivation experienced by other populations in isolated environments: prisoners of war, immobilized spinal-injury patients, Artic explorers and solo, long-flight pilots. "A pattern of psychiatric disturbances similar to those I found at Walpole have been seen in a variety of other non-prison settings . . ." Grassian wrote (1996, p. 12). "In all of these situations, despite the multiple differences which exist between them, the very same syndrome emerges."

Since the Walpole study, Grassian has evaluated the psychiatric effects of supermax confinement in over a hundred inmates in state and federal penitentiaries across the country. He is unequivocal about what he calls the "toxic" effect of supermaxes, a type of pathology that has since become known as "SHU Syndrome."

Although not included in the American Psychiatric Association's *DSM-IV,* SHU syndrome is said to share features with post-traumatic stress disorder, paranoid delusional disorder, dissociative disorder, schizophrenia and panic disorder. Symptoms include massive, free-floating anxiety, hyper-responsivity to external stimuli, hallucinations, derealization experiences (surroundings seem unreal and unfamiliar), difficulties with

thinking, concentration and memory, acute confusion, aggressive fantasies, paranoia, and other- or self-directed violence.

Since Grassian's study, similar symptoms have been observed by researchers in nearly a dozen states (Miller & Young, 1997; Human Rights Watch, 1997, 1998, 1999, 2003; Koson, 1998; Kupers, 1999; Lovell et al, 2000; Kurki & Morris, 2001; Toch, 2001; Haney, 1997, 2003; Rhodes, 2004 and Pfeiffer, 2004).

*Effects on Inmates with Pre-existing Mental Illness*

In addition, research suggests that supermax confinement is particularly pernicious to inmates with preexisting mental disorders. Kupers asserts that long stays in isolation can cause someone with a vulnerability to psychosis:

> … to go off the deep end. People who are vulnerable to psychosis have a relatively fragile or brittle ego. When they are made to feel very anxious, or very angry, or very distrustful, their ego tends to disintegrate—in other words, as anger or anxiety mounts, their ego falls apart. They regress, lose control. They can't test reality. And this is the beginning of a psychotic decompensation … (as cited in Abramsky & Fellner, 2003, p. 152)

To date, only a few studies have empirically tested this assumption. In the Lovell et al. study (2000) of Washington State supermax inmates, those with mental illness were noted to escalate in violence, unpredictability and "extremely bizarre behavior" (p. 37) and began cycling back and forth between the psychiatric unit and supermax with greater frequency. While not a causal finding, the pattern suggests that supermax conditions served as a catalyst to psychiatric breakdown.

Similarly, a 1986 study by Grassian and Friedman using the Walpole inmate sample found that "incarceration in solitary caused either severe exacerbation or recurrence of preexisting illness, or caused the appearance of an acute mental illness in

individuals who had previously been free of any such illness" (p. 7). Specifically, their review of inmate records and pre-sentence reports found a "highly significant statistical relationship" between inmates with pre-existing mental illness and "the most severe cases of overt confusional, agitated, hallucinatory psychosis precipitated by SHU confinement" (p. 22).

Data collected for the current study lend itself to similar analysis. The survey instrument included specific measures of SHU syndrome (i.e., perceptual distortions, thinking problems, suicide attempts and self-injury) and was designed with input from Dr. Grassian. Moreover, because the sample included inmates who both were and were not on the mental health caseload, it was possible to discern differences between the two groups in adaptation to supermax conditions.

*Additional Studies*

Studies in settings similar to supermax such as protective custody and administrative segregation have yielded similar results. In Brodsky and Scogin's study (1988) of inmates in protective custody (N = 31), 84% of prisoners reported anxiety and nervousness, 77% reported chronic depression, 71% reported irrational anger, 65% experienced lethargy and chronic tiredness, 65% reported confused thought process, 61% experienced chronic headaches, and 61% trouble sleeping.

Interviews with female inmates in high-security control units (Korn, 1988) revealed high levels of claustrophobia, chronic rage reaction, depression, hallucinatory symptoms, apathy and withdrawal. Kupers (1999) reported that the majority of inmates he interviewed in administrative segregation had "difficulty concentrating, heightened anxiety, intermittent disorientation and a tendency to strike out at people (as cited in

Pizarro & Steinus, 2003, p. 256). According to Kupers, the stressful and disorienting nature of the supermax environment causes people to lose touch with reality and to psychologically decompensate.

In addition, case studies and personal accounts by correctional and mental health staff who have worked in supermax units found similar symptoms, including appetite and sleep disturbances, anxiety, panic, rage, loss of control, paranoia, hallucinations and self-mutilation (see Jackson, 1983; Poporino, 1986; Rundle, 1973; Scott, 1969; and Slater, 1986, as cited in Haney, 2003). A former clinician with 30 years' experience in New York prisons and psychiatric units stated: "SHU is not the place for people with serious and persistent mental illness. One *day* in solitary confinement can undo some people. Certainly, anyone sent to a SHU for an extended period of time will be affected by it" (Personal interview with L. Klein, May, 2002).

More rigorous studies involving comparison groups (Miller & Young, 1994) and longitudinal data (Anderson, Sestoft, Lillebaek, Gabrielsen & Hemmingsen, 2003) reported similar results. Miller compared symptoms of psychological distress among federal inmates (N = 30) in three types of confinement—general population, administrative detention and disciplinary segregation—and found that increased levels of restriction produced greater psychological suffering.

One of the most methodologically sound studies was conducted by Anderson, et al. (2003). Longitudinal repeated assessments were carried out from the beginning of incarceration through the remand phase on randomized samples of Danish prisoners in solitary and non-solitary confinement remand units (N = 133). The study found that prisoners in solitary confinement had a significantly higher rate of psychiatric morbidity

(28% versus 15%), and that among prisoners with pre-incarceration psychiatric disorder, solitary confinement exacerbated existing psychiatric symptoms and produced new symptoms.

The authors reported that for inmates who remained in solitary confinement for longer than 4 weeks "the probability of being admitted to the prison hospital for a psychiatric reason was about 20 times as high as for a person [in non-solitary confinement]" (Sestoft, Andersen, Lilleback, & Gabrielsen, 1998, p. 103), leading the researchers to conclude that "individuals detained [in solitary confinement] are forced into an environment that increases their risk of hospitalization…for psychiatric reasons" (p. 105).

*Haney's Social Pathologies*

Similar to the psychiatric symptoms documented by Grassian and others, Haney identified several behavioral pathologies, or "social pathologies," which develop in prisoners as they attempt to adapt to long-term solitary and supermax confinement (2003, pp. 138-139). These behaviors include:

*Problems with self-control.* Due to the "extreme over-control" of supermax settings, Haney found that some inmates lose the ability to regulate their own behavior. "Because almost every aspect of the prisoners' day-to-day existence is so carefully and completely circumscribed in these units, some of them lose the ability to set limits for themselves or to control their own behavior through internal mechanisms" (p. 139).

*Problems initiating behavior.* Alternatively, supermax regimes can produce an opposite reaction, whereby inmates "lose the ability to initiate behavior of any kind—to organize their lives around activity and purpose—because they have been stripped of any

opportunity to do so for such prolonged periods of time." As personal initiative erodes, lethargy and depression set in.

*Loss of grasp on reality*. For supermax inmates, there are "no routine and recurring opportunities to ground one's thoughts and feelings in a recognizable human context" (p. 139). As such, a feeling of "un-reality" emerges or, in extreme cases, the environment becomes so "painful, perverse and incomprehensible" that prisoners create their own reality—"and live in a fantasy world instead" (p. 139).

*Chronic anger, revenge fantasies and outbursts of rage.* Due to the "intolerable levels of frustration" and "prolonged absence of any real opportunity for happiness or joy," some supermax inmates live in a state of chronic anger (Haney, p. 139). Some spend hours ruminating over how to fight the system and plotting fantasies of revenge, while others lash out against correction officers, flood their cells or "throw feces, urine, blood and semen at staff" (Rhodes, 2004).

This latter social pathology, referred to in the literature as the "rage hypothesis" (Ward & Werlich, 2003), suggests that supermax confinement may actually *escalate* rather than suppress violent and assaultive behavior. It is consistent with the larger literature on coercive control and violence, which argues that coercive control strategies often result in the escalation of violence (Barak-Glantz, 1985; Bottoms, 1999; Toch, 1997). Within the context of supermax regimes, researchers note that when prisoners are treated as inherently dangerous—whether they are or not—they often end up fulfilling the prophecy by engaging in future violence (Irwin, 2005; Rhodes, 2004).

To date, however, only two studies have empirically tested the assumption that supermax confinement worsens rather than improves behavior among inmates generally

and mentally ill inmates specifically. As noted, Ward & Werlich's (2003) claim that supermax confinement does not breed behavioral pathology suffered various methodological flaws. Their conclusion that there was no support for the commonly held "rage hypothesis" (p. 62) was based on the presumption that the 84% of prisoners not returned to supermax adapted successfully in other prisons—a fact that the authors did not establish.

A more methodologically sound study by Adams (1986) involved randomly selected comparison groups of mentally ill and non-mentally ill inmates (N = 880) in two New York SHUs. Here, the author explored whether mentally ill inmates were more likely to commit another infraction in punitive segregation than non-mentally inmates. The results were mixed. In one SHU, mentally ill inmates were no more likely to commit another infraction than non-mentally ill inmates. In the other SHU, mentally ill inmates were more than *twice* as likely to commit another infraction. The former director of the Wisconsin Department of Corrections elaborated on this phenomenon in his testimony in *Jones 'El v. Berge*:

> When [the mentally ill are] in segregation, if they're not appropriately engaged, they continue exhibiting the behaviors that got them there in the first place. If anything, they heighten that activity, which then puts them back before a disciplinary committee, and they get more [segregation] time. So instead of getting out, they wind up staying longer and longer and longer, and they deteriorate. (2001, p. 39)

The current study tests the hypothesis that inmate behavior worsens in supermax confinement among inmates generally and among mentally ill inmates specifically. Self-reported data on disciplinary infractions incurred by inmates in supermax (including the nature and number of tickets received) provide the basis for the analysis.

*Self-Harm: Suicide and Self-Injury*

Increasingly, studies of prison suicide and self-injury suggest that environmental factors may have an even greater effect on self-harm than individual factors such as psychiatric history. Liebling (1995) found that prisoners who commit suicide are less likely to have a history of psychiatric treatment than those in the community. "Only a third of prison suicides are found to have a psychiatric history, as opposed to 80 to 90 percent of suicides in the general community" (as cited in *Prisons*, 1999, p. 296). This finding suggests that the prison environment itself may be pathology-producing, a notion that Thomas et al. discuss in their aptly titled essay, "Self-Injury in Correctional Settings: 'Pathology' of Prisons or of Prisoners?" (2006). Here, the authors view self-injury as symptomatic "not only of individual mental health, but of the pathology of prisons as well" (p. 197).

*Suicide.* Numerous studies have identified the environmental influence of segregated housing as a major risk factor for inmate suicide (Bonner, 2000; 2005; Daniel & Fleming, 2005; Hayes, 1994; Liebling, 1992; 1995). According to Bonner, "No factor has been more tragically associated with jail and prison suicides than the consistent finding of isolated/segregated housing" (2000, p. 23). In one of the most thorough reviews to date of suicide in federal prisons between 1983 and 1992, 68% of inmates who committed suicide were on "special housing status," e.g., segregation, administrative detention, or in a psychiatric seclusion unit (Hayes, 1995). Of the 44 prisoners who killed themselves in California prisons in 2005, 70% were confined in disciplinary segregation (Vera Institute of Justice, 2006). Of the 25 suicides in Oregon's prison system between 1998 and 2007, 56% were held in disciplinary or administrative segregation.

New York is another case in point. The suicide rate of SHU and supermax inmates is almost five times that of general population inmates (Pfeiffer, 2004). “This disproportion indicates that SHU housing is also a suicide risk,” reported officials from the state’s Office of Mental Health in their review of 76 inmate suicides that occurred between 1993 and 2001 in New York prisons (Way, Miraglia, Sawyer, Beer, & Eddy, 2005, p. 218). Other suicide risk factors the authors identified were: recent adverse information such as loss of good time or disruption of community relationships (65%), inmate-to-inmate conflict (50%), recent disciplinary action (42%), physical illness (42%), and fear of victimization (40%). Over half (52%) had made a prior suicide attempt.

*Self-injury*. The terms “self-injury” and “self-mutilation” refer to “direct acts of bodily damage with the intent to harm but not to kill” (Vanderhoff & Lynn, 2001, p. 93). In one of the few studies of self-injury among prisoners, Jones (1986) found that the most common form involved cutting one’s wrists, arms or other parts of the body, followed hitting or head-banging, ingesting foreign objects, opening stitches of a prior injury, inserting items in the body and burning oneself.

Although suicidal ideation is not uncommon among individuals who engage in self-injury (Jones, 1986), Vanderhoff and Lynn state that “self-mutilators often report that their behavior [is] not a failed attempt at suicide but instead a completed act of self-harm” (2001, p. 93). People who self-mutilate “often experience relief and tension reduction that is not experienced by perpetrators of a failed suicide attempt” (p. 94).

According to Himber (1994), the three motives of self-mutilators are to achieve relief from psychological pain, tension or emotional flatness, to engender attention and sympathy from others, and to engage in a form of self-punishment. Vanderhoff & Lynn

(2001) emphasize that acts of self-injury are often preceded by a state of dissociation (non-feeling). They frame self-injury as "an effort to cope with severe and aversive dissociation" by helping an individual to "feel real again in the face of unreality and emotional numbing." (p. 98). Similarly, in a longitudinal study of clinical inpatients, Van der Kolk, Perry & Herman (1991) found that self-injury relieved dissociation-related feelings of depersonalization and detachment, and that dissociation predicted self-cutting at six-month follow-up.

Within the context of the supermax environment, the relationship between dissociation and self-injury is particularly relevant. Consider, for example, Haney's finding that 73% of the 100 inmates he interviewed in the Pelican Bay SHU reported "emotional flatness or losing the ability to feel" (2003, p. 134), as well as studies showing higher rates of self-injury among inmates in segregation versus those in general population. For example, a 1985 study of self-mutilation in Virginia prisons found that half of the documented incidents took place in the segregation units (Vera, 2006). Similarly, in Jones' study of 67 prison self-mutilators, over half of the acts took place in segregation or isolation cells; another quarter occurred in prison psychiatric units (1986).

"In this view, self-injurious behavior becomes symptomatic not only of individual mental health, but of the pathology of prisons as well" (Thomas, Leaf, Kazmierczak & Stone, 2006, p. 197). As noted by Rhodes in her of inmates in Washington State's supermax, "Incarceration is usually numbingly boring. The emergency of self-harm disrupts this state" (as cited in Thomas, et al., p. 197). Thus, if self-injury is seen as a way to relieve dissociation, the higher rate of self-injury among inmates in the dissociation-producing environment of supermax is not altogether surprising.

*Contrary Findings*

A review of the literature found three studies that suggested a neutral (or no) effect of supermax housing on psychological functioning. In one study, Canadian researchers Zinger, Wichmann & Andrews (2001) compared the mental health of 23 inmates segregated for 60 days with those who were kept in general population and found no differences in harm between isolated inmates and the control group. One problem with the study was that most of the subjects (including those in segregation) were *voluntary* participants who had access to personal belongs, televisions and computers, amenities unheard of in American supermaxes. Referencing the three-month duration of confinement, the authors wisely cautioned that the findings should not be generalized to U.S. prisons, where inmates "can sometimes be segregated for years for disciplinary infractions with virtually no distractions, human contact, services or programs."

Research by Bonta and Gendreau (1984; 1990) and Suedfeld, Ramirez, Deaton & Baker-Brown (1982) also found no support for the claim that "solitary confinement in prisons is universally damaging, aversive, or intolerable" (Suedfeld et al., p. 303). However, these authors' assertion was based not on empirical research but a review of previously conducted studies that used college students as voluntary participants, limited solitary confinement to ten days or less, and excluded from experiments individuals with mental, behavioral, intelligence or medical problems (see Morris, 2001, p. 414). Obviously, findings from these studies cannot be generalized to current supermax conditions and populations.

Finally, the study by Ward & Werlich (2003) mentioned previously deserves further analysis. Based on a review of disciplinary records, mental health status and post-

release outcomes of 1,020 federal inmates housed in USP Marion between 1983 and 1994, the authors (one of whom is a researcher with the Federal Bureau of Prisons), concluded that because only 30 inmates were transferred to a psychiatric hospital, "most of the men were able to survive their years in super-maximum custody without suffering psychological damage" (p. 65). Using psychiatric transfer as the single measure of absence of psychological suffering is problematic. The decision to transfer an inmate to a psychiatric unit may have more to do with available bed space than actual need.

### *Weaknesses of Existing Studies*

Invariably, not an article on supermax is published without reference to the methodological weaknesses of existing studies, the difficulty of conducting research in supermax settings, as well as the need for more empirical research generally and more quantitative data specifically.

Mears and Watson (2006) articulated some of the problems of conducting supermax research. "Gaining access to. . . 'vulnerable populations' involves overcoming substantial barriers (e.g., official permissions from each and every state where inmate interviews would occur, inmate permissions in advance of and at the time of interviews), to say nothing of the logistical challenges and costs of attempting in-person or telephone interviews with supermax inmates (who typically have no visiting and telephone privileges)."

From personal experience, I would add the following barriers: gaining the trust of inmates who are suspicious of outside researchers, fear retaliation for speaking with outsiders, and who are naturally reluctant to communicate sensitive or incriminating behavior during interviews.

More problematic is the issue of access. Requests from researchers to visit supermax units are routinely denied without reason or cause. If access is granted, visits might suddenly be cut short or terminated altogether (as was the case on two occasions in the current study). Requests for official data might be delayed and sometimes withheld unless obtained under the Freedom of Information Act (also the case in this study), or politically sensitive material such as inmate death reports may be so heavily redacted as to be barely comprehensible. In this author's opinion, the dearth of supermax research is equally attributable to the difficulty of actually conducting such research as it is to the unwillingness of correction officials to grant outside researchers access or to make public internal information.

Problems with extant research suggesting that supermax housing causes psychological damage are numerous. Most studies lacked a control group, had small sample sizes, and were limited to one-time observations rather than changes over time. In addition, no standard instrument was used to collect data across inmate populations in different jurisdictions, thereby compromising generalizability of findings (Pizarro & Stenius, 2003).

Although some researchers (Zinger et al., 2001) administered validated psychological tests such as the Beck Depression Inventory and Brief Symptom Inventory to measure mental well-being, others used a checklist of mental health symptoms (see, for example, Haney, 2003 and Human Rights Watch, 1997; 1998).

In addition, many of the psychological studies involved clinical evaluations yielding prevalence rates of pathology, but because no baseline rate was initially established, the question of how much pathology may have been produced by supermax

confinement or was there to begin with cannot be answered with any precision. Indeed, few studies examined inmates' past psychological and behavioral records or administered pre- and post-tests to assess changes.

Furthermore, environmental variables can influence research results and weaken external validity. Facility operations, number of occupants per cell, staffing ratios, staff training and level of restrictiveness vary widely depending on jurisdiction. For example, in California, Colorado, Washington State and the Federal Bureau of Prisons, supermax inmates can have TVs in their cells; in New York they cannot.

Finally, although federal court judges in six jurisdictions have ordered the removal of seriously mentally ill inmates from supermax settings, the possibility of bias in any litigation research must be considered. In fact, much of the work conducted by Grassian, Haney and Kupers, the "triumvirate" of the supermax literature, was done in connection with litigation, thus raising the possibility of bias.

According to Zinger et al. (2001), results from segregation studies using prisoners involved in human rights violation litigation are questionable at best. "Subjects involved in human rights violation litigation may have a special interest in demonstrating that their conditions of confinement have negative psychological and physiological effects. Therefore, the results of studies which rely on such prisoners will always remain questionable" (p. 54). Similarly, Suedfeld et al. (1982) purport that court-involved inmates do not represent average inmates and their reactions to segregation may not be the norm. Gendreau and Bonta (1984) have criticized the reliability of findings from case studies (citing, primarily, Jackson, 1983), suggesting that certain inmate subjects were

notorious for filing multiple grievances against the prison system and thus made unreliable subjects.

This study, while far from methodological perfection, benefits from a large sample size (N = 175), measures of pre-prison and pre-supermax mental illness, and a comparison group of non-mentally ill inmates to investigate differential responses to supermax.

## Legal Findings

> "It is deplorable and outrageous that this state's prisons appear to have become a repository for a great number of its mentally ill citizens. Persons who, with psychiatric care, could fit well into society, are instead locked away, to become wards of the state's penal system. Then, in a tragically ironic twist, they may be confined in conditions that nurture, rather than abate, their psychoses."
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> —Judge William Wayne Justice, *Ruiz v. Johnson*, (S.D. Texas, 1999)

Despite weaknesses in the research, federal court judges are increasingly siding with inmate plaintiffs in cases challenging the constitutionality of confining mentally ill inmates in supermax prisons. Since 1995, federal judges in at least six states—California, Connecticut, Indiana, Ohio, New Mexico, and Wisconsin—have ruled that seriously mentally ill prisoners must be removed from segregation units. As Toch has observed, "Supermax administrators today rarely make changes based on the results of research. The contemporary corrective is one of litigation" (2003, p. 237).

The Eighth Amendment's prohibition against cruel and unusual punishment has been interpreted to mean that federal and state governments must provide prisoners with basic life necessities such as shelter, clothing, food and medical care. In 1976, the U.S. Supreme Court decided in *Estelle v. Gamble* that correction officials' deliberate

indifference to inmates' medical needs—whether related to physical or mental health—violated the Eighth Amendment's prohibition against cruel and unusual punishment. This protection extends to supermax inmates. Although the courts have generally refused to find supermax confinement unconstitutional on its face absent aggravating circumstances, "specific conditions in specific facilities have been found to violate the Eighth Amendment" (Smith, 2006, p. 444). Following is a review of the three most important legal challenges to supermax confinement as it relates to inmate mental health.

The first case to receive national attention was the 1995 *Madrid* v. *Gomez* decision involving California's Pelican Bay SHU. *Madrid* was a sweeping attack on conditions in the SHU, which a former warden characterized as "virtual total deprivation, including, insofar as possible, deprivation of human contact" (p. 1230).

The seriousness of the lawsuit was reflected in the trial judge's 138-page opinion, in which he commented on the "stark sterility and unremitting monotony" of the prison environment, where prisoners "can go weeks, months or potentially years with little or no opportunity for normal social contact with other people." The court found that "many, if not most, inmates in the SHU experience some degree of psychological trauma in reaction to their extreme social isolation and the severely restricted environmental stimulation…" (p. 1235). Concluding that conditions "may press the outer bounds of what most humans can psychologically tolerate" (p. 1267), the judge barred certain categories of prisoners from supermax confinement: those who were seriously mentally ill, actively suicidal, brain-damaged or developmentally disabled.

The second significant case was *Ruiz v. Johnson* (1999), another sweeping class-action lawsuit brought by Texas state inmates. Here, the judge ruled that the "extreme

deprivations and repressive conditions" in Texas's lockdown units constituted cruel and unusual punishment "both as to the plaintiff class generally and the subclass of mentally ill inmates housed in such confinement" (p. 861). Acknowledging the potential of long-term supermax confinement to produce pathology where none existed previously, the court concluded that, "Texas's administrative segregation units are virtual incubators of psychoses—seeding illness in otherwise healthy inmates and exacerbating illness in those already suffering from mental infirmities" (p. 907). The judge concluded that "more than mere deprivation," the prisoners in these units "suffer actual psychological harm from the almost total deprivation of human contact, mental [stimulation], personal property and human dignity" (p. 913).

The third and most recent case, *Jones 'El* v. *Berge* (2001), concerned the supermax in Boscobel, Wisconsin. In this case, a federal district court granted prisoners' motion for injunctive relief on the grounds that seriously mentally ill prisoners faced irreparable psychological damage if prison officials continued to house them in its recently opened supermax. In his decision, the judge discussed the nature of SHU syndrome and ordered the removal of mentally ill inmates from the unit:

> Confinement in super-maximum security prisons such as Wisconsin's supermax is known to cause severe psychiatric morbidity, disability, suffering and mortality. Prisoners in segregated housing units who have no history of serious mental illness and who are not prone to psychiatric decompensation often develop a constellation of symptoms known as 'SHU Syndrome.'
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> The extremely isolating conditions in supermaximum confinement cause SHU Syndrome in relatively healthy prisoners who have histories of serious mental illness, as well as prisoners who have never suffered a breakdown in the past but are prone to break down when the stress and trauma become exceptionally severe. (pp. 1101-1102)

*Supermax Litigation in New York*

In May 2002, three prisoners' rights organizations and a private New York City law firm filed a class-action lawsuit against officials with the state's Office of Mental Health and Department of Correctional Services officials for mistreatment of mentally ill inmates. The lawsuit, *Disability Advocates, Inc. v. New York State Office of Mental Health, et al.*, focused on mentally ill inmates in the state's supermaxes and SHUs. It claimed that OMH and DOCS officials acted with deliberate indifference to the serious medical needs of mentally ill prisoners by failing to provide adequate mental health services, punishing inmates for symptomatic behavior that the system failed to treat, and imposing punishments such as extended terms in solitary confinement and a bread-and-cabbage diet that led to severe psychiatric deterioration, self-mutilation and suicide.

*The New York Times* described the lawsuit as "the most important against the prison system in decades," noting that it could lead to reforms nationwide "if a system as big as New York's, the nation's fourth largest, is made to improve the care of one of the fastest growing and most difficult segments of the inmate population" (May 7, 2007).

The lawsuit was prompted by DOCS and OMH's refusal to enforce the terms of a 1998 settlement (which DOCS spent 18 years fighting in court), after an inmate with a history of psychiatric illness hanged himself in the Attica SHU (Pfeiffer, 2004). Despite officials' agreement to improve mental health services in the SHU, the court-appointed monitor found that little had changed since the settlement was reached (See Grassian, 1996; 1999a; 1999b). Psychotic inmates were routinely written off as "malingering." Prisoners who were transferred to the psychiatric hospital and stabilized were returned to

the SHU to complete lengthy sentences, sometimes spanning more than a decade. In the four years after the initial settlement was reached in 1998, seven inmates in the Attica SHU committed suicide (Pfeiffer, 2004).

In May 2007, state officials agreed to settle the *Disabilities Advocates* lawsuit. Terms of the settlement require more rigorous assessment and services for mentally ill inmates in SHUs and closer scrutiny of the reasons for and length of proposed supermax sentences (Kershaw, 2007). Although the settlement does not prohibit housing mentally ill inmates in SHUs, it requires more extensive reviews than currently practiced. In addition, it requires the state to offer two hours of treatment and therapy five days a week and to expand bed space in residential mental health units for severely mentally ill inmates who otherwise would be placed in the SHU. Finally, it limited use of the bread-and-cabbage diet, known by inmates as "the loaf," to no more than seven days for mentally ill inmates unless under "exceptional circumstances."

Equally significant, the Governor's 2007 state budget included $50 million in capital construction costs for the additional mental health treatment beds and $4 million for staffing. A discussion of the possible impact of these changes is discussed in the conclusion.

# CHAPTER 3: THEORY AND RESEARCH QUESTIONS

Inarguably, supermax prisons are among the most isolated institutions in the country. Few outsiders are permitted access; little public oversight exists (Wynn & Szatrowski, 2004). Supermax inmates are hidden not only from society but from the prison system itself. As noted by the late criminologist Norval Morris, "We know little from research on who is sent to these units, why and for how long; or the effects of supermax confinement on the mental conditions and social skills of inmates" (2001, p. 385). This study helps to fill these and other gaps in the literature by answering the following five research questions:

- Who lives in supermax prisons?
- What accounts for the overrepresentation of mentally ill inmates in supermax?
- Does inmate behavior improve or worsen in supermax confinement?
- Are mentally ill inmates more adversely affected by supermax confinement than non-mentally ill inmates?
- Does supermax confinement contribute to symptoms of mental illness where none existed previously?

## Who Lives in Supermax Prisons?

To better understand the characteristics of supermax inmates, this study begins with a description of the demographic and correctional characteristics of 175 supermax inmates in the country's fourth largest prison system. The sample represented 5% of the

state's total supermax population (N=3,450) at the time of the research. Demographic and correctional data include age, race, education, length of prison sentence, criminal conviction (violent or nonviolent), mental health status, and length of supermax sentence.

What Accounts for the Overrepresentation of Mentally Ill Supermax Inmates?

Hypothesis 1a: Although mentally ill supermax inmates resemble non-mentally ill supermax inmates in predisposition to violence before prison, they engage in more violent behavior once in prison.

Hypothesis 1b: Mentally ill supermax inmates experience more adjustment problems in general population than non-mentally ill supermax inmates.

Hypothesis 1c: Mentally ill supermax inmates are more likely to be victimized in general population than non-mentally ill supermax inmates.

Hypothesis 1d: Mentally ill supermax inmates are more likely to be infracted for symptomatic behavior in general population than non-mentally ill supermax inmates.

Most correction officials acknowledge that housing mentally ill inmates in supermax is far from cost-effective and potentially unconstitutional (Mears & Castro, 2006; Riveland, 1999). As more mentally ill individuals enter the prison system, it is essential that correction officials know how and where to house these inmates without violating their constitutional right to mental health care. Thus, understanding the factors that contribute to mentally ill inmates' overrepresentation in supermax is important from both an operational and legal perspective.

One factor suggested in the literature is that mentally ill inmates are more violence-prone than non-mentally ill inmates. Some researchers (Adams, 1983; Toch & Adams, 1986) found that mentally ill inmates are more likely to have been convicted of a

violent crime and receive longer prison sentences than non-mentally ill inmates. Conversely, other researchers (BJS, 2006; Lovell et al., 2000) have found that mentally ill and non-mentally ill inmates resemble each other on correlates of violent behavior.

Additionally, several studies show that mentally ill inmates are more likely to be violent toward inmates and staff once they *enter* the prison system (Baskin, Sommers, & Steadman, 1991; BJS, 2006; Lovell et. al, 2000; Toch & Adams, 1986). Both of these factors—predisposition to violence before prison and violent behavior during prison—deserve further analysis. If research found, for example, that mentally ill inmates entered prison more violence-prone than other inmates and subsequently committed significantly more violence in prison, it could be argued that increasing high-security housing was justifiable from a security perspective.

On the other hand, if research found that mentally ill inmates enter the prison system similarly violence-prone as non-mentally ill inmates but tend to become more violent once in prison, one could look to and perhaps alter factors in the prison environment that serve as catalysts to antisocial and violent behavior.

In addition, research suggests that mentally ill inmates, due to psychological and coping deficits, have greater problems adjusting to prison and complying with rules and regulations than other inmates, thereby increasing their chances of landing in segregated confinement (Adams, 1983; Fellner, 2006; Kupers, 1999; Toch and Adams, 1986). As Liebling observed, "Survival in prison demands recourse to a set of personal resources which may exceed the abilities of many of those it confines."

Inmate victimization and fear of victimization further compromise prison adjustment. "The threat of violence and criminal victimization in U.S. prisons weighs

heavily on the minds of many inmates," report researchers (Hochstetler, Murphy & Simons, 2004, p. 439). Studies have shown that inmates who have been victimized exhibit higher levels of depression, anxiety and symptoms of post-traumatic stress disorder (McCorkle, 1993; O'Donnell & Edgar, 1998). Even outside the prison walls, "a single nonviolent offense committed against free citizens can have lasting psychological consequences and affect future perceptions of security" (Hochstetler et al., p. 440). The authors point out that being victimized in prison is more devastating because prison victims live with their offenders (p. 440).

Although only a few empirical studies on prison victimization have been conducted, results show that mentally ill inmates are at greater risk of victimization than other inmates (BJS, 2006; Abramsky & Fellner, 2003; Kupers, 1999, Wynn et al., 2004). Fear of victimization combined with psychological deficits can strain the already fragile coping mechanisms of mentally ill inmates, thereby leading to defensive actions, aggression and, ultimately, punitive segregation.

The final factor identified in the literature as contributing to mentally ill inmates' overrepresentation in supermax is the tendency of correction officials to sanction symptomatic behavior with disciplinary infractions. In New York, although state law requires that mental health staff present information to a DOCS hearing officer when a prisoner's mental state is an issue in the disciplinary process, prisoners' attorneys report that these safeguards are not implemented in a manner that protects mentally ill prisoners from being punished for being ill (Wynn, Szatrowski & Warner, 2004).

This failure is due to several factors: mental health staff's over-diagnosis of malingering by mentally ill prisoners, hearing officers' lack of training in mental illness

symptomatology, and mental health staff's reluctance to get involved in security issues (Pfeiffer, 2004). Thus, inmates who self-mutilate or attempt suicide can be (and often are) issued a disciplinary ticket and sent to the SHU instead of Central New York Psychiatric Center (Pfeiffer, 2004). Clearly, if prison policy permits correction officials to infract inmates for symptomatic behavior, there is a greater likelihood that the mentally ill will be disproportionately represented in supermax.

## Does Behavior Improve or Worsen in Supermax?

Hypothesis 2a: Inmate behavior worsens in supermax confinement.

As discussed, correctional policymakers report that an important goal of supermax confinement is to improve inmate behavior (Mears & Watson, 2006). To date, there is scant evidence that this goal has been achieved either on an institutional level as measured by system-wide reductions in violence (Briggs, Sundt & Castellano, 2003) or an individual level as measured by reduced misconduct in supermax (Adams, 1986).

This study argues that inmate behavior worsens rather than improves in supermax confinement. Support for the hypothesis is assumed if a majority of inmates report additional disciplinary infractions for continued misconduct in supermax. Theoretically, if supermax units fulfilled their goal of improving inmate behavior, one would expect that the majority of inmates would not engage in continual misconduct in supermax.

To strengthen the power of analysis, another measure of behavior—deprivation orders—was included. In addition to disciplinary infractions, inmates can receive a type of punishment known as a deprivation order for continued misconduct in SHU. Deprivation orders range in severity from suspension of commissary, recreation, visits or showers on the least punitive end to suspension of water (for flooding one's cell), the

restricted diet (regular meals are replaced by three one-pound servings of an unpalatable, binding bread known by inmates as "loaf"), to the use of mechanical restraints during movement on the most punitive end. Mechanical restraints include handcuffs attached to a waist chain and hobble chains around the ankles during all out-of-cell movement, even recreation.

## Are Mentally Ill Inmates More Adversely Affected By Supermax?

Hypothesis 3a: Mentally ill inmates report significantly more psychiatric distress in supermax confinement than non-mentally ill inmates.

Hypothesis 3b: Mentally ill inmates report significantly more behavioral pathology in supermax than non-mentally ill inmates.

The small but growing body of supermax literature and case law suggests that mentally ill inmates are more adversely affected by supermax conditions than non-mentally ill inmates, a concept that is intuitively obvious but difficult to measure empirically for a host of reasons, which are discussed more in detail in the limitations section.

Mears and Castro (2006) attempted to overcome the problems associated with supermax research by interviewing prison wardens (N = 500). The majority agreed with the statement that "placement of the mentally ill [in supermax]…may aggravate existing mental illness and in turn may increase their misconduct." Grassian elaborated on how this process occurs:

> Many of the inmates who end up in SHU are precisely the group least capable of tolerating such stringent and isolating conditions. They are often individuals with long histories, beginning in childhood, of emotional instability, hyperactivity, impulsivity or other indications of subtle central nervous system dysfunction. As a result of this dysfunction, such individuals are almost pathologically stimulation-

> seeking and incapable of tolerating stimulus deprivation. When placed in stringent conditions of confinement, they become agitated and paranoid and their emotional state and behavior deteriorates. Many become floridly psychotic or so agitated that they engage in awful, grotesque behaviors (Wynn et al., 2004, p. 49)

## Does Supermax Confinement Contribute to Mental Illness?

Hypothesis 4: There is a statistically significant relationship between inmates with pre-existing mental illness and the most severe cases of psychiatric distress in supermax confinement.

A related but more difficult question to answer is whether supermax confinement contributes to symptoms of mental illness where none existed previously. As noted, only two studies have empirically tested this hypothesis, one of which was conducted as part of litigation (Grassian, 1986); the other of which involved Danish prisoners in remand facilities (Anderson et al, 2000). For obvious reasons, results from these studies cannot be generalized to all U.S. supermax populations.

Because the current study is not a true experiment (such as the Anderson study), a causal relationship is impossible to measure. However, it *is* possible to determine if there is an association between inmates with preexisting mental illness and the most severe cases of psychiatric distress in supermax, and whether inmates with no current or prior mental history exhibit symptoms of psychiatric distress in supermax. If the data were to affirm these assumptions, they would provide support for the claim that supermax confinement contributes to mental illness.

# CHAPTER 4: METHODOLOGY

## Overview of Research Design

The study used a quasi-experimental research design involving two mutually exclusive groups: 90 mentally ill inmates and 85 non-mentally ill inmates. Mental illness was defined as being on the mental health caseload, a determination that is made by prison mental health staff upon admission or during incarceration. The study was cross-sectional in nature (recording observations at one time) and used a triangulated approach to the research, which included the following methods:

- A 46-item survey questionnaire personally administered to a total of 175 inmates in 8 SHUs and 4 supermaxes.
- Face-to-face interviews with prison superintendents and officials from DOCS and OMH.
- Focus groups with correction officers, mental health staff and inmate liaison committees.
- A review of official data, legal documents, policies and reports.
- Field observations from 17 site visits to SHUs and supermax facilities.

## Research Sites

At the time of the study, NYS DOCS held approximately 3,450 inmates in 24 different SHUs and supermaxes throughout the state.[8] The research sites were 4 supermax prisons (including the two largest, Upstate and Southport) and 8 SHUs (see Table 2: Research Sites). These facilities held a total of 2,207 inmates, or approximately

[8] NYS DOCS has a total of 11 supermax prisons and 13 Special Housing Units.

64% of the system's total punitive segregation population, at the time of the research. The sample of 175 inmates represented 8% of inmates in the sites visited and 5% of the total supermax/SHU population.

In NYS DOCS, inmates are sent to punitive segregation for violating a prison rule considered sufficiently serious to warrant a specified term in a 23-hour lockdown facility. The length of sentence in punitive segregation is determined by a prison hearing committee, based loosely on departmental guidelines and approved by the prison's superintendent. There is no state or federal limit to the amount of time an inmate can be sentenced to punitive segregation. In 2003, DOCS officials reported an average sentence in punitive segregation of 5.3 months.

SHUs and supermaxes resemble each other in most respects, i.e. the rules and regulations governing their operations and the policies pertaining to inmate movement, restrictions and privileges. The major difference between supermaxes and SHUs in New York is structural: SHUs are comprised of one or two cellblocks of 30 to 90 inmates and are usually located in a remote area of the prison separated from general population cellblocks. SHUs tend to be dank and poorly lit as most are located in prisons built over a hundred years ago.

By contrast, the state's supermaxes are massive, freestanding facilities capable of housing anywhere from 200 to 1,200 inmates. They are stark, high-tech prisons with state-of-the-art security and large, cavernous cellblocks.

Cells in SHUs and in the supermax, Southport Correctional Facility, do not have windows, though prisoners can look out a window on the opposite side of the gallery. There are no desks, chairs or writing surfaces in these cells; they are simply barren cells

with concrete floors, on which inmates place their clothes, books, toiletries and legal papers. By contrast, at Upstate and Five Points Correctional Facilities and the 200-bed supermaxes, cells have steel desks with attachable stools and a narrow window slot giving a glimpse of the outside.

Cell fronts (meaning the front wall of the cell) in SHUs and supermaxes vary. Some have bars, thereby permitting more sound and natural light, while others have solid steel doors. If an inmate is known as a "slasher" or "thrower," correction officials cover the bars of the cell with a thick lexsan shield, which not only prevents objects from being hurled through the bars but also significantly reduces communication with the inmate inside. The plaintiff's expert in the *Disabilities Advocates* litigation described the experience of being confined in a lexsan-covered cell as follows:

> In order to get a sense of how prisoners experience a lexsan-covered cell, during our tour, [my colleague] and I had ourselves locked into an empty cell with a lexsan shield over its door. With the food port closed, we tried to catch the attention of the attorneys who were engaged in conversation in the hall just a few feet away in front of the cell. While they were within four or five feet of us, we were unable to hear them talking, and they were unable to hear us calling to them even when I raised my voice to a scream. Finally, after I tapped on the lexsan with my knuckles, one of the attorneys noticed us. (Kupers, 2005, p. 4)

**Table 2: RESEARCH SITES**

| Correctional Facility | Type | Number in Segregation | Included in Sample | On MH Caseload | Not on MH Caseload |
|---|---|---|---|---|---|
| 1. Attica | SHU | 90 | 13 | 7 | 6 |
| 2. Clinton | SHU | 36 | 4 | 2 | 2 |
| 3. Elmira | SHU | 54 | 7 | 3 | 4 |
| 4. Five Points | Supermax | 95 | 18 | 7 | 11 |
| 5. Great Meadow | SHU | 69 | 8 | 5 | 3 |
| 6. Green Haven | SHU | 47 | 9 | 4 | 5 |
| 7. Orleans* | Supermax | 160 | 2 | 0 | 2 |
| 8. Sing Sing | SHU | 30 | 6 | 1 | 5 |
| 9. Southport | Supermax | 674 | 59 | 36 | 23 |
| 10. Sullivan | SHU | 30 | 5 | 2 | 3 |
| 11. Upstate | Supermax | 892 | 37 | 16 | 21 |
| 12. Wende | SHU | 30 | 7 | 7 | 0 |
| **Total:** | | N = 2,207 | n = 175 | n = 90 | n = 85 |

*Only two interviews were conducted at this facility. Interviewing time was cut short due to an institutional security problem.

## Population and Sample

The two samples of 90 mentally ill inmates and 85 non-mentally ill inmates are subsets of a larger data set provided by the Correctional Association of New York. The data were collected between 2001 and 2003 in conjunction with two research projects, of which I served as principal investigator and a member of the research team. For these studies, over 500 inmates were interviewed in various types of confinement throughout the state, including SHUs, supermaxes, residential mental health units, and Central New York Psychiatric Center.

From a data subset of 350 subjects, I obtained two equivalently sized samples of mentally ill and non-mentally ill inmates for use in this study. SPSS was used to sort and

randomly select subjects until two sufficiently large and equal sized samples were obtained.

## Data Collection

### *Instrument*

The primary data collection tool was a structured survey questionnaire personally administered to inmates. The survey contained 46 closed-item questions and took, on average, 40 minutes to administer. Developed with assistance from a forensic psychologist, a psychiatrist with extensive experience interviewing supermax inmates, and a prisoners' rights attorney, the survey contained forced-choice items requiring either "yes" or "no" responses, Likert-type scale responses, or responses from a checklist. The survey was reviewed and revised at length to enhance internal validity and was pilot-tested on former prisoners to ensure that the language was comprehensible to and appropriate for inmate subjects.

Data captured basic demographic and custodial information (race, age, education, criminal conviction, and length of prison sentence). In addition, items probed inmates' pre-prison and in-prison experiences, including mental health service usage, psychiatric hospitalization, victimization, and acts of self-injury. Pathways to supermax confinement were explored through questions concerning the number and type of infractions that led to punitive segregation, whether inmates were infracted for symptomatic behavior, and the length of the sentence in punitive segregation.

In addition, a series of questions probed indicators of psychiatric distress and behavioral pathology in punitive segregation. Indicators of psychiatric distress, as delineated by Grassian and others, included items such as difficulty thinking or

concentrating, perceptual distortions, suicidal ideation, self-injury, withdrawal, and psychiatric hospitalization while incarcerated. Indicators of behavioral pathology, as outlined by Haney and others, centered largely on violent, assaultive and extreme forms of maladaptive or antisocial behavior, including assault, destruction of property (including flooding or lighting one's cell on fire), self-injury (cutting or burning oneself, swallowing objects, etc.), and unhygienic acts (spitting or throwing bodily fluids).

Evidence of the above behaviors was measured in two ways: the number of disciplinary infractions inmates received for these behaviors and the number of deprivation orders imposed for continual misconduct.

In NYS DOCS, when an inmate in punitive segregation acts out, in most cases he receives not only a ticket for the infraction but also a punishment, known officially as a deprivation order. Deprivation orders range in severity. On the least punitive end, an inmate may have certain privileges such as recreation, visits or showers suspended for a specified period, usually one to two weeks, or have time added to his sentence in punitive segregation. At the most punitive end, correction officials withhold basic staples such as water (for flooding one's cell) or regular food (for throwing food or bodily fluids). If an inmate continues to act out, a lexsan shield will be put over his cell and he will be ordered to wear "full restraints" (handcuffs attached to a waist chain and hobble chains around the ankles) during all out-of-cell movement, including recreation.

*Sampling and Survey Administration*

Depending on the size of the unit, a team of 5 to 8 researchers (four of whom were full-time staff members) administered the survey. Each researcher had significant training and experience conducting inmate interviews and was familiar with the culture and operations of New York state prisons. To enhance interviewer-subject rapport and overall research validity, the team included an African American and Hispanic male, both of whom were formerly incarcerated in NYS DOCS, as well as three psychiatrists and one psychologist, each of whom had experience working with forensic populations. A psychiatrist or psychologist accompanied the team on six of the twelve site visits.

Inmate subjects were selected in one of two ways: by interviewing every other prisoner in a cellblock or by developing a random sample of every kth subject from a sampling frame if one was provided by the facility in advance of the site visit. Obviously, when visiting units with over 100 inmates in different cellblocks, it was impossible to obtain sufficiently large samples from every cellblock. In the largest supermax facilities (Upstate Correctional Facility, with a total of 892 inmates in segregation, and Southport Correctional Facility, with a total of 674) where inmates are housed in four different cellblocks and at different levels of restrictions, each researcher covered a different cellblock to ensure that inmates from all areas were represented.

Researchers entered the cellblocks and administered the survey cell front (through the bars or door) to inmates during face-to-face interviews. Because DOCS prohibits visitors from giving inmates any items (including business cards, consent forms, surveys

or pens), researchers read each question aloud and marked off subjects' responses on the questionnaire.

If the cell front was a solid door (as opposed to bars) or covered with a lexsan shield, researchers opened the food slot in the lower part of the door and conducted the interview through the opening. This approach was initially awkward in that it required both researcher and inmate to sit on the floor on opposite sides of the cell door and speak through a trap-door-like opening. Although we could have remained standing and spoken to inmates through a perforated speaking patch in the upper part of the door (as correction officers and counselors do), confidentiality would have been comprised given the necessity to shout in order to be heard by the inmate inside and the inability to maintain eye contact during communication. Though our method was considered unusual by both inmates and officers, it had the unintended effect of building subject rapport.

Researchers began by introducing themselves, stating their first and last names and explaining in clear and concise language that they were representatives from an independent agency not affiliated with NYS DOCS. They described the nature and purpose of the research (to gain an understanding of the experiences of inmates in punitive segregation), and emphasized that there were no penalties or incentives for participation. The vast majority of inmates who were asked to participate did. The most common reason for not participating was lack of interest (the inmate did not want to be bothered), or because the inmate was sleeping.[9]

The data were collected in keeping with the Correctional Association's legislative authority to monitor and report on conditions in New York state correctional facilities.

[9] On some occasions, we encountered inmates who were frankly psychotic and too incoherent to be interviewed and reported the cell location of these inmates to corrections officials at the end of the visit. We encountered approximately 20 such individuals during the research.

Agency protocols for the protection of vulnerable subjects were followed and approved by John Jay College's Institutional Review Board. All subjects were informed that their responses would be kept confidential in a locked filing cabinet, that identifying information would be deleted once the data were coded to ensure anonymity, and that no identifying information would be included in the reporting of findings.

## Limitations of the Data

As with most supermax studies, data collection was fraught with numerous challenges. Despite the Correctional Association's legal authority to monitor conditions in New York State prisons, its access was impeded at times due to political and legal concerns. For example, when the *Disabilities' Advocates* lawsuit was filed several months after the study's inception, OMH prohibited its prison mental health employees from speaking with us. Moreover, requests for information from DOCS and OMH were generally disregarded unless sought under the Freedom of Information Act.

Moreover, an effort to increase the sample size by mailing surveys to inmates was abruptly halted by DOCS several months into the study with no justification or recourse. DOCS officials also restricted the time for conducting face-to-face interviews to one hour in each facility, necessitating costly return trips to remote prisons and limiting the size and representativeness of the sample. As stated, the sample of 175 inmates represents just 5% of the system's total supermax population (N = 3,500) at the time of the research.

Moreover, much of the data were self-reported. It is possible that inmates over- or under-reported information, believing that in our capacity as outsiders we had influence over their custodial status. We took steps to mitigate this problem by emphasizing that

the data were collected solely for research purposes and that we had no influence over their status within the correctional system.

Because many of the questions involved potentially embarrassing or incriminating information, there was greater concern about under-reporting. While interviews were typically conducted out of earshot but often within eyesight of correction officers, conversations were not completely private and inmates may have withheld information.

Nevertheless, the majority of inmates spoke with apparent candor even when discussing highly sensitive or incriminating information such as criminal activity in prison, psychiatric history and victimization by other inmates. We concluded that the ex-offender status of two of the researchers, the team's in-depth knowledge of the New York state prison system, as well as researchers' familiarity with prisoner vernacular and the time with each subject enhanced disclosure.

## Data Preparation and Analysis

To reduce data entry errors, the same staff researchers who administered the surveys entered the data into SPSS. Researchers checked each others' work for missing entries, inaccuracies and discrepancies.

For the current study, this author subsequently reexamined each of the data sets and spent considerable time "cleaning" the data, i.e. checking for normality, removing outliers, and recoding and transforming some of the variables to broaden the range of statistical tests that could be used.

In some instances, nominal, dichotomous variables (yes/no responses) that measured the same underlying construct, i.e. psychiatric distress, were combined into an index so that statistical procedures requiring continuous, interval-level data could be

used. When scales were created, internal consistency was verified by calculating the Cronbach coefficient alpha using SPSS. Cronbach's alpha measures the average correlation among all of the items that make up the scale, ensuring that all items "hang together" (Pallant, 2005). Cronbach alpha values range from 0 to 1, with higher values demonstrating greater validity. The recommended minimum alpha level of .7 was used.

In most analyses, the independent variable was mental health status, measured dichotomously as non-mentally ill (not on the mental health caseload) or mentally ill (on the mental health caseload). In some cases, to strengthen the power of analysis, ANOVA tests were conducted. In these instances, the independent variable, mental illness, was measured ordinally by level of severity:

- Level 1—*Non-Mentally Ill*: Inmates not on the mental health caseload (n = 83)
- Level 2—*Mentally Ill*: Inmates on the mental health caseload with no reported psychiatric hospitalization in prison or in the community (n = 58)
- Level 3—*Seriously Mentally Ill*: Inmates on the mental health caseload with either a history of psychiatric hospitalization in prison or the community or a primary diagnosis of schizophrenia (n = 34).

With hypotheses where it was necessary to control for the possibility that inmates may have brought their mental health problems into prison with them, the independent variable was pre-prison psychiatric history (measured dichotomously as yes or no) versus current status on the mental health caseload. In these analyses, only those inmates who reported no previous or current mental health problem (n = 55) were included.

The reader should bear in mind that the current study does not use entirely randomly sampled data, making significance tests inappropriate for inferential analysis.

However, based on the large sample size (n = 175) and the widespread use of significance tests in social science for exploratory analysis of nonrandom data, significance is reported here as an arbitrary criterion.

The primary statistical tests used were chi square, independent-samples t-test and ANOVA (one-way between groups analysis of variance). Before performing statistical tests, preliminary analyses were conducted to ensure no violations of assumptions of normality and homogeneity of variance and, if violations existed, how they would be addressed. For example, to reduce the risk of Type I errors in ANOVA tests where sample sizes were unequal and thus violated the assumption of homogeneity of variance, SPSS's Robust-tests of Equality of Means (specifically, Welsh and Brown-Forsythe tests) were used to reduce the impact of this violation. Planned comparisons for between-group differences in ANOVA were assessed using the post-hoc Tukey HSD.

With t-tests and ANOVA, effect sizes were calculated using eta squared. P values less than .05 were considered statistically significant.

### *Operationalization of Variables and Data Analyses*

Research Question 1: What accounts for the overrepresentation of mentally ill inmates in supermax?

Hypothesis 1a: Although mentally ill supermax inmates resemble non-mentally ill inmates in predisposition to violence before prison, they report more violent behavior than non-mentally inmates once in prison.

Similar to Lovell et al. (2000), the construct of *predisposition to violence* was operationalized as criminal conviction for or a violent offense (murder, rape, robbery, or assault) and confirmed through the NYS DOCS inmate look-up system. As the system

contains only information on current convictions, previous convictions were not included. A chi-square analysis using Kruskal Tau (the appropriate measure for 2 nominal, categorical values) was conducted to measure the strength of association between mental illness and violent conviction.

Predisposition to violence was also measured by sentence length. A t-test was conducted to compare mean scores on sentence length between mentally ill and non-mentally ill inmates.

The construct of *violent behavior in prison* was operationalized as disciplinary infractions for the charge of assault. (Similar to Lovell et al., charges for "fighting" were excluded since they can indicate a defensive action). To investigate differences between the two groups, an independent t-test was conducted on mean scores for assault by mentally ill and non-mentally ill inmates.

Hypothesis 1b: Mentally ill supermax inmates experience more adjustment problems in general population than non-mentally ill supermax inmates.

Here, the construct *prison adjustment* was operationalized as number of disciplinary infractions and acts of self-harm committed in general population. According to McCorkle (1995), "disciplinary infractions are valid measures of adjustment to prison life" (citing Grant, Adams & Toch, p. 55). With regard to self-harm (operationalized as suicide threats, suicide attempts and self-mutilation), research suggests that prisoner self-harm not only indicates psychological decompensation but is often a response to the tremendous stressors inherent in the prison environment.

Independent t-tests were conducted to determine if there were statistically significant differences between mentally ill and non-mentally ill inmates on number of

disciplinary infractions and acts of self-harm. To control for the possibility that an act of self-harm would generate placement on the mental health caseload, thereby confounding results, the independent variable used in the self-harm analysis was pre-prison psychiatric history rather than presence on the mental health caseload.

Hypothesis 1c: Mentally ill supermax inmates are more likely to be victimized in general population than non-mentally ill supermax inmates.

The construct *inmate victimization* was operationalized as "yes" responses to the following two questions: "During your current sentence, have you ever: 1) been physically assaulted by another inmate? 2) had your property or commissary stolen by another inmate? To strengthen the power of analysis, the independent variable was ordinally measured by mental health severity: Level 1: non-mentally ill; Level 2: mentally ill; and Level 3: seriously mentally ill. Chi square analyses using Somers' d were conducted for each of the two dependent variables to measure the significance and strength of the relationship between mental illness and victimization.

Hypothesis 1d: Mentally ill supermax inmates are more likely to be infracted for symptomatic behavior in general population than non-mentally ill supermax inmates.

The construct *symptomatic behavior* was measured by summing the number of infractions leading to supermax confinement that research indicates are symptomatic of mental illness. These nine items were: disobeying a direct order, creating a disturbance, being out of place, committing an unhygienic act, issuing threats, self-mutilating, attempting suicide, destroying state property, and committing arson. Values on the index ranged from 0 to 9, with a mean of .73, standard deviation of 1.3, and an alpha scale reliability score of .68.

An independent t-test was conducted to determine differences in group means between mentally ill and non-mentally ill inmates on infractions for symptomatic behavior.

Research Question 2: Does inmate behavior improve or worsen in supermax confinement?

Hypothesis 2: Inmate behavior worsens in supermax confinement, as measured by a majority of inmates receiving additional infractions and deprivation orders for continued misconduct in supermax.

Behavior was measured by infractions and deprivation orders for misconduct while in supermax. A frequency distribution showed the percentage difference between inmates who did and did not receive an infraction or deprivation order. It was expected that the percentage of inmates reporting deprivation orders would be slightly lower than those reporting disciplinary infractions as certain minor offenses may be punished solely by an infraction without an ensuring deprivation order.

Research Question 3: Are mentally ill inmates more adversely affected by supermax confinement than non-mentally ill supermax inmates?

Hypothesis 3a: Mentally ill supermax inmates report significantly more psychiatric distress than non-mentally ill inmates.

To measure the construct *psychiatric distress,* an index was created by summing "yes" values (1=yes; 0=no) to the following nine questions, which began with the statement "While in SHU . . . "

1. Do you have problems thinking, concentrating, or paying attention?

2. Do you find that your mind plays tricks on you, or your hearing or vision plays tricks on you?
3. How often do you take your one hour of recreation? (only responses of "never" or "rarely" were included)
4. Have you purposely tried to hurt yourself?
5. Have you threatened suicide?
6. Have you attempted suicide?
7. Have you been charged with an unhygienic act?
8. Have you been sent to CNYPC, an observation cell or mental health unit?
9. If sent to CNYPC, on how many occasions were you sent there?

Scores on the index were normally distributed, ranging from 0 to 12, with a mean of 2.3, standard deviation of 2.3 and an alpha reliability score of .6. Although the alpha level was slightly lower than required, the index was retained because its components have been consistently validated by other researchers.

An independent t-test was conducted to explore mean differences between mentally ill and non-mentally inmates on level of psychiatric distress in supermax. The magnitude of the difference was computed using eta squared.

Hypothesis 3b: Mentally ill supermax inmates report significantly more behavioral pathology than non-mentally supermax inmates.

To measure *behavioral pathology,* an index was created based on established indicators of antisocial or violent behavior that researchers have identified in supermax populations. Specifically, behavioral pathology was operationalized as receiving an

infraction or deprivation order in supermax for any of the following: 1) assaulting another inmate or staff, 2) creating a disturbance, 3) issuing threats, 4) committing an unhygienic act, and 5) destroying state property.

The index also included the total number of infractions and deprivation orders received while in supermax. One point was added if the inmate received the most punitive deprivation order (restricted diet, water deprivation, full restraints or lexsan cell shield). Values on the index ranged from 0 to 11, with a mean of 2.7, standard deviation of 3.2, and an alpha scale reliability score of .83.

Research Question 4**:** Does supermax confinement contribute to symptoms of mental illness where none existed previously?

Hypothesis 4: There is a statistically significant relationship between inmates with pre-existing mental illness and the most severe cases of psychiatric distress in supermax confinement.

Here, an ANOVA with post-hoc tests was conducted, the appropriate test when one has an independent (grouping) variable comprised of three or more levels and one dependent continuous variable (Pallant, 2005). For the analysis, the independent variable was level of mental health severity (Level 1 = non-mentally ill; Level 2 = mentally ill; Level 3 = seriously mentally ill). The dependent variable was total score on the psychiatric distress scale. Significant differences among mean scores between and within each group were explored using the Tukey post-hoc test. Given the possibility that small differences can become statistically significant with sample sizes over 100, the magnitude of the effect was calculated using eta squared.

To control for the possibility that inmates may have brought their mental health problems into supermax with them, a frequency distribution of reported symptoms of psychiatric deterioration was conducted on a subset of inmates (n = 55) with no reported mental health history in the community or in prison.

# CHAPTER 5: FINDINGS

## Description of Subjects

Table 3 displays the demographic and custodial characteristics of the sample of 175 supermax inmates and the total NYS DOCS population in 2002. Compared to other inmates, supermax inmates were more likely to be Black, convicted of a violent crime and sentenced to significantly longer prison terms. The typical NYS DOCS supermax inmate was a 34-year-old Black male with a high school diploma or equivalency degree serving an average sentence of 15 years for a violent crime.

Subjects ranged in age from a minimum of 18 to a maximum of 55. The racial breakdown showed that Whites were underrepresented in supermax (12%) compared to their representation in general population (18%), whereas Blacks were overrepresented in supermax (60%) compared to their share of general population inmates (51%). The proportion of Hispanics was generally the same in supermax and general population.

In the area of education, slightly over half (53%) of supermax inmates reported a high school or equivalency degree compared to less than half (48%) of general population inmates. This finding is inconsistent with the literature, which suggests that supermax inmates are less likely to have a high school or equivalency degree than general population inmates (Toch & Adams, 2002). The discrepancy may be attributed to subjects' inflating their educational status or DOCS' including in its estimate only those inmates with a verifiable degree.

As expected, a larger percentage of supermax inmates (73%) are serving time for a violent offense such as murder, rape, robbery or assault compared to general population inmates (57%). Similarly, supermax inmates were sentenced to longer periods in prison

(15 years) compared to general population inmates (approximately 4 years). Excluding the latter two variables, no other variables showed statistically significant differences between supermax and general population inmates.

| **Table 3: DEMOGRAPHIC AND CUSTODIAL CHARACTERISTICS** | ***Supermax Sample*** **(N =175)** | ***All NYS DOCS Inmates in 2002*** **(N = 69,152)** |
|---|---|---|
| **AGE** (%) | | |
| 15—19 | .6 | 1.4 |
| 20—24 | 14.8 | 16.3 |
| 25—29 | 18.3 | 16.6 |
| 30—34 | 18.9 | 18.2 |
| 35—39 | 21.1 | 18.3 |
| 40—44 | 17.1 | 13.8 |
| 45—49 | 8.0 | 7.6 |
| 50+ | 1.2 | 7.8 |
| Mean | 33.6 | 34.6 |
| **RACE** (%) | | |
| Black | 60.1 | 50.8 |
| Hispanic | 26.6 | 29.9 |
| White | 11.6 | 17.5 |
| Other | 1.7 | 1.8 |
| **EDUCATION** (%) | | |
| High School Diploma | 53 | 48 |
| **CRIME** (%) | | |
| Violent | 73.4 | 56.6 |
| Nonviolent | 26.6 | 43.3 |
| **SENTENCE LENGTH** | | |
| Median (years) | 8 | 5 |
| Mean | 14.9 | 4.4 |

## Disciplinary Characteristics

### *Offenses Resulting in Supermax Confinement*

Table 4 displays the offenses that resulted in supermax confinement. Assault (inmate-on-inmate or inmate-on-staff) was the most frequent offense, reported by 43% of inmates, followed by drug use or possession (29%), disobeying a direct order (24%), and weapons possession (19%).

Interestingly, these figures differ from those reported by DOCS in 2001 (see Wynn & Szatrowski, 2004, p. 18), where the most frequently reported offense was creating a disturbance (28%), followed by drug use or possession (19%) and assault (15%). On its face, this finding suggests that DOCS may be more likely today to reserve supermax space for seriously disruptive, violent inmates than it has in the past. On the other hand, the greater percentage of inmates serving time in segregation for assault (43% in 2003 compared to 15% in 2001), an increase that occurred *after* the state's build-up of supermaxes, suggests that these units have not had a positive effect on institutional safety.

| **Table 4: OFFENSES REPORTED BY SUPERMAX INMATES** | |
|---|---|
| ***Offense*** | ***% Reported*** |
| Assault | 43 |
| Drug Use / Possession | 29 |
| Disobey Direct Order | 24 |
| Weapon Possession | 19 |
| Creating Disturbance | 11 |
| Threats | 10 |
| Fighting | 9 |
| Other* | 9 |
| Contraband | 9 |
| Unhygienic Act | 7 |
| Suicide Attempt / Self-Harm | 5 |
| Out of Place | 4 |
| Destruction of State Property | 4 |
| Gang Activity | 2 |
| Escape Attempt | 2 |

*Category includes mail violation, solicitation, extortion, refusal to double bunk, and TB or drug test refusal.

*Length of Supermax Sentences*

In determining the length of an inmate's sentence, hearing officers are provided with the following guidelines (Wynn & Szatrowski, 2004):

- Assault with a weapon/serious injury 12-24 months
- Assault with weapon/minor or no injury 6-12 months
- Assault without a weapon/serious injury 9-18 months
- Assault without a weapon/minor or no injury 3-9 months
- Group or gang-related assaultive/disruptive behavior 12-24 months
- Weapon on person 6-12 months
- Weapon in area of responsibility 3-6 months

Although New York imposes finite supermax sentences (in other jurisdictions sentences are open-ended), there is *no limit* to the amount of time to which correction

officials can sentence a prisoner to segregation. Moreover, if an inmate continues to violate rules while in supermax, he can accumulate many more months or years in segregation. For example, while DOCS reports an average sentence length of 5.3 months, many inmates are actually confined much longer, as this figure does not include the consecutive sentences correction officials mete out to inmates if they violate rules in lockdown (Wynn & Szatrowski, 2004).

Of the 175 inmates in the sample, prisoners reported an average cumulative sentence length of nearly three years (34.4 months), which is over six times longer than the average sentence length reported by DOCS. At the high end was a sentence of over 15 years (189 months). More striking, 72% of inmates had supermax sentences of more than one year, half (49%) had sentences of more than two years, and one fifth (20%) had sentences of five years or more in punitive segregation. Table 5 displays the breakdown of sentences.

| **Table 5: LENGTH OF SUPERMAX SENTENCE** | ***(N = 175)*** |
|---|---|
| **Inmates with Sentence of:** | |
| Less than 1 year | 28% |
| 1 to 2 years | 23% |
| 2 to 3 years | 12% |
| 3 to 4 years | 10% |
| 4 to 5 years | 7% |
| 5 or more years | 20% |
| Minimum sentence | 2 months |
| Maximum sentence | 189 months |
| Mean sentence | 34.4 months |
| Median sentence | 23 months |
| Standard Deviation | 35.8 |

It is difficult to know how these figures compare to those of other jurisdictions because correction officials rarely report supermax information. A review of the literature found measures of comparison from the following five states:

- South Carolina has a minimum sentence of 18 months (NIC, 1997).
- Colorado has an average supermax sentence of 36 months, half of which are spent in isolation (Wynn & Szatrowski, 2004).
- Illinois has a minimum required supermax sentence of one year (Kurki & Morris, 2001).
- Virginia has an average sentence of two years (NIC, 1997).
- Washington State requires a minimum supermax stay of 6 months; the median sentence length is 12 months (Lovell et al., 2004).

A breakdown of time spent in supermax was available for the 242 inmates in Washington State's Intensive Management Unit (see Table 6). Compared to Washington, it appears that New York inmates spend considerably more time in supermax: 44% of Washington inmates spend a year or more in supermax compared to 72% of New York inmates. Just 6% of Washington prisoners spend three or more years in supermax compared to 37% of New York inmates.

| **Table 6: SUPERMAX SENTENCES OF WASHINGTON STATE INMATES** | **(N=242*)*** | |
|---|---|---|
| ***Sentence Length*** | ***Number*** | ***Percent*** |
| 6 months or less | 65 | 27% |
| 6 months to 1 year | 70 | 29% |
| 1 to 3 years | 92 | 38% |
| **Over 3 years** | 15 | 6% |

## Factors Contributing to the Overrepresentation of Mentally Ill in Supermax

In exploring the overrepresentation of mentally ill inmates in supermax, a preliminary factor considered was differences in length of supermax sentence. If mentally ill inmates served significantly more time in supermax than non-mentally ill inmates, they would obviously comprise a disproportionate share of the population. Findings showed that differences in supermax sentence length were not significant. The 5% trimmed mean, which controls for the influence of outliers, showed that 95% of non-mentally ill inmates had an average supermax sentence of 29 months, compared to 32 months for mentally ill inmates.

Another factor considered was predisposition to violence and violent behavior in prison. Specifically, it was hypothesized that:

Hypothesis 1a: Although mentally ill supermax inmates resemble non-mentally ill supermax inmates in predisposition to violence before prison, they engage in more violent behavior once in prison.

As stated, predisposition to violence was operationalized as violent conviction and sentence length. On both measures, mentally ill inmates showed slightly but not significantly less predisposition to violence before prison than non-mentally ill inmates: 76% of non-mentally ill inmates were convicted of a violent crime compared to 71% of mentally ill inmates $X^2$ (2, N = 173) = .292, p = .59). The mean prison sentence length of non-mentally ill inmates was 18 years, compared to 12 years for mentally ill inmates (M = 18.06, SD = 35.22; M = 12.08, SD = 17.8; $t$(171) = 1.43, p = .16). The median sentence length of non-mentally ill inmates was 10 years; for mentally ill inmates it was 6 years. These differences, however, were not significant, and thereby supported the research

hypothesis that mentally ill and non-mentally ill inmates resemble each other in predisposition to violence before prison.

With regard to violence in prison, measured as disciplinary infractions for assaulting another inmate or staff, findings showed that mentally ill inmates were slightly but not significantly more likely to be infracted for assault than non-mentally ill inmates. Specifically, 40% of non-mentally ill inmates reported an assault charge compared to 46% of mentally ill inmates $X^2$ (2, N = 175) = .347, p = .46). Thus, the research hypothesis that mentally ill inmates were significantly more likely to engage in violence in prison was not supported.

Hypothesis 1b: Mentally ill supermax inmates experience more adjustment problems in general population than non-mentally ill supermax inmates.

Here, it was hypothesized that mentally ill inmates receive significantly more disciplinary infractions and committed significantly more acts of self-harm than non-mentally ill inmates, factors that would contribute to their overrepresentation in supermax. On both measures, the research hypothesis was supported.

Specifically, mentally ill inmates reported a mean of 2.16 disciplinary infractions in prison compared to 1.56 for non-mentally ill inmates $t(121.6) = -2.75$, p = .007. It should be noted, however, that the magnitude of the difference was weak (eta squared = .04), meaning that mental illness explained only 4% of the variance in disciplinary infractions.

With regard to self-harm, defined as suicide threats, suicide attempts and self-mutilation, the independent variable used was pre-prison psychiatric history as opposed

to current mental health status. This controlled for the possibility that an act of self-harm would result in placement on the mental health caseload, thereby confounding results.

Inmates with pre-prison psychiatric histories reported a mean of 1.58 acts of self-harm in prison compared to .68 for other inmates t (129.9) = -4.640, p = .000. The magnitude of the effect was large (eta squared = .14), meaning that psychiatric history before prison explained 14% of the variance in self-harm in prison.

Table 7 compares the type and frequency of self-harm committed by mentally ill and non-mentally ill inmates in general population.

| **Table 7: SELF-HARM COMMITTED BY MENTALLY AND NON-MENTALLY ILL INMATES** | | |
|---|---|---|
| | ***Mentally Ill*** | ***Non-Mentally Ill*** |
| Suicide threat | 64% | 27% |
| Suicide attempt | 50% | 26% |
| Self-mutilation | 45% | 15% |

Hypothesis 1c: Mentally ill supermax inmates are more likely to be victimized in general population than non-mentally ill supermax inmates.

As depicted in Table 8, there was a fairly strong association between mental illness and victimization, thereby supporting the research hypothesis. Compared to non-mentally ill inmates, mentally ill and seriously mentally ill inmates were significantly more likely to be physically assaulted by another inmate ($X^2$ (6, N = 154) = .144, p = .05). With regard to nonphysical victimization such as extortion or theft, mental illness was correlated with increased risk, but not significantly so.

| **Table 8: VICTIMIZATION BY MENTAL HEALTH SEVERITY** | ***Non-Mentally Ill (n = 66)*** | ***Mentally Ill (n = 56)*** | ***Seriously Mentally Ill (n = 32)*** |
|---|---|---|---|
| | | | |
| Physically assaulted by another inmate | 24% | 32% | 44% |
| Property stolen by another inmate | 20% | 25% | 34% |

These findings are consistent with comments from correction staff and inmates during focus groups. Corrections staff generally felt that mentally ill inmates were highly vulnerable to victimization, particularly assault but also theft and extortion, whereas inmates were mixed in their opinion, with some suggesting that the mentally ill were, at best, protected by other inmates or, at worst, ostracized or victimized by them.

For example, at Auburn Correctional Facility, a captain with 25 years on the job commented, "Mentally ill inmates are easily exploited, extorted for their money, sodomized, you name it" (Wynn et al., 2004, p. 23). A sergeant at Sing Sing said that when mentally ill inmates receive packages and food from family members, they are prone to theft by other inmates (Wynn et al., p. 23). Correction officers at most prisons said that mentally ill inmates with poor hygiene and problems controlling their behavior were particularly vulnerable to abuse, hostility and ridicule. For example, a deputy superintendent at Attica reported the following comment from an inmate, "We don't want him [a mentally ill inmate] here stinking up the cellblock. Either you take care of him or we will." (Wynn et al., p. 23).

Prisoners' comments on victimization of the mentally ill varied. Inmates at Attica stated that the mentally ill were highly vulnerable to victimization by other inmates as well as staff. "Mentally ill inmates can live in general population, but they are victimized

by both sides—by us because some inmates are predators, and by officers because mentally ill guys are like playthings to them" (Wynn et al., p. 24). They reported that mentally ill inmates need protection from other inmates to survive in general population.

However, inmate comments suggesting that mentally ill inmates are ostracized by other inmates suggest that they do not receive the protection they need. Throughout the research, mentally ill inmates' status as outcasts in the prison community emerged as a consistent theme. As an inmate at Elmira Correctional Facility stated:

> The mentally ill are on a lower level [of the prison hierarchy]. They have poor hygiene so no one wants to be celled next to them or forced to sit with them in the mess hall. They scream all night or bang on the walls. . . most of the general population just refuses to deal with them. They're constantly being moved between cellblocks until no one can stand them anymore. (Wynn, et. al, 2004, p. 21)

Hypothesis 1d: Mentally ill supermax inmates are more likely to be infracted for symptomatic behavior in general population than non-mentally ill supermax inmates.

As predicted, inmates with mental illness reported significantly more infractions for symptomatic behavior (M = .88, SD = 1.4) than non-mentally ill inmates (M = .44, SD = .73), $t(135) = -2.63$, $p = .009$. It should be noted, however, that although mentally ill inmates reported twice as many infractions for symptomatic behavior than non-mentally ill inmates, the magnitude of the difference was weak (eta squared = .04), meaning that mental health explained only 4% of the variance in infractions for symptomatic behavior.

It is surmised that the weak influence of mental illness on infractions for symptomatic behavior had more to do with the method of data analysis than actual impact. Similar to Adams (1986), an ordinary least squares regression analysis may have

revealed a stronger effect. However, to avoid the practice of "fishing," i.e., conducting multiple analyses in order to produce significant findings, additional analyses were not performed.

## Behavioral Effects of Supermax Confinement

Hypothesis 2: Inmate behavior worsens in supermax confinement, as measured by a majority of inmates receiving additional infractions and deprivation orders for continued misconduct in supermax.

The research hypothesis that the majority of supermax inmates receive additional infractions for continued misconduct in supermax was supported, with 55% of inmates having received infractions. Further supporting the hypothesis, nearly half (48%) of inmates reported receiving deprivation orders for continued misconduct. Of these, 22% received 1 to 3 deprivation orders, 17% received 4 to 6 deprivation orders, 3% received 7 to 9, and 6% received over 10 deprivation orders. Moreover, nearly one-third of inmates (32%) who received deprivation orders were sanctioned with the most severe form of punishment (the restricted diet, water deprivation, mechanical restraints or cell shield).

## Differential Effects on Inmates with Mental Illness

Hypothesis 3a: Mentally ill inmates report significantly more psychiatric distress in supermax confinement than non-mentally ill inmates.

Hypothesis 3b: Mentally ill inmates report significantly more behavioral pathology in supermax than non-mentally ill inmates.

The differential effect of supermax confinement on inmates with mental illness was explored through two measures: symptoms of psychiatric distress and manifestations of behavioral pathology.

### *Psychiatric Distress*

Results showed that mentally ill inmates experience far greater psychiatric distress in supermax confinement (M = 3.37, SD = 2.5) than non-mentally ill inmates (M = 1.1, SD = 1.1), $t(125) = -7.842$, p = .000. The magnitude of the differences was large (eta squared = .27), with mental illness explaining 27% of the variance in psychiatric distress. Specifically, mentally ill inmates reported significantly more problems with thinking and concentrating, perceptual distortions (including auditory and visual hallucinations), suicidal ideation, suicide attempts and self-mutilation, as well as lethargy, chronic tiredness and social withdrawal.

The following comments made by mentally ill inmates to researchers during site visits illustrate the high level of psychiatric distress they experience in supermax:

- 'Objects talk to me, said a 26-year-old man with a history of mental illness. The inmate had been in solitary confinement for 18 months and had another 18 months to serve. 'Sometimes the radiator comes alive and tries to attack me. At night I get lonely and the door and the radiator and the shadows come alive and try to get me' (Wynn et al., 2004, p. 55).

- 'From the corner of my eye, I see things. . . people moving,' a skittish Elmira inmate, aged 37, said through the feed-up slot in the door of his cell. Sentenced to 3 ½ years in solitary confinement, he described himself as 'a suicidal loner' (Wynn et al., 2004, p. 55).

### *Behavioral Pathology*

In addition to psychiatric distress, mentally ill inmates demonstrated significantly more behavioral pathology (M = 2.84, SD = 3.3) in supermax than non-mentally ill

inmates (M = 1.54, SD = 2.4), *t*(163) = -3.020, p = .003. As predicted, mentally ill inmates reported significantly more disciplinary infractions, more violent behavior, more antisocial behavior including destruction of property and unhygienic acts, and more disruptive behavior. The following inmate profile reflects the level of behavioral pathology among supermax inmates with histories of mental illness.

- AR has been in SHU for eighteen months, where he will remain until his prison sentence expires in a year. AR stated that he was previously double-celled in the SHU at Upstate Correctional Facility, where he fought with his six-foot tall cellmate and 'stomped' him into a coma. AR has received 24 tickets since his placement in SHU. He has attempted suicide on multiple occasions and was previously admitted to the prison psychiatric hospital. He reported inpatient psychiatric care in the community. (Wynn et al., 2004, p. 66)

## Psychological Harm of Supermax Confinement

The final research question explored whether supermax confinement contributes to mental illness. Specifically, it was hypothesized that:

Hypothesis 4: There is a statistically significant relationship between inmates with preexisting mental illness and the most severe cases of psychiatric distress in supermax confinement.

An ANOVA test found a large, statistically significant difference in psychiatric distress among non-mentally ill, mentally ill and seriously mentally ill inmates (F (2, 169) = 77.9, p = .000). The effect size was also substantially large (.48), with mental illness accounting for nearly 50% of the variance in psychiatric distress. Post-hoc comparisons showed that the mean scores for all three groups were significantly different from each other (Group 1: M = 1.09, SD = 1.1; Group 2: M = 2.26, SD = 1.6; Group 3: M = 5.38, SD = 2.7).

The following profile illustrates the relationship between inmates with preexisting mental illness and the most severe cases of psychiatric distress in supermax.

- Inmate BH, aged 45, stated that of the 15 years of his incarceration, he has spent 13 years 'in the hole.' He suffers from schizophrenia and bipolar disorder and was briefly admitted to a prison mental health unit before being removed for assaultive behavior. He extended his arms through the bars of his cell, which were covered with scars from self-mutilation. He had a five-inch scar on his neck from when he slashed his own throat in a suicide attempt.

  'The officers rape me and beat me because I know too much,' he said. 'I hear voices telling me to kill myself.' BH spends most of his time writing letters to Ruth Bader Ginsberg, Hillary Clinton, the FBI and the Department of Justice. He believes the officers are after him because of who he knows, and he rarely leaves his cell for showers or recreation. When asked if he had sought mental health counseling, he stated, 'I have no faith in nobody. My mind is constantly on being beaten to death. I've been beaten so much I feel like there's an officer in that shower waiting to press a button to call ten more officers in there to beat me to death.' (Wynn et al., 2004, p. 66)

Another indication of the high level of psychiatric distress in supermax is suicide rates. As noted, the suicide rate in NYS DOCS supermaxes is significantly higher than in general population. Pfeiffer (2006) reports that 44% of the suicides from 1995 through mid-2004 occurred among the less than 10% of the population in punitive segregation. According to the NYS Office of Mental Health, the vast majority of these inmates suffered from preexisting mental illness (2004). The following excerpts from inmate suicide reports obtained from the New York State Commission of Correction, an oversight agency, illustrate the relationship between supermax isolation, preexisting mental illness and suicide.

- In March 2000, inmate Carlos Diaz hanged himself in his cell at Southport Correctional Facility. Diaz, who had a history of psychiatric problems including paranoia and hallucinations, committed suicide after a series of misbehavior reports resulted in a sentence of 15 years in supermax confinement (Wynn et al., 2004, p. 57).

- Jessie McCann, 17 years old, hanged himself with a bed sheet at Downstate Correctional Facility after being sent to the SHU for disciplinary infractions. His family stated that his outbursts were related to his mental illness, which included a history of depression and anxiety. An investigation of his suicide noted that McCann reported anxiety attacks when he was locked in this cell (Wynn et al., 2004, p. 57).

- In September 2002, 22-year-old Paul Lagoe was found hanging dead in his cell at Southport. Lagoe suffered from bipolar disorder and had been in and out of psychiatric hospitals in the community. He had seen a mental health counselor just hours before he killed himself (Wynn et al., 2004, p. 57).

To control for the possibility that inmates may have brought their mental health problems into supermax with them, frequency distributions of psychiatric distress symptoms were performed on a subset of inmates (n = 55) who had no mental health history in the community or in prison. As depicted in Table 9, a notable percentage of inmates with no mental health history before supermax indicated psychiatric deterioration once in supermax.

| **Table 9: SYMPTOMS OF PSYCHIATRIC DISTRESS AMONG SUPERMAX INMATES WITHOUT HISTORIES OF MENTAL ILLNESS** | ***PERCENTAGE*** ***(n = 55)*** |
|---|---|
| Confused thought process; problems thinking and concentrating | 56% |
| Perceptual distortions; visual or auditory hallucinations | 44% |
| Transferred to a psychiatric unit due to psychiatric deterioration, suicide threats or suicide attempts | 40% |
| Social withdrawal; lethargy; chronic tiredness | 20% |

The following profile shows an individual with no history of mental illness in the community or in general population, but who psychologically decompensated in SHU:

- JR, aged 30, did not experience any mental health problems before he was sent to prison at age 19 or before landing in SHU after 5 years in general population. According to his disciplinary records, he was sent to SHU for assaulting a correction officer. An examination of his records reveals increasing difficulty

coping with isolation. He has received countless disciplinary tickets while in SHU, mostly for exposing himself and masturbating in front of female staff.

His sister, who has corresponded with JR since his prison sentence began, stated that his letters started becoming strange once he arrived in SHU. She described his letters as rambling, confused, disturbing, inappropriate and highly repetitive. When she visited him for the first time after his placement in SHU, she was shocked at the change. 'He wasn't himself,' she reported.

When we visited JR in 2002, he appeared disheveled and highly disorganized in his thinking and speech. His black plastic glasses were broken in places and missing an eyepiece; his t-shirt was stained. His responses to our questions were repetitive and disorganized, some unintelligibly so. For example, when we asked how long he had been in SHU, he responded, 'Oh, fifty days, a hundred days, a hundred fifty days, massive days . . .' (In fact, JR had served more continuous SHU time than he could probably count: 2,067 days.)

Inmates in nearby cells, listening to the conversation, began to snicker. 'He's crazy!' they shouted. 'He's a bug! Help him!' An older inmate on the block said that JR gets mocked every day. 'Guys here have nothing to do,' he explained. 'He's their TV.' (Wynn et al., 2004, p. 93)

# CHAPTER SIX: CONCLUSION

## Limitations

Attempts to study supermax populations are fraught with political, logistical and conceptual problems. This study is no exception. Because its findings carry risks for misinterpretation, its limitations are discussed in detail.

First, the reader should avoid generalizing results to supermax populations in other states. Conditions in supermaxes vary widely by jurisdiction and are influenced by numerous external and internal factors. A short list would include local politics, penal philosophy, prison leadership and management style, staffing ratios, staff training and morale, facility operations and physical plant issues, cellblock configurations and housing arrangements and, of course, severity of restrictions, rules and regulations, as well as level of outside oversight, if any.

Similarly, findings may not be representative of the overall NYS DOCS supermax population. The sample of 175 inmates represented only 5% of all supermax inmates in New York (approximately 3,500) at the time of the study. Moreover, the original sample from which the sub-sample for this study was drawn was not a pure probability sample. While subjects at some prisons (those that provided a sampling frame) were randomly selected, not every subject had an equal and known probability of being selected. For example, in situations when an inmate requested an interview, he was usually not denied the opportunity. In this regard, a claim for selection bias could be made.

In addition, virtually all inmate data were self-reported. The possibility exists that information was misstated, forgotten or withheld. Because confidentiality from other

inmates in neighboring cells could not be guaranteed during interviews, it is likely that full and accurate disclosure was not always the case.

Furthermore, the study was based on one-time observations rather than multiple observations over time. A longitudinal design whereby the same subjects were interviewed at fixed intervals, say every six months, to assess changes in mental health status would have strengthened findings considerably.

Perhaps the study's most serious weakness is that all subjects were exposed to the same effect: supermax confinement. As such, it was not only difficult to isolate the specific contribution of supermax confinement to psychiatric deterioration but impossible to attribute cause. Although it *was* possible to identify differences in adaptation to supermax between mentally ill and non-mentally ill inmates, it was *not* possible to claim that supermax confinement *caused* these differences or produced psychiatric deterioration. The most one can claim is association, not cause.

To illustrate the difficulty of discerning whether supermax confinement causes psychological harm, it is useful to consider what a true research design would look like. Such an experiment would necessarily begin with a large randomized sample (N >100, at a minimum) of newly admitted inmates without current or prior mental health problems. It would be necessary to include only psychologically healthy subjects to reduce the risk that prior mental health problems (rather than supermax confinement) contributed to current mental health problems. Similarly, it would be necessary to exclude individuals who were currently incarcerated so as to limit the confounding effect of prisonization on mental health.

Presuming such a sample could be located, the subjects would then need to be divided into two groups and randomly assigned to each of the experiment conditions: supermax housing (the experimental group) or general population (the control group). Mechanisms would need to be established to ensure the similarity and stability of research conditions throughout the duration of the study since any differences or changes in environment could influence outcomes. For example, subjects in the control group would have to be confined in the same general population housing area. If some inmates were placed in dormitory settings and others in cellblocks, for example, the different levels of social interaction and environmental stimuli would confound results.

Once the subjects were placed in their respective conditions (general population or supermax), clinically trained researchers would then need to conduct face-to-face interviews with each subject using a validated mental health assessment tool to establish baseline rates of psychological functioning. To gather longitudinal data, the same tool would need to be re-administered every six months to examine changes over time.

Ideally, the duration of the experiment would mirror the average supermax sentence length in the United States, approximately two years, after which time the inmate subjects would be released from the experiment and reassigned to other housing areas. Finally, follow-up interviews would need to be conducted with all subjects to determine whether symptoms of psychological harm persisted or abated once subjects were returned to general population.

Obviously, conducting such an experiment would be virtually impossible for a host of logistic and ethical reasons, not to mention cost. Given prisoners' limited autonomy in institutions of total control, institutional review boards classify inmates—

particularly those who are mentally ill—as especially vulnerable. Accordingly, researchers are held to the highest levels of scrutiny to ensure that adequate protections from harm are ensured; research that carries any risk to prisoner well being is likely to be rejected by institutional review boards.

Given what we know from extant research and case law about the association between segregation and mental illness, it is unlikely that any institutional review board would condone an experiment requiring a group of inmates to be held in supermax confinement without voluntary and knowing consent.

Even if allowances were made for those inmates who willingly and knowingly consented to participate, those who accepted would thereby be considered "supermax volunteers," which contrasts sharply with ordinary experience and penal practice and would therefore confound results.

Another barrier that researchers would confront is access. Rarely do corrections officials permit anyone—whether established researchers, concerned citizens or the media—access to supermax prisons. As stated, the agency under whose auspices this study was conducted is one of only two private organizations in the country with legislative authority to visit prisons. Nevertheless, despite its statutory right to access, the agency has experienced numerous attempts by NYS DOCS to limit its access to SHUs.

Another problem would be finding a sufficiently large sample of psychologically healthy, newly admitted inmates to include in the study. Research demonstrates that the vast majority of inmates have histories of addiction, which often co-occur with drug- and alcohol-induced mental impairment. Conducting collateral records reviews to verify inmate's mental health information would take an inordinate amount of time.

Assuming a sample of psychologically healthy inmates could be identified and space were available to confine all subjects in the same or similar housing areas in general population or supermax, researchers would need to have inmates escorted by correction officers to confidential settings for mental health interviews at regular intervals without inmates' knowledge that they were being studied. Even if sufficient staff were available, if each interview lasted one hour, with a group of 1000+ subjects the process would literally take hundreds of hours given the regular disruptions of inmate movement due to institutional searches, lockdowns and counts.

Moreover, in cases where symptoms of psychiatric deterioration were noted, say if an inmate in supermax threatened suicide, researchers would be in the position of having to decide whether to keep the subject in the experimental condition—thereby risking that he may actually commit suicide and thus exposing him to harm—or refer him to a suicide prevention (observation) cell. In the latter scenario, if subjects who experienced the most severe symptoms of psychiatric distress were systematically removed from the experiment, the integrity of the sample and the accuracy of findings would be seriously compromised.

In light of these obstacles, it is clear that the "perfect" supermax study represents an ideal, not a doable research project. Indeed, there is not a single study on the effects of supermax confinement in the United States that could be considered a true experiment. Nevertheless, given the paucity of supermax research, one could argue that any empirical information emerging from these isolated and understudied institutions is worthy of consideration. With regard to the current study, despite its limitations, its findings do tell us something.

## Discussion of Findings

A point to bear in mind in the discussion that follows is the length of time that New York state prisoners spend in supermax confinement. Where prisoners report a sense of alienation, dissociation, paranoia or rage and manifest these feelings through self- and other-directed violence, it is important to consider the length of time they endure in the very conditions that breed such behavior. In New York, the average prisoner spends nearly three years (34.4 months to be exact, or 1,032 days) in supermax confinement.

It is difficult to imagine spending 1,000 days in a cell the size of a bathroom, where one's existence is devoid of human interaction, sensory experience and meaningful, structured activity. It is difficult to imagine how one's self-identity would be distorted in the vacuum of social isolation, when every step outside one's cell requires handcuffs, shackles and hobble chains.

According to psychologist Craig Haney, the impact is profound:

> The virtually complete loss of genuine forms of social contact and the absence of any routine and recurring opportunities to ground one's thoughts and feelings leads to an undermining of the sense of self and a disconnection of experience from meaning. Supermax prisoners are literally at risk of losing their grasp on who they are . . . (2003, p. 139)

A letter from an inmate who spent two years in supermax illustrates Haney's point:

> It is hard for people on the outside to understand the absolute despondency that begins to invade your spirit after being confined in a cage like an animal, when a deeper part of you knows that this isn't why you were born—it wasn't what you were meant to be. After months of deprivation and isolation in the hole, the one thing that's easiest to lose is your humanity. You have to distance yourself from your feelings, because to feel means to hurt, and hurting is what you've been running from all along. It

> leaves you walking through life like a zombie. Everything becomes empty and meaningless (Letter from BJ, February 2002).

This letter, written by a prisoner who did *not* have a history of mental illness, raises the question of how individuals *with* mental illness endure supermax conditions. According to a retired licensed clinical social worker with over thirty years of service in New York correctional facilities:

> People with a major mental illness such as bipolar disorder, schizophrenia or depression should not be housed in SHU—period. One *day* in solitary confinement can undo some people. Certainly anyone sent to SHU for an extended period of time will be affected by it. In New York we have inmates doing 10 years, 15 years or more in isolation. That is absurd. (Personal interview with LK, May 18, 2002).

As discussed, supermaxes throughout the country are overpopulated with mentally ill inmates. What accounts for their overrepresentation was the first point of inquiry in this study.

Although it was hypothesized that mentally ill inmates engaged in more violence in prison than non-mentally ill inmates, this hypothesis was not supported. With regard to predisposition to violence before prison, there was not a significant difference between mentally ill and non-mentally ill inmates. Considered together, these findings provide empirical support for one of the most frequent criticisms of supermaxes—that they are unnecessarily populated with mentally ill inmates who are more likely to be nuisance problems than serious security risks. This point was expressed by the former secretary of the Wisconsin Department of Corrections, who told researchers at the Vera Institute of Justice that his state's supermax "was filled with the wrong people, 'the young, the pathetic, the mentally ill'" (Vera, 2006, p. 53).

Less surprisingly was the finding that mentally ill inmates experience significantly greater difficulty adjusting to prison life than other inmates. The data revealed that mentally ill inmates receive significantly more disciplinary infractions in general population than other inmates and are significantly more likely to attempt suicide and self-mutilate. This finding shows that the prison environment is especially traumatic for inmates with mental illness and that available mental health services are insufficient.

Aside from psychological problems, another factor that contributes to mentally ill inmates' difficulty in general population is heightened risk for victimization. The data showed that mentally ill inmates are significantly more likely to be physically victimized in prison than other inmates. With regard to nonphysical forms of victimization (extortion and theft), findings showed that mentally ill inmates were also more at risk than other inmates but not significantly so.

The final analysis concerning the overrepresentation of mentally ill inmates in supermax showed that they are significantly more likely to be infracted for symptomatic behavior than other inmates. In fact, they reported twice as many infractions for symptomatic behavior than non-mentally ill inmates. This finding is consistent with the literature and was echoed during focus groups with inmates and mental health staff. For example, a former prison mental health counselor in New York stated, "It's rare that an individual won't be given SHU time if he violated a prison rule, regardless of whether he has a mental illness" (personal interview with LK, May 18, 2002).

As discussed, in New York and other states, it is not against correctional policy to issue disciplinary infractions to inmates who repeatedly self-injure or attempt suicide. A member of the Inmate Liaison Committee at Attica who had been in prison over a decade

reported, “People who are clearly sick are written up all the time by COs who should know better. They are placed in the SHU and given tickets even though their behavior is distinctly a mental health issue.” Other accounts from inmates included the following:

- On 6-company in D-block [in Attica], there’s an ‘extra-strength,’ which is what we call the serious mental health guys. He’s seriously disturbed and can’t read. He keeps getting disciplinary tickets and expects to come out soon because he can’t understand his tickets and how long he’s stuck there. One day he got upset and compressed a steel locker flat—to the size of this notebook. They put him in an isolation area in the hospital for a while and told him they’d discuss the tickets with him, but they never did. The officers joke with him and tell him they’ve dismissed the tickets, but he just doesn’t understand what’s going on or why he isn’t let out of SHU.

- There was a guy who got dementia from shingles, and when it set in, everyone from the COs to the mental health people were just like, ‘it’s not my job.’ They just didn’t deal with him. One day he had a fight with another mental health guy in the yard and when it went down, the COs said, “One nut cracked another nut. Send this nut down to PC [protective custody] and the other down to SHU for a couple days.” So now he’s isolated in SHU and totally neglected.

Once inmates end up in supermax, whether mentally ill or not, it appears that their behavior worsens rather than improves. Corrections administrators report that a primary goal in building supermax prisons is to improve inmate behavior, yet data from this study show that behavior in fact worsens in supermax confinement. The majority of supermax inmates received additional infractions for misconduct; slightly less than half received deprivation orders for the most serious forms of behavioral pathology (throwing bodily fluids, destroying property and assault). The finding that nearly a third of these inmates were repeatedly issued the most severe punishment (restricted diet, water deprivation, full restraints or cell shield), suggests that there is a core group of individuals for whom increasingly harsh punishment not only ceases to stop misconduct but escalates it.

This core group of inmates typically suffers from mental illness. The following example, provided by an attorney with the *Disabilities Advocates* litigation, illustrates three related themes that emerged throughout this study: the over-reliance on extreme forms of punishment in supermax; hearing officers' issuing disciplinary infractions for behavior that is clearly indicative of mental illness—without intervention by mental health staff; and the futility of piling punishment on top of punishment in an attempt to improve behavior.

- Inmate NB was accused of various rule violations while housed in the Auburn SHU. The violations included unauthorized correspondence, delaying the count, untidy cell, littering, throwing food and refusing a direct order. The disciplinary committee imposed a punishment of 40 *days* on the restricted diet.

  Approximately two weeks later, the inmate, believing that toxic gas was coming into his cell through the light fixture, was infracted for covering the fixture with clothes and refusing to come out of his cell. He was subsequently admitted to Central New York Psychiatric Center and diagnosed with psychotic disorder. He was released from the hospital two weeks later and sent back to the Auburn SHU, where he was put back on the restricted diet for 14 days to finish his punishment.

Not surprisingly, the hypothesis that mentally ill inmates are more adversely affected by supermax confinement than other inmates was supported. Mentally ill inmates reported significantly greater psychiatric distress and behavioral pathology in supermax confinement than other inmates. The finding that mental illness explained 27% of the variance in psychiatric distress makes an important contribution to the literature in that it provides empirical support for the most frequently voiced but infrequently substantiated criticisms of supermax housing—that inmates with preexisting mental illness cannot tolerate supermax confinement.

Untreated inmates with both psychiatric and behavioral problems present significant challenges and risks to correction officers, who are typically untrained and unable to deal with them. During a focus group with correction officers at the Southport supermax, each officer recalled situations where they had been stabbed, spat at, assaulted, or had feces thrown at them. They said that "the biggest problem" at Southport was that "a quarter of the inmates are mentally ill and shouldn't be here" (Wynn et al., 2004, p. 31). Echoing the opinions of correction officers at most supermaxes we visited, the officers blamed the problem of untreated mentally ill inmates on insufficient and/or under-performing mental health staff.

Finally, the research hypothesis that supermax confinement contributes to mental illness was supported. The data showed a statistically significant relationship between inmates with preexisting mental disorder and the most severe cases of psychiatric distress in supermax, with mental illness accounting for nearly 50% of the variance in psychiatric distress. This is a substantially large effect, and an important contribution to the literature.

The following profiles (Wynn et al., 2004, p. 27) documented during a visit to Clinton Correctional Facility illustrate the extreme levels of psychiatric distress found in punitive segregation:

- Inmate SP was lying in his bed, stock-still and staring into space. He appeared dazed and catatonic. He either would not or could not speak. A correction officer reported that the inmate had not spoken to anyone *in almost a year*.
- Inmate AP had not left his cell for showers or recreation 'for several months,' according to the correction officer on the cellblock. AP sat in his cell picking incessantly at his scalp. He appeared disoriented and paranoid. We asked if he wanted to speak with a mental health counselor, but he refused.

Further supporting the hypothesis that supermax confinement contributes to mental illness, the study found that a notable percentage of inmates with no mental health history either in prison or the community manifested symptoms of psychiatric deterioration once in supermax. As noted, over half (56%) reported confused thought processes and problems concentrating; 44% experienced visual and auditory hallucinations; 40% were transferred to a psychiatric unit due to suicidal ideation or suicide attempts; and 20% reported social withdrawal, lethargy and chronic tiredness.

On face value alone, these findings are striking. That 40% of inmates without a history of mental illness in prison or the community were deemed so decompensated and at risk for suicide in supermax that they were transferred to a psychiatric unit provides robust empirical support for claim that supermax confinement contributes to symptoms of mental illness where none existed previously.

An important point to consider, then, is whether this study's findings can be generalized to supermax prisons across the country. Are supermax units so inherently destructive that their existence should be reconsidered altogether (as corrections officials did in the 1800s)? Is it possible that prisoners can emerge from supermax "rehabilitated" and without psychological damage?

This study's findings as well as extant research suggest that in the absence of intensive treatment in a more humane and less restrictive environment, supermax prisons will continue to produce the same the results: inmates who are no better prepared (and in many cases worse prepared) to return safely to general population or society. On the other hand, the facilities described below—the state supermax in Colorado and New

York's maximum-security psychiatric hospital—show that treatment-rich environments can produce vastly different results.[10]

## Model Approaches for Managing High-Need Inmates

### *Colorado State Penitentiary*

Colorado State Penitentiary (CSP) opened in 1993 to provide centralized management and treatment of Colorado's most violent, high-risk inmates. It holds 800 of the state's 20,000 inmates; 16% of CSP inmates are on the mental health caseload. CSP's mission, according to warden Larry Reid, "is to ensure that inmates receive the tools they need to reintegrate safely back into general population."

Compared to most supermaxes, CSP is unusual in many respects, most notably for its emphasis on treatment over punishment, an array of incentives to encourage good behavior, a broad range of therapeutic, educational and vocational programs, a high level of staffing and training, and a requirement that inmates spend at least seven months in a reintegration program with ample out-of-cell time and congregate activity before returning to general population.

Intervention and treatment begin immediately upon placement. With input from medical staff, mental health counselors, security and program staff, a team of case managers meet with new admissions to develop a treatment plan that addresses core problems. Compliance is encouraged through a "Quality of Life" system that offers

[10] Descriptions are based on site visits made to each facility in 2003 and interviews with inmates, corrections staff and clinicians.

incentives for good conduct, including television, games, commissary privileges, additional phone calls and visiting hours.

Programs on anger management, behavioral health care, criminal thinking, morals and ethics, personal awareness and prison life management skills are delivered through closed-circuit TV. Inmates must complete all program segments and homework assignments before advancing to the next level and receiving more privileges. Inmates are also afforded classes in Adult Basic Education, GED preparation and English-as-a-Second-Language. Unlike in New York and most other states, inmates in Colorado's supermax can take the GED exam, which the warden considers an important tool for building self-esteem.

Also unusual is the level of interaction between correction officers and inmates. Correction officers communicate regularly with prisoners in their housing areas and submit weekly case notes on their behavior. Also unique to CSP, inmates have intercoms in their cells to facilitate communicate with correction officers, a sensible system considering that inmates depend on staff for everything from food to medical attention to toilet paper.

Once inmates have satisfied their program requirements and maintained good behavior, they are transferred to the "Progressive Reintegration Opportunity Unit" to ease the transition from isolation to general population. The seven-month program continues the therapeutic and academic classes inmates participated in while in segregation, but lessons are delivered in classrooms instead of cells. Inmates recreate in small groups and can participate in business management classes and a professional janitorial program.

Only when inmates successfully complete their required programs and "pass" a personal interview with the warden are they transferred to general population.

The average length of stay at CSP is 36 months, approximately 18 months of which is spent in isolation. CSP officials believe that three years of programming is necessary given inmates' years if not decades of maladaptive behavior.

CSP is one of the few supermaxes in the country to track recidivism. Of the nearly 3,000 inmates released to less secure settings since its inception, only 8.5% were returned to the supermax at three years post-release. There have been no inmate suicides at CSP since it opened.

### *Central New York Psychiatric Center*

Opened in 1980, Central New York Psychiatric Center (CNYPC) is a 189-bed maximum-security hospital for prisoners with serious mental illness. Staffed and operated by the state's Office of Mental Health, CNYPC receives inmates from prisons across the state who are involuntarily committed through a court procedure. One-third of new admissions come from (and are returned to) punitive segregation. According to executive director Hal Smith, CNYPC's goal is stabilization and treatment through medication, counseling and life skills.

Although it is a maximum-security facility, CNYPC has little in common with the state's prisons. The environment is calm and orderly; colorful posters adorn the walls. There are no bars or cells, and the prisoners are referred to as "patients" rather than inmates. Recreation areas include a gym, a basketball court, a weight-lifting room and a racquetball court. Vocational training is offered in woodworking and horticulture.

Brightly-lit dayrooms have couches, TVs and board games and are adjoined by "music therapy" rooms where inmates learn stress reduction techniques.

Upon admission, a psychiatrist, psychologist, social worker, occupational therapist and treatment assistant work with inmates to develop a treatment plan. A "menu" of therapeutic activities is offered every day in a "treatment mall," where inmates spend ten hours a week in groups focusing on conflict resolution, substance abuse, stress management and medication compliance. In CNYPC's 25 years of operation, there has been only one suicide death.

Most striking is that many inmates arrive at CNYPC delusional, violent or suicidal—often from the SHU—yet they return to the prison system stable and medically compliant. Even the most treatment-resistant inmates tend to do well at CNYPC, reported Smith. The court-appointed monitor in the *Disabilities Advocates* litigation made a similar point to the courts, emphasizing the difference in inmate behavior when housed in CNYPC compared to the SHU:

> At CNYPC, where SHU prisoners are frequently treated with respect and freed from restraints with no problem, the fact that these individuals are capable of programming without being in restraints adds further support for the view that the harsh conditions as well as idleness and isolation in isolated confinement cause deterioration of prisoners' psychiatric condition, and that deterioration plus inadequate mental health treatment lead to many of their disciplinary problems (Supplemental Report of Plaintiff's Expert, Nov. 29, 2005).

Despite the tripling of New York's inmate population since CNYPC opened and its success in managing the most high-need inmates, its capacity has never been expanded. To accommodate the burgeoning caseloads, the hospital was forced to reduce the length of stay and cut admissions from a high of 1,400 annually in 1991 to 850

currently. Inevitably, the result is a pattern of shuttling back and forth between prison and CNYPC. “At least two-thirds of our patients return because they go back to prison, or worse yet the SHU, and deteriorate,” a staff psychologist explained.

## Conclusion

It has been said that prison is a microcosm of society—that the same social ills that exist in society are reproduced behind the walls of the penitentiary. Similar to the criminalization of mental illness in society, so too in prison, where mentally disordered inmates are “re-incarcerated” in the most punitive places of all—supermax prisons.

The interrelated problems identified in this study have important correctional policy implications. Of first order is the lack of treatment for the growing number of mentally ill inmates in prisons across the country. In New York, despite a three-fold increase in the number of mentally ill inmates since 1980, state officials have not expanded capacity at the one facility that has shown the greatest success in treating them: Central New York Psychiatric Center. Instead, they expanded prison capacity, building 38 new prisons since 1980 and adding 10 new supermaxes since 1998.

As noted, state officials did increase mental health services in prisons. In light of this study’s findings, however, these services are incapable of addressing the needs of the most seriously mentally ill inmates and protecting them from the hazards of prison life. This study found that mentally ill inmates in general population are significantly more likely to attempt suicide, self-mutilate, become victimized by other inmates, receive more disciplinary infractions and be punished rather than treated for symptomatic behavior.

Based on these findings, the overrepresentation of mentally ill inmates in segregation comes as no surprise. Most important, this study has demonstrated

empirically many of the same arguments that federal court judges, inmate attorneys and prisoner advocates have claimed repeatedly over the years.

Several of these points merit reiteration. First, the claim that mentally ill inmates are more violent than other inmates was not supported. This study found that mentally ill inmates were no more violence-prone before entering prison than other inmates or more likely to engage in violence once in prison. Once in supermax, however, inmates with preexisting mental illness were found to experience significantly more psychological and behavioral deterioration than other inmates.

Specifically, mentally ill inmates received more disciplinary infractions and deprivation orders for antisocial behavior in supermax, experienced more problems thinking and concentrating, were more likely to report hallucinations, suicidal ideation, suicide attempts, social withdrawal and inpatient hospitalization. The effect of mental illness on psychiatric distress in supermax was large, with mental illness explaining nearly 50% of the variance. Finally, the data showed that even inmates with no mental health history either in the community or prison manifested symptoms of mental illness once in segregation.

Housing anyone but the most high-risk inmates in supermax prisons unnecessarily diverts much-needed funds from those parts of prison system such as programs and mental health services, which research shows are far more effective in improving inmate behavior, reducing suicides and improving public safety. Given the tremendous expense of building and operating supermaxes and the legal risks they pose, critics justifiably question the economic wisdom of their continued existence. Where New York is

concerned, one questions the wisdom of continuing to operate supermax prisons that have not been at capacity since they opened.

From a legal perspective, knowing what we do about the prevalence of psychopathology found in and exacerbated by supermax settings, the 8th Amendment's prohibition against cruel and unusual punishment is especially relevant. Indeed, in defining cruel and unusual punishment, the courts have noted that its definition will change over time, "drawing its meaning from the evolving standards of decency that mark the progress of a maturing society" (*Trop v. Dulles*, 1958).

Nevertheless, despite growing evidence and admonitions from the courts about the suicide risks inherent in segregation, particularly for inmates with mental illness, inmates who are suicidal and self-injurious continue to be confined in punitive segregation, only now they receive additional hours of cell-front "treatment" in states where the courts have required it. This is hardly a solution and cannot mitigate against the debilitating nature of total isolation and the paradigm of punishment that pervades in supermax prisons.

It is this author's opinion that segregating some inmates some of the time is essential to maintaining prison order. What happens during segregation, however—whether inmates are treated or warehoused—is the pivotal issue. Although critics claim that the costs of treatment are prohibitive (at CNYPC, for example, it costs $550 per day for an inmate compared to $70 per day in a standard prison cell), cost reductions could be achieved in multiple ways: through fewer staff injuries, less staff turnover and reduced workers' compensation payments; through fewer involuntary court proceedings and

revolving-door admissions; and through fewer investigations, individual and class action law suits and court-ordered reforms.

In the final analysis, unless political leaders are willing to fund the intensive level of treatment that is necessary to manage society's most high-risk individuals and work with corrections officials to find alternatives to supermax, the corrections community cannot be expected to fulfill the most basic part of its mission: protecting public safety.

# BIBLIOGRAPHY

Abramsky, S. & Fellner, J. (2003). *Ill Equipped: U.S. prisons and offenders with mental illness*. New York: Human Rights Watch.

Adams, K. (1983). Former mental health patients in a prison and parole system. *Criminal Justice and Behavior*, *10*, 358-84.

Adams, K. (1986). The disciplinary experiences of mentally disordered offenders. *Criminal Justice and Behavior*, *13*, 297-316.

Andrews, D.A. & Bonta, J. (1994, 2d ed.). *The psychology of criminal conduct*. OH: Anderson Publishing.

Austin, J. & Irwin, J. (2001, 3d ed.). *It's about time: America's imprisonment binge*. Belmont, CA: Wadsworth.

Andersen, H.S., Sestoft, D., Lillebaek, T., Gabrielsen, G., & Hemmingsen, R. (2003). A longitudinal study of prisoners on remand: Repeated measures of psychopathology in the initial phase of solitary versus nonsolitary confinement. *International Journal of Law and* Psychiatry, 26, 165-177.

Baskin, D., Sommers, I., & Steadman, H. (1991). Assessing the impact of psychiatric impairment on prison violence. *Journal of Criminal Justice, 19*, 271-280.

Bonner, R. (2000). Correctional suicide prevention in the year 2000 and beyond. *Journal of the American Association of Suicidology, 30*, 370-376.

Bottoms, A. (1999). Interpersonal violence and social order in prison. In M. Tonry & J. Petersilia (Eds.). *Prisons* (pp. 205-81). Chicago: University of Chicago Press.

Briggs, C., Sundt, J. and Castellano, T. (2003). The effect of supermaximum security prisons on aggregate levels of institutional violence. *Criminology, 41*, 1341–1376.

Brodsky, S., & Scogin, F. (1988). Inmates in protective custody: First data on emotional effects. *Forensic Reports, 1,* 267-280.

Cohen, F. (1998). *The mentally disordered inmate and the law.* Kingston, NJ: Civic Research Institute.

Collins, W. C. (November 2004). *Supermax prisons and the Constitution: Liability concerns in the extended control unit*. National Institute of Corrections. (NIC Accession No. 019835). Washington, D.C.: Department of Justice.

Council of State Governments. (2002). *Criminal justice/mental health consensus project*. New York: CSG.

Coyle, A. (2002). *A human rights approach to prison management: Handbook for prison staff.* London: International Centre for Prison Studies.

Davenport v. DeRobertis, 844 F.2d 1310, 1313 (7th Cir.), *cert. denied*, (1988).

Dignam, J. T. (2003). Correctional mental health ethics revisited. In T. Fagan and R. Ax (Eds.). *Correctional mental health handbook*. California: Sage Publications.

Disability Advocates, Inc. v. New York State Office of Mental Health, et al., 02-CV-4002 USDC SDNY (2002).

Ditton, P.M. (1999). *Mental health and treatment of inmates and probationers*. Bureau of Justice Statistics. Washington, D.C.: Department of Justice.

Edwards, K. (1988). Some characteristics of inmates transferred from prison to a state mental hospital. *Behavioral Sciences and the Law, 6*, 131-137.

Eng, et al., v. Goord, et al., 80-CV-385S, USDC WDNY.

Feeley, M., & Simon, J. (1992). The new penology: Notes on the emerging strategy of corrections and its implications, *Criminology 30*(4), 449-474.

Fellner, J. (2006). A corrections quandary: Mental illness and prison rules. *Harvard Civil Rights—Civil Liberties Law Review, 41*, 391-415.

Fellner, J. & Mariner, J. (1997). *Cold storage: Super-maximum security confinement in Indiana*. New York: Human Rights Watch.

Foucault, M. (1977). Discipline & punish: The birth of the prison. Trans. Alan Sheridan. New York: Pantheon.

Garland, D. (2000). The culture of high crime societies. *British Journal of Criminology*, *40*, 347-375.

Gendreau, P. & Bonta, J. (1984). Solitary confinement is not cruel and unusual punishment: People sometimes are! *Canadian Journal of Criminology 26*, 467-478.

Gendreau, P. (1996). The principles of effective intervention with offenders. In A. T. Harland (Ed.). *Choosing correctional options that work.* (pp. 117-130). Beverly Hills, CA: Sage Publications.

Goffman, E. (1957). Characteristics of total institutions. In Marquart, J. & Sorensen, R. (Eds.). *Correctional contexts: Contemporary and classical readings* (2d ed.). (pp. 71-82). Los Angeles: Roxbury.

Gonnerman, J. (2003, December 17). Suicide in the box. *Village Voice*, p. 17.

Goord, Glenn S. (2000). *Commissioner's policy paper: On prison safety and programming*. NYS DOCS, November 2000, p. 4.

Grassian, S. (1983). Psychopathological effects of solitary confinement. *American Journal of Psychiatry, 40* (11), 1450-1454.

Grassian, S. (1996). *Declaration of Dr. Stuart Grassian. Eng v. Coughlin*, Civ 80-385S (W.D. New York).

Grassian, S. (1999) a. *First site visit to the Attica SHU: Mental health care. Eng v. Goord*, Civ 80-385S (W.D. New York, June 1999) (redacted copy).

Grassian, S. (1999)b. *Second site visit to the Attica SHU: Mental health care. Eng v. Goord*, Civ 80-385S (W.D. New York, October 1999) (redacted copy).

Grassian, S. & Friedman, N. (1986). Effects of solitary deprivation in psychiatric seclusion and solitary confinement. *International Journal of Law and Psychiatry, 8*, 49-65.

Haney, C. (1993). 'Infamous punishment: The psychological consequences of isolation. In E.J. Latessa, A. Holsinger, J.W. Marquart & J. Simon (Eds.). *Correctional contexts: Contemporary and classical readings* (pp. 464-473). Los Angeles: Roxbury Publishing.

Haney, C. (1997). Psychology and the limits to prison pain: Confronting the coming crisis in eighth amendment law. *Psychology, Public Policy and Law 3*(4), 499-588.

Haney, C. (2003). Mental health issues in long-term solitary and "supermax" confinement. *Crime & Delinquency 49*(1), 124-156.

Haney, C. & Lynch, M. (1997). Regulating prisons of the future: A psychological analysis of supermax and solitary confinement. *Review of Law and Social Change 23*, 477-570.

Harcourt, B. (2007, Jan. 15). The mentally ill, behind bars. *The New York Times*, Op-Ed.

Henningsen, R. J., W.W. Johnson & T. Wells. (1999). Supermax prisons: Panacea or desperation? *Corrections Management Quarterly 3*(2), 53-59.

Hill, Michael J., T. Abastillas, J. Steinfeld, J. Barrett & L. Irish. (2002). *Forensic Mental Health Triage and Admission Services: The Operations of the NYS-OMH Forensic Diagnostic Unit within a Maximum-Security Environment*. New York: Downstate Correctional Facility.

Hills, H., Siegfried, C & Ickowitz, A. (May 2004). *Effective prison mental health services: Guidelines to expand and improve treatment*. National Institute of Corrections. (NIC Accession No. 018604). Washington, DC: Department of Justice.

Hodgins, S. & Cote, G. (1991). The mental health of penitentiary inmates in isolation. *Canadian Journal of Criminology, 33*, 175-182.

Hochstetler, A., Murphy, D.S., & Simons, R.L. (2004). Damaged goods: Exploring predictors of distress in prison inmates. *Crime & Delinquency, 50*(3), 436-457.

Human Rights Watch. (1999). *Red Onion State Prison: Super-maximum security confinement in Virginia. 11*(1-G). New York: Human Rights Watch.

Human Rights Watch. (2000). *Out of sight: Super-maximum-security confinement in the United States. 12*(1-G). New York: Human Rights Watch.

Irwin, J. (2005). *The warehouse prison: Disposal of the new dangerous class*. Los Angeles, CA: Roxbury Publishing.

Irwin, J. & Austin, J. (1997). *It's about time: America's imprisonment binge*. 2d ed. Belmont, CA: Wadsworth.

Jacobson, M. (2004). *Downsizing prisons: How to reduce crime and end mass incarceration.* New York: NYU Press.

Jones 'El v. Berge, Civil Case 00-C-0421-C (W.D. Wisconsin, September 20, 2001), p. 39. Testimony of Michael J. Sullivan, former director, Wisconsin Department of Corrections.

Jones, A. (1986). Self-mutilation in prison: A comparison of mutilators and nonmutilators. *Criminal Justice and Behavior, 13* (3), 286-296.

Kershaw, S. (2007, April 25). More scrutiny for mentally ill in state prisons. *The New York Times*, pp. B1, BB5.

King, R. (1999). The rise and rise of supermax: An American solution in search of a problem? *Punishment and Society, 1*(2), 163-186.

Kluger, J. (2007, Jan. 26). Are prisons driving prisoners mad? *Time, 335*, 28-30.

Korn, R. (1988). Effects of confinement in the high security unit at Lexington. *Social Justice, 15* (1), 8-19.

Koson, D. *New Jersey Prison System Report*, C.F. v. Terhune, Civil Action No. 96-1840 (D.N.J., September 8, 1998), p. 6.

Kupers, T. (1999). *Prison madness: The mental health crisis behind bars and what we must do about it*. San Francisco: Jossey-Bass.

Kupers, T. (2005). *Supplemental report of plaintiff's expert. Disability Advocates, Inc. v. New York State Office of Mental Health, et al.,* 02 Civ. 4002 (S.D. New York, November 29, 2005).

Kurki, L. & Morris, N. (2001). The purposes, practices and problems of supermax prisons. In M. Tonry (Ed.). *Crime and Justice: A Review of Research 28*, (pp. 385-424). Chicago: University Press.

Liebling, A. (1999). Prison suicide and prison coping. In M. Tonry & J. Petersilia (Eds.). *Prisons* (pp. 283-359). Chicago: University of Chicago Press.

Lipke, R.L. (2004). Against supermax. *Journal of Applied Philosophy 21*(2), 109-124.

Lovell, D., K. Cloyes, D. Allen & L. Rhodes. (2000). Who lives in super-maximum custody? A Washington State study. *Federal Probation 64*(2), 33-38.

Lovell, D. & Johnson, C. (2004). Felony and violent recidivism among supermax prison inmates in Washington State: A pilot study. Unpublished paper. University of Washington.

Madrid v. Gomez, 889 F. Supp. at 1265-66 (N.D. Cal. 1995).

McCann, R. A., Ball, E. & Ivanoff, A. (2000). DBT with an inpatient forensic population: The CMHIP forensic model, Association for Advancement of Behavioral Therapy, 450-451.

Mears, D.P. & Castro, J. (2006). Warden's views on the wisdom of supermax prisons. *Crime & Delinquency, 52*(3), 398-431.

Mears, D.P. & Reisig, M.D. (2006). The theory and practice of supermax prisons. *Punishment & Society, 8*(1), 33-57.

Mears, D.P. & Watson, J. (2006). Towards a fair and balanced assessment of supermax prisons. *Justice Quarterly, 23*(2), 232-270.

Miller, H.A. & Young, G.R. (1997). Prison segregation: Administrative detention remedy or mental health problem? *Criminal Behavior and Mental Health,7*, 85-94.

Morgan, D.W., Edwards, A.C. & Faulkner, L.R. (1993). The adaptation to prison by individuals with schizophrenia. *Bulletin of the American Academy of Psychiatry and the Law*, 21 (4), 427-433.

National Institute of Corrections. (1997). *Supermax housing: A survey of current practice, special issues in correction*s. Washington, D.C.: Department of Justice.

New York State Commission of Correction. (2000). *In the matter of the death of Carlos Diaz, an inmate of the Southport Correctional Facility*. Albany, NY: New York State Commission of Correction.

New York State Commission of Correction. (Sept. 2003). *In the matter of the death of Al Kirby, an inmate of the Five Points Correctional Facility*. Albany, NY: New York State Commission of Correction.

Pallant, J. (2005). *SPSS survival manual*. United Kingdom: Open University Press.

Pettigrew, C. (Fall 2002). Technology and the Eighth Amendment: The problem of supermax prisons. *North Carolina Journal of Law & Technology 4*(1), 191-214.

Pfeiffer, M. (2002, March 10). State prisons falter in psychiatric care: Officials fail to heed recommendations. *Poughkeepsie Journal*, pp. C3, C15.

Pfeiffer, M. (2003, June 29). Mental health care faulted in six prison deaths. *Poughkeepsie Journal*.

Pfeiffer, M. (2004, October 31). A death in the box. *The New York Times Magazine*, p. 48.

Pfeiffer, M. (2006, May 7). Cruel and unusual punishment. *The New York Times*.

Pinta, E.R. (1999). The prevalence of serious mental disorders among U.S. prisoners. *Correctional Mental Health Report*, *1*(3), 33.

Pizarro, J. & Stenius, V. (2004). Supermax prisons: Their rise, current practices, and effect on inmates. *Prison Journal 84*(2), 248-264.

President's New Freedom Commission on Mental Health (2003). *Achieving the promise: Transforming mental health care in America*, p. 3. Available online at: http://www.mentalhealthcommission.gov/reports/FinalReport/toc.html.

Rhodes, L.A. (2004). *Total confinement: Madness and reason in the maximum security prison.* Los Angeles: University of California Press.

Riveland, C. (1999). *Supermax prisons: Overview and general considerations*. National Institute of Corrections. Washington, D.C.: Department of Justice.

Roberts, J.V. & Gebotys, R.J. (2001). Prisoners of isolation: Research on the effects of administrative segregation. *Canadian Journal of Criminology 43(*1), 85-97.

Ruiz v. Estelle, 503 F. Supp.1265, 1336 (S.D. Tex., 1980), *aff'd in part*, 679 F.2d 115 (5th Cir., 1982), *cert. denied*, 460 U.S. 1042 (1983).

Sestoft, D., Andersen, H., Lilleback, T., & Gabrielsen, G. (1998). Impact of solitary confinement on hospitalization among Danish prisoners in custody. *International Journal of law and Psychiatry, 2*1, 99-108.

Smith, H. E. (1997). *NYS OMH Task Force on the Future of Forensic Services: Report of the Subcommittee on Prison Mental Health Services*. New York: January 31, 1997.

Smith, H., Sawyer, D. & Way, B. (2004). Correctional mental health services in New York: Then and now. *Psychiatric Quarterly 75*(1), 21-39.

Smith, P.S. (2006). The effects of solitary confinement on prison inmates: A brief history and review of the literature. *Crime and Justice 34*, 441-542.

Simon, J. (2000). The "society of captives" in an era of hyper-incarceration. *Theoretical Criminology 4*(3), 285-308.

Suedfeld, P., Ramirez, C. Deaton, J. & Baker-Brown, G. (1983). Reactions and attributes of prisoners in solitary confinement. *Criminal Justice and Behavior 9*, 303-339.

Sykes, G.M. (1958). *Society of captives: A study of a maximum security prison*. Princeton, NJ: Princeton University Press.

Szaz, T.S. (1973) The second sin. Garden City, NY: Anchor/Doubleday.

Szaz, T.S. (1974). The myth of mental illness: Foundations of a theory of personal conduct (revised edition). NY: Harper & Row.

Thomas, J., Leaf, M., Kazmierczak, S., & Stone, J. (2006). Self injury in correctional settings: 'Pathology' of prisons or of prisoners? *Criminology & Public Policy, 5*(1), 193-202.

Toch, H. (1982). The disturbed disruptive inmate. Where does the bus stop? *Journal of Psychiatry and Law*, Fall 1982, 327-349.

Toch, H. (1992). Mosaic of despair: Human breakdowns in prison. Lawrenceville, NJ: Princeton University Press.

Toch, H. (2001). The future of supermax confinement. *The Prison Journal 81*(3), 376-388.

Toch, H. (2003). The contemporary relevance of early experiments with supermax reform. *The Prison Journal, 83* (2), 221-228.

Toch, H & Adams, K. (1986). Pathology and disruptiveness among prison inmates. *Journal of Research in Crime and Delinquency 23,* 7-21.

Toch, H. and Adams, K. (2002). Acting out: Maladaptive behavior in confinement. Washington, DC: American Psychological Association.

Torrey, E.F. (1997). *Out of the shadows: Confronting America's mental illness crisis*. New York: John Wiley.

Weisman, A. (2000). Mental illness behind bars. In John P. May and Khalid R. Pitts (Eds.). *Building violence: How America's rush to incarcerate creates more violence*. Thousand Oaks, CA: Sage.

Vanderhoff, H. A. & Lynn, S. J. (2001). The assessment of self-mutilation: Issues and considerations. *Journal of Threat Assessment 1*(1), 91-109.

Ward, D. A. & Werlich, T. (2003). Alcatraz and Marion: Evaluating super-maximum custody. *Punishment & Society 5*(1), 53-75.

Way, B., Miraglia, R., Sawyer, D., Beer, R. & Eddy, J. (2005). Factors related to suicide in New York state prisons. *International Journal of Law and Psychiatry*, 28, 207-221.

Wynn, J. & Szatrowski, A. (2004). Hidden prisons: 23-hour lockdown units in New York state correctional facilities. *Pace Law Review, 24*(2), 497-525.

Wynn, J., Szatrowski, A. & Warner, G. (2004). *Mental health in the house of corrections: A study of mental health care in New York state prisons*. New York: The Correctional Association of New York.

Zinger, I., Wichmann, C. & Andrews, D. (2001). The effects of administrative segregation. *Canadian Journal of Criminology 43*(1), 47-83.