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Administrative Segregation From Within

A Corrections Perspective

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The growth of the inmate population nationwide has given rise to supermax prisons over the past two decades. Among the controversial issues that supermax prisons face are concerns about the types of individuals placed in solitary confinement and the arbitrary nature of those placements. This study profiled inmates in administrative segregation, as supermax confinement is called in Colorado, and the process and reasons for their placement. Evidence of institutional misbehavior, more serious criminal histories, and preexisting mental health needs were found among segregated inmates.

Keywords: *administrative segregation; corrections; supermax*

Just as prison is society's solution to errant citizens, supermax is prisons' answer to contentious inmates. Born out of the necessity to provide safety to the public, staff, and inmates, prison systems have expanded the use of administrative segregation, or supermax, facilities. By 1998, nearly 2% of the state and federal prisoners were housed in administrative segregation (Human Rights Watch, 2000; King, 2000). Administrative segregation facilities provide tight controls to ensure reductions in violence and serious prison disruptions.

Yet, it has been argued that supermax is an overused management tool (Human Rights Watch, 2000; Metzner & Dvoskin, 2006; Toch, 2001). Although institutional behavior may serve as the basis for placements, supermax confinement is an administrative decision rather than a punitive one, relying on staff to predict an inmate's propensity to create disturbances and violence within prison. Herein lies one of the primary concerns—that it is too readily used for inmates who may be a nuisance rather than dangerous and violent (Human Rights Watch, 2000; King, 2000; Toch, 2001).

Role of Administrative Segregation in Today's Prisons

Traditionally, prisons have employed the dispersion model (Hershberger, 1998; Riveland, 1999), whereby problem inmates are scattered throughout the correctional system and the burden is distributed across facilities and staff. Often, these inmates are moved around the prison system to disrupt their alliances and provide temporary staff relief (Hershberger, 1998). Conversely, the concentration or consolidation model centralizes high-risk, dangerous inmates in a tightly controlled facility (Hershberger, 1998; Riveland, 1999). The supermax concept is the archetype of this model.

Supermax is known by many names—administrative segregation, security housing units, intensive management unit, and extended control unit—but is characterized by long-term solitary confinement regardless of what it is called (Collins, 2004; Haney, 2003; King, 2000; Riveland, 1999). In addition, a supermax *facility* may refer to an entire facility or a distinct unit within a facility. However, administrative segregation, as it is termed in Colorado, is differentiated from *punitive* or *disciplinary segregation*; these are a time-limited response to a disciplinary infraction after due process hearings resulting in a finding of guilt.

Unlike punitive segregation, the courts have been reluctant to unilaterally impose procedural due process on initial placement decisions for administrative segregation (Collins, 2004), demonstrating a judicial awareness that prison officials should be afforded enough flexibility and latitude to swiftly manage a volatile environment. Nonetheless, observable behavior should create the foundation for such placements. Riveland (1999) indicated that

inmates who have demonstrated that they are chronically violent or assaultive, who present a serious escape risk, or who have demonstrated a capacity to incite disturbances or otherwise are threatening the orderly operation of the general population institution may become target populations. (p. 6)

The greater challenge to prison administrators is to identify inmates as a risk *prior* to a serious incident, with the understanding that prediction strategies are unreliable and subjective.

Administrative segregation is characterized as a “minimum privilege, maximum control facility” (Hershberger, 1998, p. 56) in which solitary confinement is the primary security measure. In this context, solitary confinement is typically defined as restriction to a single-bunk cell for 23 hr per day, allowing just 1 hr out of cell for personal hygiene and exercise. Inmate movement is severely restricted, with multiple restraints placed on inmates before leaving their cell. Personal contact is kept to a minimum. Even contact with

staff is limited; therapy and worship services may be provided through video-conferencing or secure barrier. Visitations are allowed on a limited basis but are generally no contact, meaning there is a physical barrier between inmates and visitors.

Even though staff contact and inmate movement are severely restricted, administrative segregation facilities are equipped with more staff and security devices than typical prison facilities. Many of the supermax facilities boast state-of-the-art prison technology including increased medical and dental capacities (Berge, Geiger, & Whitney, 2001; Hershberger, 1998), thereby circumventing transportation issues and reducing personal contact even further. Nonetheless, more staff is needed due to multiple-officer escorts, increased supervision and searches, and individualized services at cell doors (e.g., meals, programs; Riveland, 1999).

Release procedures vary by supermax facility, but behavioral compliance with institutional rules generally dictates the conditions under which an inmate may be released (Riveland, 1999). The conditions of release need to be explicit so that inmates understand how to move to lower custody situations. Retaining inmates within an extended-control facility should be done only with adequate rationale provided through periodic reviews (Collins, 2004; Riveland, 1999).

The Controversy Over Administrative Segregation

Administrative segregation is inarguably the most restrictive environment used to incarcerate inmates, giving way to concerns about prisoners' psychological adaptation to solitary confinement. The decline of the rehabilitation movement, coupled with inadequate staff training, is believed to be strongly correlated with the increase in administrative segregation (King, 2000; Toch, 2001).

The concern exists that correctional authorities use vague or broad placement criteria. Because the full due process afforded for punitive segregation may not apply in administrative segregation (Collins, 2004), opponents question the appropriateness of placements. Long-term segregation is suitable for violent, dangerous inmates who present imminent risk rather than nuisance inmates, inmates with an accumulation of minor, nonviolent disciplinary infractions or those in need of protective custody (Human Rights Watch, 2000; Kurki & Morris, 2001; Riveland, 1999; Toch, 2001). Mentally ill inmates may find themselves inappropriately placed in administrative segregation because of a lack of other suitable placements, protective custody reasons, or disruptive behavior related to their mental illness. Some contend

that placement based on gang-member status is inappropriate (Haney, 2003; Toch, 2001).

Many find the conditions of solitary confinement to be excessively harsh and inhumane (Haney, 2003; Haney & Lynch, 1997; Human Rights Watch, 1997, 1999, 2000; King, 2000; Kurki & Morris, 2001; Toch, 2001). The list of objectionable conditions, although not exclusive, includes lack of windows, 24-hr lighting, lack of exercise in general and outdoor recreation in particular, restricted interpersonal contact, denial of reading materials or other meaningful activity, and limited therapeutic services. It is believed that many of these conditions are in place for punishment rather than actual security reasons.

The duration of administrative segregation outlasts disciplinary segregation, extending years rather than months. Lengths of stay are determined solely by correctional staff and may be extended for minor infractions of the rules, particularly ones that might be overlooked in a less restrictive prison, thereby resulting in a punishment disproportionate to the seriousness of the behavior (Human Rights Watch, 2000). Furthermore, extreme solitary confinement with reduced sensory stimulation for long durations leaves an inmate unprepared to reenter the prison culture or society at large.

Administrative segregation facilities are characterized by the complete control exerted over inmates by correctional staff (Hershberger, 1998; Human Rights Watch, 2000). The typical "we-they" dynamic between inmates and staff is exacerbated in segregated settings where inmates have almost no control over their environment (Human Rights Watch, 2000; Kurki & Morris, 2001; Riveland, 1999). Prisoner abuses have been discovered and punished in administrative segregation settings (Kurki & Morris, 2001), but in other situations Human Rights Watch (2000) found that "management has tacitly condoned the abuse by failing to investigate and hold accountable those who engage in it" (p. 4).

In 1983, the same year that the Federal Bureau of Prisons opened the supermax at the Marion, Illinois facility, Grassian described the psychopathological features resulting from solitary confinement that he believed to form a clinical syndrome. He reported perceptual changes, affective disturbances, cognitive difficulties, disturbing thought content, and impulse control problems that immediately subsided following release from such confinement.

Evidence of Harmful Effects

The U.S. Constitution ensures prisoners protection from cruel and unusual punishment. Cases concerning conditions of confinement, which fall under the Eighth Amendment, must consider whether conditions harm prisoners

or pose a substantial risk of serious harm and whether officials have been deliberately indifferent to inmates' basic human needs (Collins, 2004). It is on this point that the courts have typically found fault with corrections institutions; the conditions of solitary confinement were found so extreme and horrific in some states—even in those operating state-of-the-art facilities—as to violate inmates' constitutional rights, particularly for the mentally ill subpopulation (*Jones 'El v. Berge*, 2001; *Madrid v. Gomez*, 1995; *Ruiz v. Johnson*, 1999). In California, Texas, and Wisconsin, inmates with serious mental illness who might deteriorate in administrative segregation are barred from such a placement. As a practice itself, however, administrative segregation has not been ruled unconstitutional.

Despite the court rulings, there has not been a uniform definition of mental illness or even severe mental illness. Nor has it ever been deemed that all mentally ill offenders are excluded from solitary confinement. Various definitions have been used by the prison systems, but it is not known what types of offenders, if any, suffer psychological pain as a result of long-term solitary confinement.

Since Grassian's 1983 study, other qualitative studies using case study designs and personal accounts have been added to the literature that demonstrate negative psychological consequences of long-term solitary confinement (Benjamin & Lux, 1975; Haney & Lynch, 1997; Human Rights Watch, 1997, 1999; King, 2000; Kurki & Morris, 2001). However, small sample sizes, as are the norm in case studies, mean findings may not generalize to all, or even most, segregated offenders. Of particular concern is that sampling procedures are often not discussed, and thus it is impossible to know if the findings were based on a representative sample. Although sampling was described in Dr. Grassian's research, the 14 study participants were plaintiffs involved in a class action lawsuit regarding their conditions of confinement who might benefit from reporting negative effects, and the author noted how it was necessary for the interviewer to press the participants into endorsing negative symptoms after initially denying them. In addition, these approaches do not provide a relative comparison of the participants' behavior in other settings. Inmates who report serious psychological difficulties in segregation might experience those same problems in other prison settings or in the community at large.

Another group of studies are comparative in nature, equating other types of participants, settings, or stimuli to the conditions found in administrative segregation (see Benjamin & Lux, 1975; Pizarro & Stenius, 2004; Suedfeld, Ramirez, Deaton, & Baker-Brown, 1982; Zinger, Wichman, & Andrews, 2001). Inmates in supermax settings have been compared to prisoners of war, and

college students or inmates who volunteer for time-limited segregation stays do not depict the typical inmates placed in modern-day segregation against their will for indeterminate stays. Furthermore, studies conducted in field or laboratory settings that try to emulate a segregation unit, particularly sensory deprivation and isolation studies, have more severe conditions than those found in today's supermax settings.

Direct studies of solitary confinement conducted with inmates in administrative segregation are more valuable for understanding the population but are not without their limitations. Haney (2003) randomly selected 100 security housing unit prisoners at Pelican Bay Prison for assessments by interview. He found elevated symptoms of psychological trauma (e.g., anxiety, headaches, impending nervous breakdown, lethargy) as compared to a national probability sample. This study also demonstrated a greater prevalence rate of psychopathological features (e.g., ruminations, social withdrawal, irrational anger) than the population at large. However, it has been shown that prisoners in general differ from standardized samples across multiple measures such as anxiety, depression, hostility, and socialization (Suedfeld et al., 1982).

Several studies have compared segregated to nonsegregated inmates. In one study, no differences were found between the groups (Seudfeld et al., 1982). In a study of Canadian offenders, however, the segregated group had more criminal justice system involvement, poor education, skills deficits, family dysfunction, antisocial attachments, chemical dependencies, thinking problems, and antisocial attitudes than randomly selected nonsegregated offenders (Motiuk & Blanchette, 2001). Furthermore, segregated offenders had a higher recidivism rate than the nonsegregated offenders. A third study found that severe mental disorders were higher among segregation populations than the general population, particularly schizophrenia and bipolar disorder (Hodgins & Côté, 1991). Major depression was lower in segregation than the general population, and suicide attempts were of equal proportion between samples.

Danish inmates in solitary confinement were compared to nonsegregated offenders using a longitudinal research design (Andersen et al., 2000), and the results indicated that psychiatric disorders were higher among offenders in solitary confinement than those not segregated. However, those disorders included primarily adjustment and depressive disorders rather than psychotic disorders. Because of releases and transfers from solitary confinement, the 228 participants at the beginning of the study declined to 14 within 3 months. In another longitudinal study, Zinger and his colleagues (2001) found that mental health and psychological functioning did not deteriorate over time in Canadian offenders, although segregated offenders had psychological indices

that were often elevated over nonsegregated offenders. This study was limited to a 60-day period, and it suffered a 40%-44% refusal rate (depending on group) and a 56% attrition rate. The short durations in these two studies, coupled with high attrition from segregation, suggest that the setting in these foreign countries is perhaps more akin to punitive segregation found in the United States than administrative segregation.

This Study

The extensive interviews and qualitative analyses into inmates' experiences in solitary confinement have informed and shaped the direction of subsequent research, but the empirical data in this area are limited and heavily flawed (Glancy & Murray, 2006; Mears & Watson, 2006; Metzner & Dvoskin, 2006). Moreover, Mears and Watson (2006) noted that "almost no studies have tapped into the experiences and views of corrections staff" (p. 239), which lends itself to an unbalanced perspective of supermax confinement. In fact, there is a void of even basic statistics on supermax prisons. For example, in a carefully crafted survey that used clear definitions, King (2000) found that 2% of all inmates were imprisoned in supermax settings, whereas an annual directory of the American Correctional Association (2005) reported less than a half percent of all state and federal inmates were in such settings. It is doubtful that this decline was a true reduction in supermax usage but rather suggests data-reporting problems and lack of uniform terms and definitions. The present study seeks to narrow the gap that exists surrounding the inmates in one state's administrative segregation and the reasons for their confinement.

Administrative segregation began in Colorado with the opening of Colorado State Penitentiary in 1993, as many other states were bringing similar facilities on line. Further expansion of this security level occurred when the Colorado Department of Corrections (CDOC) included administrative segregation units with the construction of three multicustody facilities. These additional facilities expanded the overall capacity and provided female and mentally ill offender segregation units.

Method

Participants

Two cohorts were used in this study, one to examine placement reasons and one for population comparisons. Prior to midyear 2003, reasons for

administrative hearings were not recorded consistently and therefore are not available for many of the administrative segregation inmates in the profile sample. Also, this methodology better represents all placements, given that inmates with less serious behaviors may cycle in and out of segregation more quickly and might otherwise be underrepresented, by profiling a snapshot sample of administrative segregation inmates.

Placement reasons. All administrative segregation hearings from January 2004 through December 2005 were used to analyze placement decisions; 1,614 hearings were held during this time. Participants included 1,459 inmates, during which time 135 had two hearings and 10 had three hearings. Inmates were 95% male ($n = 1,391$), ranging in age from 17 to 63 ($M = 30.94$, $SD = 7.99$). The ethnic composition was 41% Hispanic, 38% Caucasian, 18% African American, 2% Native American, and 1% Asian.

Population comparisons. The CDOC incarcerated population at the end of fiscal year 2005 was used in the profile analyses. Administrative segregation inmates were identified among the population through their classification levels. There were 1,210 inmates classified as administrative segregation, representing 7% of the adult incarcerated population ($N = 17,483$). This number exceeded the 992 beds available, effectively dispersing 218 throughout the prison system occupying a punitive segregation bed until an administrative segregation bed opened.

Incarcerated offenders were 92% males and 8% females ranging in age from 16 to 85 with a mean of 35.75 ($SD = 10.59$). Ethnicities were predominantly Anglo (46%) followed by Hispanic (31%) and African American (20%); the remaining 3% reported Native American or Asian descent. At the time of this study, Colorado was operating 25 state facilities that housed 81% of the inmate population and contracting with 5 private facilities for the remainder.

Materials

The Test of Adult Basic Education (TABE) is designed to measure adult proficiency in reading, mathematics, language, and spelling in order to place learners in the appropriate lessons for their particular skill level (CTB/McGraw-Hill, 1994). Scoring of the tests can be done using different systems, one of which generates grade equivalent (GE) scores used in this study. Kuder-Richardson Formula 20 reliabilities of the TABE ranged from .71 to .94 (Bauernfeind, 1992), and the correlation between the TABE total

score and the General Equivalency Diploma (GED) average score was .63 (CTB/McGraw-Hill, 2004).

The Culture Fair Intelligence Test (CFIT; Cattell & Cattell, 1973) is a non-verbal measure designed to assess general mental capacity in terms of fluid ability, meaning the ability to perceive relationships, to analyze, and to reason in abstract or novel situations. The goal of this measure is to use items that are free of cultural bias usually associated with language, cultural background, and educational level. Internal consistency reliability estimates vary between high .70s to .90s depending on the scale. Test-retest reliabilities run in the low .80s, and equivalent-forms reliabilities range from .58 to .72 (Koch, 1992; Tannenbaum, 1965). The CFIT's convergent validity with other intelligence tests has an average correlation of .70 (Koch, 1992).

The Level of Supervision Inventory-Revised (LSI-R; Andrews & Bonta, 1995) is a 54-item assessment conducted in a semistructured interview format. It measures offender recidivism risk and can be utilized to determine the amount of supervision necessary for offenders in the community. The LSI-R is administered to all prison intakes as part of the diagnostic assessment and showed moderate predictive validity ($r = .31$) for 1-year recidivism rates with Colorado parolees (O'Keefe, Klebe, & Hromas, 1998). Using norms established for Colorado offenders, scores between 0 and 12 designate offenders as low risk, 13 to 25 as medium risk, and 26 to 54 as high risk.

The Millon Clinical Multiaxial Inventory-III (MCMI-III; Millon, Davis, & Millon, 1997) consists of 175 true or false items. The inventory provides diagnostic information in the areas of personality disorders and clinical syndromes. Internal consistency for the clinical scales ranges from .66 to .90, with 20 of the 26 scales having alpha coefficients in excess of .80. Test-retest reliability coefficients for the subscales ranged from .82 to .96 (Millon et al., 1997). The MCMI-III was only administered to inmates admitted to prison between 1995 and 2003.

The Brief Psychiatric Rating Scale (BPRS; Overall & Gorman, 1962) is a 24-item scale most commonly used to assess patients with psychiatric disorders. It is designed to allow for the rapid review of changing symptoms (Lukoff, Nuechterlein, & Ventura, 1986; Ventura et al., 1993). An 18-item version of the BPRS administered to supermaximum inmates in Washington produced a reliability coefficient of .75 and correctly identified inmates meeting criteria for serious psychosocial impairment (Cloyes, Lovell, Allen, & Rhodes, 2006). Research has also indicated that there are five factors to which the individual items are associated: thinking disorder, withdrawal, anxiety/depression, hostility/suspicion, and activity (Burger, Calsyn, Morse, Klinkenberg, & Trusty, 1997; Cloyes et al., 2006; Hedlund & Vieweg, 1980).

Procedure

Administrative segregation hearings and reasons for placement were tracked by high-security management specialists within a centralized classification unit that provides the final review for all hearings and coordinates interfacility transfers. Hearings data were entered into a database designed for ongoing research with this population.

Participant data were obtained from administrative information in the CDOC database. Inmates are routinely processed through the diagnostic unit, and data are gathered through various sources including official records, diagnostic interviews, and pencil-and-paper tests. During this time, the TABE, CFIT, LSI-R, and MCMI-III are administered to inmates. Data obtained during the diagnostic process are used to rate different needs areas, including academic, vocational, sex offender, substance abuse, medical, psychological, assaultiveness, self-destruction, and developmental disabilities. Each level is rated on a 5-point scale, where scores of 3 and higher indicate moderate to high needs for services. Levels may be reevaluated during offenders' incarceration.

The psychological needs level has two parts—the 5-point rating scale as well as a qualifier code. Similar to the other scales, a rating of 3 or greater indicates the need for mental health services. The qualifier code clarifies whether a qualifying mental illness exists. Qualifying disorders include bipolar mood disorders, major depressive disorder, depressive disorder not otherwise specified, dysthymia, paranoid/delusional disorders, schizophrenic disorders, schizophreniform disorder, schizo-affective disorder, psychotic disorder not otherwise specified, induced psychotic disorder, brief reactive psychosis, dissociative identity disorder, post-traumatic stress disorder (PTSD), and cluster A personality disorders (schizoid, schizotypal, and paranoid). These disorders, selected from the *Diagnostic and Statistical Manual of Mental Disorders—Text Revision (DSM-IV-TR)*; American Psychiatric Association, 2000), characterize individuals who experience the greatest perceptual distortions or mood disorders, which require more frequent monitoring and treatment than other psychiatric diagnoses.

Psychological data, such as the BPRS and psychological needs level, are updated periodically during an offender's incarceration. The BPRS is administered only to diagnosed mentally ill offenders, ideally at 6-month intervals or more often as warranted. Assessment information is used in placement decisions and management of mentally ill offenders. Institutional behavior, such as disciplinary violations and involvement in security threat groups, are also recorded electronically over the course of an offender's incarceration.

Descriptive statistics were generated for the entire prison population and for the administrative segregation subpopulation. One-way chi-square and *t* tests were conducted between the administrative segregation sample and the general population, using an alpha level of .001.

Results

Placement Reasons

Colorado uses a system of due process for administrative segregation placements that includes multiple points of review. Inmates are given written notice of their impending hearing and have the right to be present with witnesses. The burden of proof rests with CDOC staff and, following the decision, each case is reviewed by the warden, who has the authority to reverse a decision. Every case is again reviewed by a centralized high-security management division.

In this study, 89% of the 1,614 hearings resulted in an initial decision to place the inmate in administrative segregation ($n = 1,432$). Six decisions to segregate and 14 decisions to return to general population were reversed by reviewers. Ultimately, 1,440 of the 1,614 hearings resulted in administrative segregation placements. Typically, it is a combination of behaviors that result in an offender's placement; therefore, in the examination of reasons, percents do not total 100%.

Although institutional misbehavior serves as the primary basis for segregation, infrequently placements occur for reasons not related to their incarceration in Colorado. Twenty offenders (1%) were placed directly into administrative segregation upon intake because of their high-profile crime. Of these, 10 were interstate transfers due to extreme violence, such as murder of a correctional officer.

Administrative segregation inmates in Colorado release to general population through a transitional unit, but failure in the program results in return to solitary confinement. There were 110 inmates who failed in the transitional unit and returned to administrative segregation following a due process hearing, composing 8% of all placements. In addition, offenders who parole from administrative segregation and subsequently violate their parole violation may have a new hearing to determine whether segregation is still warranted; 71 parole violators were returned to segregation (5%).

Escapes and riots constitute immediate security threats. Over the 2-year study period, 46 placements were for escapes (3%), of which 12 were

forceful attempts or completions, 14 were escapes without force from minimum security prisons or community placements, and 20 were serious threats of escape. There were 211 inmates involved in riotous activity (15%), which often comprised large-scale yard fights.

Staff safety is paramount; 156 placements (11%) were for staff assaults, of which 47 involved a weapon or resulted in serious injury. In addition, 87 incidents of staff intimidation (6%) and 61 threats against staff (4%) resulted in administrative segregation. Violence among inmates is much more common than inmate-on-staff assaults. There were 703 placements made for inmate assaults or fighting (49%), half of which were reported to have security threat group involvement. In addition, weapon possession was listed as a reason for 178 hearings (12%).

Opponents of administrative segregation have voiced a valid concern that placements may occur for nuisance behaviors, such as accumulating minor disciplinary infractions. This study examined the remaining 217 placements (15%) for a reason other than those listed above. Reasons for these included multiple disciplinary infractions, which averaged 16 per inmate, possession of drugs or drug paraphernalia, security threat group activity or recruitment, and refusing housing assignment. Sixteen of the 19 inmates refusing an assignment as their only reason gave as the reason that they feared for their safety in general population.

Population Comparisons

Demographic characteristics. The administrative segregation group was 98% male and 32.08 years old ($SD = 8.37$) on average. Anglos represented 37% of the subpopulation, Hispanics 43%, and African Americans 16%. Statistical comparisons revealed that administrative segregation inmates were more likely to be younger, $t(1,209) = -15.26, p < .001$; male, $\chi^2(1, N = 1,210) = 56.71, p < .001$; and Hispanic, $\chi^2(3, N = 1,210) = 89.87, p < .001$, than the population as a whole.

Offenders' highest grade level, TABE scores, and CFIT IQ results are presented in Table 1. Administrative segregation inmates were more likely to terminate their formal education prior to completing high school than was the population at large. They also had lower TABE scores for reading, math, and total scales than the population; the differences were slight even though statistically significant, with administrative segregation inmates scoring within half of a grade level of the population on each scale.

Table 1
Comparisons Across Academic Achievements
and Intelligence Testing

	Population		Ad Seg		Comparison
	μ	(σ)	M	(SD)	
TABE Reading	9.21	(3.30)	8.84	(3.31)	$t(1011) = -3.59^{**}$
TABE Math	7.52	(2.87)	7.13	(2.80)	$t(1012) = -4.46^{**}$
TABE Language	7.92	(3.74)	7.55	(3.67)	$t(991) = -3.15$
TABE Total	8.25	(3.31)	7.78	(3.21)	$t(911) = -4.46^{**}$
CFIT IQ	101.15	(13.22)	100.38	(13.32)	$t(904) = -1.73$
Highest grade					$\chi^2 = (3, N = 1,080) = 113.84^{**}$
Grade school, %	11			18	
Some high school, %	61			68	
High school diploma, %	17			9	
College, %	11			5	

Note: Ad Seg = administrative segregation; TABE = Test of Adult Basic Education; CFIT = Culture Fair Intelligence Test.

* $p < .001$.

Criminal history and institutional behavior. Administrative segregation inmates were more likely to be serving a sentence for a violent crime (61%) than the population at large (48%), $\chi^2(1, N = 1,210) = 84.60, p < .001$. They were no more likely to have served a prior incarceration in Colorado (29%) than the population (28%), $\chi^2(1, N = 1,210) = 0.62, p = .43$, but they had been institutionalized for longer periods ($M = 6.19$ years, $SD = 4.85$) than the population ($\mu = 4.31$ years, $\sigma = 4.88$) under their current incarceration, $t(1210) = 13.51, p < .001$. Indeed, 13% of the administrative segregation sample were serving life sentences versus 9% of the population. LSI-R scores provide a gross measure of criminal risk and recidivism potential, and administrative segregation inmates had higher scores ($M = 32.95, SD = 7.03$) than the population ($\mu = 29.88, \sigma = 7.74$), $t(866) = 12.88, p < .001$. These data show that administrative segregation inmates are among the most serious offenders in Colorado based on their criminal history.

Disciplinary infractions, punitive segregations, and security threat group involvement are measures of institutional behavior that were analyzed. Inmates in the population at large had a median of 3 ($SD = 14.73$) disciplinary violations over their entire incarceration as compared to 21 ($SD = 29.22$) for the administrative segregation sample, $t(1209) = 23.27, p < .001$. Similarly, administrative segregation inmates were 7 times more likely to have punitive

segregation sanctions imposed prior to their placement, $t(1209) = 24.35$, $p < .001$. The population had a median of 1 ($SD = 5.94$) punitive segregation sanction, whereas the sample had a median of 7 ($SD = 8.81$).

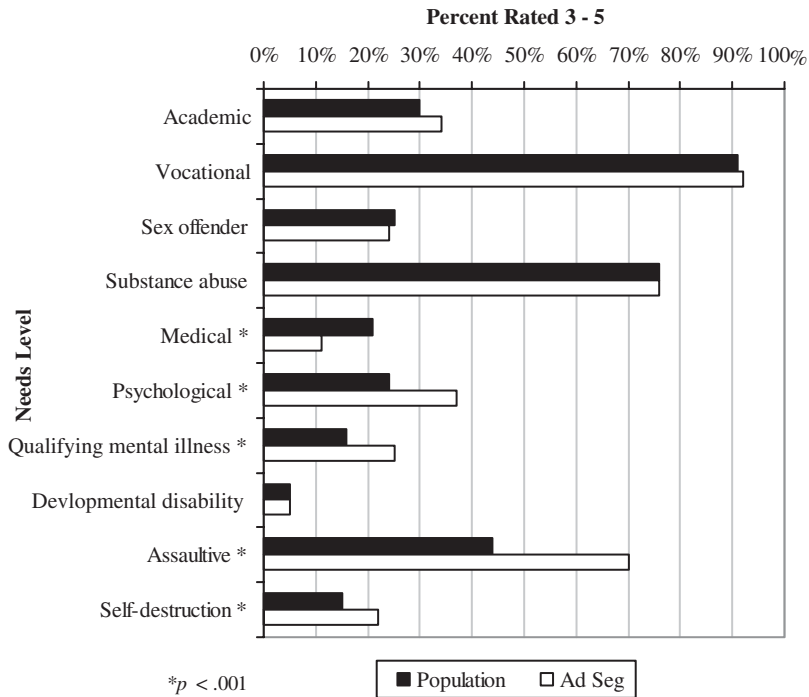
Whether inmates are involved in a security threat group is tracked along with their level of involvement, where members play the biggest roles and suspects have the smallest ones. Among the population, 71% have no security threat group involvement, 12% are members, 5% are associates, and 12% are suspects. Within administrative segregation, only 31% have no known security threat group affiliation, and 38% are members, 7% associates, and 24% suspects. This difference is statistically significant, $\chi^2(3, n = 1,209) = 1174.29$, $p < .0001$, and demonstrates Colorado's zero-tolerance policy for security threat group activities.

Need levels and psychological profile. The percentage of inmates scoring with moderate to high needs across 10 areas is presented in Figure 1. The administrative segregation group did not differ from the population on academic, $\chi^2(1, n = 1,209) = 8.80$, $p = .003$; vocational, $\chi^2(1, n = 1,209) = 0.25$, $p = .618$; substance abuse, $\chi^2(1, n = 1,148) = 0.21$, $p = .644$; sex offender, $\chi^2(1, n = 1,208) = 0.58$, $p = .448$; or developmental disabilities, $\chi^2(1, n = 1,170) = 0.23$, $p = .633$. Segregated inmates presented greater psychological, $\chi^2(1, n = 1,209) = 98.32$, $p < .001$; self-destruction, $\chi^2(1, n = 1,088) = 44.25$, $p < .001$; and assaultiveness, $\chi^2(1, n = 1,181) = 312.74$, $p < .001$, concerns. The percentage of inmates in segregation with a qualifying disorder (25%) exceeded the rate found in the population (16%) by a substantial margin, $\chi^2(1, n = 1,209) = 79.33$, $p < .001$. Contrarily, medical needs were found to be significantly lower in segregation than those found in the population, $\chi^2(1, n = 1,209) = 70.23$, $p < .001$.

The results of the needs level comparisons speak to the necessity of extensive mental health services that address not only offenders' mental illness but also suicidal and assaultive propensities. Additional tests were examined to better understand the areas of psychological functioning where administrative segregation inmates are different. Over the years, CDOC has used several psychological tests at prison intake. The greatest number of offenders had MCMI-III data as opposed to other assessments, with valid profiles present for 8,513 inmates in the population and 663 inmates in administrative segregation. Offenders scoring a base rate score greater than 75 were selected so as to identify the *presence* of symptoms for each disorder.

MCMI-III scores are presented in Table 2. One-way chi-square tests were conducted with the 663 sample participants who had MCMI-III data. Administrative segregation inmates were elevated on eight scales, seven of

Figure 1
Inmate Needs Levels



Note: Ad Seg = administrative segregation.

which were personality scales, and one was a clinical syndrome. These scores indicate that even upon intake into prison, inmates with schizoid, narcissistic, antisocial, aggressive, passive-aggressive, schizotypal, and borderline personality characteristics or delusional thoughts had a greater propensity for later placement in administrative segregation.

Unlike the MCMI-III that is administered at intake, the BPRS is administered on a regular basis to inmates with a qualifying mental illness. Administrative segregation inmates had higher BPRS total scores ($M = 36.90$, $SD = 8.31$) than the population, $t(369) = 5.49$, $p < .001$. Using the BPRS subscales described by Burger et al. (1997), sample inmates were also elevated on thought disorder, $t(369) = 4.48$, $p < .001$; hostility suspicion, $t(369) = 6.31$,

Table 2
Percentage Scoring Greater Than 75 on Millon Clinical
Multiaxial Inventory-III Base Rate Scores

Personality Pattern	% Pop	% Ad Seg	χ^2	Clinical Syndrome	% Pop	% Ad Seg	χ^2
1 Schizoid*	14	18	9.26	a Anxiety	35	36	0.17
2a Avoidant	26	28	1.19	h Somatoform	2	1	0.74
2b Depressive	20	18	0.64	n Bipolar: manic disorder	4	4	0.80
3 Dependent	15	12	4.02	d Dysthymic disorder	17	17	0.03
4 Histrionic	9	7	2.77	b Alcohol dependence	23	27	5.45
5 Narcissistic*	17	21	7.32	t Drug dependence	17	18	1.04
6a Antisocial**	23	29	11.13	r Post-traumatic stress	8	9	0.92
6b Aggressive**	15	22	26.81	ss Thought disorder	3	4	0.26
7 Compulsive	6	4	3.19	cc Major depression	5	5	0.00
8a Passive- aggressive**	24	31	18.93	pp Delusional disorder**	4	7	21.65
8b Self-defeating	12	11	1.78				
s Schizotypal*	6	9	7.27				
c Borderline**	9	12	10.29				
p Paranoid	8	10	6.52				

Note: Pop = population; Ad Seg = administrative segregation.

* $p < .01$. ** $p < .001$.

$p < .001$; and activity, $t(369) = 5.08$, $p < .001$. These data correspond to scale elevations on the MCMI-III delusional disorder, antisocial, aggressive, and passive-aggressive scales.

Discussion

This study revealed an administrative segregation profile that was quite discernable from that of the prison population in general. As a whole, administrative segregation housed inmates with more disruptive institutional behavior than the general prison population. Very rarely were inmates placed in segregation solely on the basis of their crime, and only for the most egregious crimes. In Colorado, all offenders have a hearing to determine whether placement is warranted, and all offenders are expected to progress back to general population by completing recommended treatment programs and complying with the rules. Death row inmates are the notable exception, however, even those cases whose sentences were commuted to life have the same opportunities to transition into population.

Although administrative segregation inmates clearly delineate themselves from the general population as a more disruptive, difficult-to-manage group of offenders, the question of whether Colorado sets its bar too low remains. Colorado admits to exceeding the best national estimates by a factor greater than three, although underreporting of this security level appears to be problematic (King, 2000). In the absence of a national standard or guideline, it is unclear how disruptive is enough to warrant segregation. Nor can this study suggest that some of these offenders could be safely managed in a less restrictive environment. Nonetheless, research is subject to its own limitations, and it is important to remember that statistics examine groups, averages, and sample distributions. A court of law, on the other hand, looks at individual cases. For this reason, it is not enough to say that on average administrative segregation placements are justified—even one inappropriate placement is too many.

Concerns regarding placement of inmates who are nuisances and management problems into segregation reflect systemic issues that extend beyond what is often perceived as low tolerance by correctional staff for disruptive behaviors. Administrative segregation facilities have expanded nationally as overcrowding has become commonplace and the use of private prisons increased. Capital construction has slowed, even given the influx of felons into prison. More beds in a limited number of facilities not only means that our most disorderly citizens are living together in still closer quarters but that there are fewer and fewer opportunities to deploy traditional dispersion methods among inmates who have disputes with each other or are in rival gangs. Private prisons, as they are implemented in Colorado, cost less than many state prisons but have limited capacity for security and treatment. Therefore, they house the most desirable inmates, concentrating the most difficult ones even more tightly in state-run facilities.

Demographically, inmates in administrative segregation possess qualities (e.g., male, younger) that are known to correspond to higher risk. In fact, it appears as though this group may have early histories of nonconforming behavior by dropping out of school without a high school diploma. Although their academic skills may be slightly lower than those of the prison population, they are of equal intelligence. This suggests that their achievements were more likely affected by their behavior or other influences than their actual abilities.

This study was specifically interested in psychological functioning and found a disproportionately high rate of offenders with mental health needs in administrative segregation, many of which appeared to be preexisting upon entry into prison. For the most part, inmates in administrative segregation

have higher rates of personality disorders that are both difficult to treat and characterize individuals who may have greater adjustment difficulties in interacting with their peers and correctional staff.

Several measures indicated that not only was there a higher prevalence of individuals with psychiatric needs in segregation, but those needs may be more acute than among the general prison population. These represent serious implications for operating such a facility. It is the responsibility of staff to monitor mentally ill offenders and ensure that they do not decompensate, particularly in regards to suicidal behavior. Solely by definition, this population requires more rigorous programming and treatment services than most.

The trend of incarcerating more and more offenders with mental illness in solitary confinement has even greater implications for nonadministrative segregation facilities. With recent economic downturns in Colorado, already limited mental health resources have further diminished. Whether the prevailing perspective that prison mental health services are ancillary reverts to one where they are accepted as integral or mental health training is brought to the front lines (i.e., security staff), prisons need to learn how to better manage their mentally ill inmates and protect them. Optimally, both scenarios would be in effect, where mental health clinicians work closely with line staff to employ the best management strategies.

Ensuring the quality of prisons should include process evaluations that take into account actual operations as compared to policy. As demonstrated in *Ruiz v. Johnson* (1999), clearly written policies and procedures are not nearly enough; a court of law will examine actual practices. In fact, even accreditation by the American Correctional Association did little to assist the corrections officials' position in the Texas lawsuit when a paper review was deemed an inadequate substitute for a thorough on-site evaluation. Process evaluations conducted by an agency or unit external to the prison program, where there are not repercussions for either the prison or the researchers, is essential to obtain an unbiased perspective that might reveal program features not obvious to those working there every day and to promote positive change.

The need persists for researchers to empirically tackle the question of whether administrative segregation inflicts psychological harm on inmates, both for mentally ill and emotionally stable subgroups. However, as opponents and proponents search for a middle ground on the supermax issues, the research question may become, For whom is solitary confinement harmful? In all likelihood, some inmates do better in segregation, even for long durations, whereas others experience serious psychological distress. Our prisons and inmates will benefit from rigorously conducted research that informs correctional practice.

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