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Administrative Segregation in U.S. Prisons

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INTRODUCTION

On September 1, 2015, newspapers across the country announced that a settlement agreement had been reached between the California Department of Corrections and Rehabilitation (CDCR) and inmates incarcerated at Pelican Bay State Prison, one of the most well-known supermaximum (supermax) security facilities in the country (St. John, 2015). The settlement agreement, which should result in the return of close to 2,000 inmates from supermax confinement back to the general population, is expected to end the CDCR's practices of housing inmates in supermax confinement indefinitely and of routinely incarcerating those with suspected gang affiliations in solitary confinement. Although California's practice of confining gang members in administrative segregation is certainly not the norm around the country, long-term segregation in restrictive housing units is more common, and the California settlement was announced amidst a more general and growing concern about the practice of solitary confinement (or near solitary confinement) through administrative segregation.

In a speech before the National Association for the Advancement of Colored People (NAACP) in July 2015, President Barack Obama questioned the practice of solitary confinement by calling for a Justice Department investigation into its use across the United States:

I've asked my Attorney General to start a review of the overuse of solitary confinement across American prisons. The social science shows that an environment like that is often more likely to make inmates more alienated, more hostile, potentially more violent. Do we really think it makes sense to lock so many people alone in tiny cells for 23 hours a day, sometimes for months or even years at a time? That is not going to make us safer. That's not going to make us stronger. And if those individuals are ultimately released, how are they ever going to adapt? It's not smart. (White House Office of the Press Secretary, 2015)¹

President Obama is not alone in his reservations about the practice. Supreme Court Justice Anthony Kennedy has repeatedly made clear his concern about solitary confinement across several venues, including by using largely unrelated cases to question the policies of long-term solitary confinement (Liptak, 2015). In May 2015, the United Nations (UN) passed the Mandela Rules, which represent the first modification to the UN's standards on the treatment of prisoners in 60 years (United Nations, 2015a). Rule 43 of the Mandela Rules prohibits both *indefinite* solitary confinement and *prolonged* solitary confinement (defined as lasting more than 15 days) (United Nations, 2015b). Human Rights Watch, Amnesty International and the American Civil Liberties Union (ACLU) have each published reports condemning the use of solitary confinement for both juvenile and adult correctional populations (American Civil Liberties Union, 2014; Amnesty International, 2012; Human Rights Watch, 2000; Human Rights Watch & American Civil Liberties Union, 2012). Individual state chapters of the ACLU have published

¹ Although President Obama has called for a Justice Department review of solitary confinement practices nationally, two recent and substantial inquiries were made into the *federal* use of administrative segregation (Baker & Goode, 2015). In May 2013, the U.S. Government Accountability Office (GAO) issued its report on the use of segregated confinement across the federal prison system (United States Government Accountability Office, 2013). After the publication of that report, the CNA Institute for Public Research conducted an independent assessment with the cooperation of the Federal Bureau of Prisons (McGinnis et al., 2014).

fairly scathing critiques of more localized practices, for example, in Colorado and Texas (Butler & Simpson, 2015; Wallace, 2013). The perspective of these advocacy organizations is clear and unapologetic: They seek an end to the practice of solitary confinement in juvenile correctional settings and extensive restrictions on its use among adult correctional populations.

Across the political spectrum, there is growing concern about the efficacy and utility of administrative segregation practices, particularly those that involve extended solitary confinement, and growing support for finding ways to safely reduce its use across correctional systems. In 2006, the bipartisan Commission on Safety and Abuse in America's Prisons, co-chaired by the Honorable John J. Gibbons and the former U.S. Attorney General, Nicholas de B. Katzenbach, noted that the rapid increase in the use of solitary confinement across the country had outpaced the remarkable growth in overall correctional populations (Gibbons & Katzenbach, 2006). The Commission deemed solitary confinement both expensive and counterproductive and recommended limiting its use. After the publication of the commission's *Confronting Confinement* report, research organizations also turned their attention to solitary confinement. Researchers at the VERA Institute of Justice recently published a report on solitary confinement, identifying what they describe as 10 common misperceptions about solitary confinement (Shames, Wilcox & Subramanian, 2015). Among the misconceptions identified was the common belief that segregated housing deters violence and misbehavior and that segregation helps keep prisons and jails safer. The VERA Institute of Justice (Shames, Wilcox & Subramanian, 2015) has also launched the "Segregation Reduction Project," partnering with four states (Illinois, Maryland, New Mexico and Pennsylvania) to assess the criteria for placement in segregation with the explicit goal of reducing the use of segregation across those states. Several other states, including Arizona, California, Colorado, Indiana, Michigan, Nebraska, New Jersey, New York, Ohio and Wisconsin, have already begun working to reduce the number of inmates in administrative segregation, with more states passing reforms related to the use of solitary confinement in 2014 than in the previous 16 years combined (Hager & Rich, 2014).

Although the spotlight seems to be shining especially bright at this moment, the practice of solitary confinement has a long and storied history in corrections. Some of the earliest American correctional facilities — the early Quaker-inspired penitentiaries in Pennsylvania — were built on a model of extended solitary confinement intended to bring about penitence (Rothman, 1971/1990). Although the "Pennsylvania model" was abandoned relatively quickly in favor of a model based on the more congregate style of confinement that is still prominent, the use of solitary confinement — usually for behavioral control and management — never went away. All correctional systems (including those for men, women and juveniles) have cells or units and, in some cases, entire facilities designed to isolate some inmates in more restrictive housing units for administrative purposes. Segregated confinement is sometimes solitary. Whether they involve complete solitary confinement or not, segregation units are intended to offer a more secure alternative for those who cannot be safe toward others, be kept safe, or be adequately controlled in the traditional congregate correctional setting.

Within correctional contexts, the terms used to describe segregation policies and practices vary greatly across jurisdictions. Although they represent conceptually distinct practices, it is difficult to separate the literature on *disciplinary segregation* from the literature on *administrative segregation* because researchers have tended to study *solitary confinement* without carefully

distinguishing the various types of segregated restrictive housing units. As we became increasingly bewildered by the sheer number of terms used to describe various practices, we decided to avoid using “administrative segregation” as an umbrella term in this white paper, instead opting for either *segregation* or *segregation in restricted housing units*. Where possible, we will distinguish between (1) solitary confinement through *disciplinary segregation* and (2) solitary confinement through *administrative segregation*. As we will explain, the former refers to short-term confinement after a specific infraction and the latter to long-term classification to the supermax unit or facility within a correctional system. Most of our early discussion will focus on administrative segregation (rather than on disciplinary segregation), but when we begin discussing the empirical research, we will refer more broadly to the practice of solitary confinement. Although we recognize not all units and facilities used for disciplinary and administrative segregation follow a strict regimen of solitary confinement, we will describe the empirical research that has been conducted in settings that do (as it is clearly solitary confinement that most troubles those who have expressed grave concerns about correctional segregation policies).

BRIEF HISTORY OF ADMINISTRATIVE SEGREGATION

Developed as a strategy for separating problematic inmates from the general population, administrative segregation is one of two dominant behavioral control models used by correctional administrators to address any number of correctional management challenges that accompanied rapidly growing prison populations (Hershberger, 1998; Riveland, 1999). The dispersion and consolidation models represent contrasting strategies for handling inmates who are perceived to pose significant security challenges to the correctional system. With dispersion, administrators manage inmates through a “divide-and-conquer” approach, attempting to limit the impact of problematic inmates by dispersing them throughout the correctional system. Dispersion avoids the concentration of inmates classified as disruptive or unruly in one location, thereby allowing staff to control disorder more effectively throughout the system (Pizarro & Stenius, 2004). Conversely, consolidation, an approach more aligned with contemporary administrative segregation practices, consolidates disruptive or unruly inmates in highly restrictive settings. The presumed benefits of the consolidation model lie in its efficiency in directing resources toward a central location, be it a unit or stand-alone facility that can house individuals and groups identified as a threat to institutional security (Hershberger, 1998).

Historical accounts indicate that correctional administrators have alternated between these two approaches. The federal prison at Alcatraz, for example, operated under the consolidation model, housing some of America’s most notorious and disruptive offenders for most of the early 1900s (Pizarro & Stenius, 2004). When Alcatraz shut its doors in 1963, with no viable alternative location for consolidating, the prisoners from Alcatraz were dispersed throughout the federal prison system. The federal system’s return to the dispersion model, however, was short-lived because of increasing violence within the federal system between 1970 and 1980. After the number of assaults escalated throughout the Federal Bureau of Prisons (BOP) facilities, the federal prison in Marion, Illinois, was modified for increased security and became the first level 6 supermax facility in the United States (Ward & Werlich, 2003). Intended as a replacement for Alcatraz, the high-security prison at Marion gradually became the preferred facility not only for the BOP’s most problematic inmates but also for inmates perceived to represent a grave threat to

institutional security across state correctional systems. In other words, Marion rapidly became the go-to institution for housing the “worst of the worst” (Richards, 2008).

Although increasing violence in prisons troubled correctional administrators, correctional historians often point to the killing of two correctional officers at Marion in 1983 as the trigger for the revival of total lockdown control units and facilities (King, 1999; Pizarro & Stenius, 2004). In the immediate aftermath of these killings, Marion administrators rapidly reintroduced highly restrictive procedures, beginning with the immediate removal of inmates’ personal property from individual cells, followed by the placement of severe restrictions on inmates’ movements within the prison, the use of handcuffs anytime an inmate was out of the cell area, and an increased use of solitary confinement (King, Steiner & Breach, 2008). Although the conditions at Marion sparked immediate pushback from prisoner rights groups, the use of control units received judicial endorsement when a federal court opined that the BOP had not violated inmates’ constitutional rights in *Bruscino v. Carlson* (Olivero & Roberts, 1987). Eventually, the U.S. Supreme Court’s denial of the petition for writ of certiorari in *Bruscino* only strengthened the sense among correctional administrators that the courts had formally sanctioned the use and expansion of control units similar to those at Marion. In the aftermath of these court decisions, supermax-style facilities, such as the Security Housing Unit at Pelican Bay in California that opened in 1989, became models for correctional jurisdictions across the country (Bosworth, 2004; King, 1991; Romano, 1996).

CONTEMPORARY USE OF ADMINISTRATIVE SEGREGATION

Since the 1980s, entire facilities in both the state and federal correctional systems have been constructed with isolation and segregation as their central purposes. Commonly referred to as supermax facilities, these facilities offer enhanced security and control, allowing for only minimal contact between inmates and staff. Where construction of a new facility was either not necessary or not feasible, whole sections of existing facilities were set aside to segregate the inmates deemed “the worst of the worst” (Butler, Griffin & Johnson, 2013). Although clear general consensus exists that supermax units and facilities are designed to isolate offenders that require the highest and most restrictive security classification, a universally accepted definition does not yet exist (Fellner & Mariner, 1997; Henningsen, Johnson & Wells, 1999; Riveland, 1999).

The lack of definitional consensus has made collecting information on this type of custody (including data on prevalence, goals, objectives and associated effects) difficult. The National Institute of Corrections (NIC) attempted to provide clarity around the practice of supermax incarceration through its 1997 national survey of state departments of corrections that focused on supermax-style housing (Riveland, 1999). Although the survey results from all 50 state departments of corrections offered a rich source of information on supermax by identifying more than 55 functioning supermax facilities or units in 1997, it also demonstrated the significant variation across jurisdictions. Some facilities, for example, were stand-alones, whereas others were sections or units within existing correctional facilities that had been repurposed and retrofitted to meet the strict control needs of the supermax model.

Moreover, across correctional systems, the units classified as supermax units might be referred to as administrative maximum units, administrative segregation units, special housing units, secure housing units, segregation units, isolation units, close custody units, control units, management units and adjustment centers, to name but a few (Kupers et al., 2009; Naday, Freilich & Mellow, 2008; National Institute of Corrections, 1997). Despite the many monikers, in a national survey of state wardens (Mears & Castro, 2006), greater than 95 percent of the state prison wardens surveyed agreed that the following modified definition put forth by the NIC was accurate: “[A] supermax is a stand-alone unit or part of another facility and is designated for violent or disruptive inmates. It typically involves up to 23-hour-per-day, single-cell confinement for an indefinite period of time. Inmates in supermax housing have minimal contact with staff and other inmates” (p. 40). Supermax units and facilities might house inmates being segregated for both administrative and disciplinary purposes (Browne, Cambier & Agha, 2011).

The lack of definitional clarity brings us to the first of many challenges to conducting research (or interpreting the existing research) on segregation and solitary confinement in correctional contexts: the use of overlapping terminologies for what are sometimes distinct correctional practices. As an umbrella term, “segregation” refers to placement in a restricted housing unit used by correctional administrators (for disciplinary segregation or protective custody) and temporary or long-term supermax security housing (McGinnis et al., 2014, 2008b; Shames et al., 2015). The primary purpose of this practice is to separate and isolate an inmate, or certain groups of inmates, from the general population for reasons mainly centered on security and safety within the facility or across the correctional system.

At least three distinct types of segregation exist: administrative segregation, disciplinary segregation and protective custody (see Shames et al., 2015, p. 4). Some inmates are segregated because they are identified as being at high risk for victimization. Inmates in *protective custody* are segregated for their own protection, and their placement in segregation is sometimes voluntary. Solitary confinement in a restrictive housing unit for a specified period of time to punish behavior is generally referred to as *disciplinary segregation* (or punitive segregation). Disciplinary segregation is typically imposed as a sanction after a disciplinary hearing related to a specific instance of misconduct. Crucially, disciplinary segregation is a form of punishment, so inmates subjected to it are afforded due process rights (O’Keefe, 2008). *Administrative segregation* is used to separate those deemed to pose a significant threat to institutional security from the general population. Inmates are often classified to administrative segregation or transferred to these units and facilities based on patterns of disruptive behavior, security threat group identifications, or designation as high-risk inmates.

In a recent review of segregation policies, Metcalf and colleagues (2013) noted that jurisdictions tended to invoke the safety of inmates and staff as well as overall institutional security as the primary criteria for placement in administrative segregation. In addition to safety and security, many states included more specific placement criteria (typically tied to either the offense that triggered the inmate’s initial incarceration or the accumulation of disciplinary infractions). Unlike disciplinary segregation, which is time-limited, length of stay in administrative segregation is typically indefinite and largely at the discretion of correctional administrators. Although placement into this, often much longer term, form of segregation does not trigger the same due process rights and protections as disciplinary segregation (O’Keefe, 2008) according to

a recent review of correctional policies across the United States, almost all correctional systems have procedures for review of placements into administrative segregation (Metcalf et al., 2013).

Of course, with different pathways into the various restrictive housing units and different trajectories once there, one would anticipate substantial variations not only in prevalence but also in psychological and behavioral effects across the different types of restrictive housing units. Although segregation in restrictive housing units usually involves solitary, or near solitary, confinement, some of the early court cases related to administrative segregation centered on the double-celling of inmates being housed in segregation units. That brings us to our next important distinction.

Solitary Confinement vs. Administrative Segregation

Isolation through solitary confinement is prevalent across both administrative and disciplinary segregation. Solitary confinement practices vary across correctional systems, but a defining feature of current solitary confinement practice is the isolation of inmates for 22-24 hours a day in a small cell, with minimal contact with others, in areas of the facility designed for the purpose of restricting inmates' movement. Other distinct features of current solitary confinement practices include reduced natural light; limited lighting; little to no access to programming, classes, reading, radio and television as well as restrictions placed on visitation from friends and family (ACLU, 2014). Although it is this type of custody that researchers tend to be most interested in, correctional administrators rarely refer to solitary confinement in any context, perhaps seeking to avoid the controversy the phrase often invokes.² Scholars studying psychological and behavioral effects focus almost exclusively on solitary confinement, often with little regard for the varying contexts in which it occurs.

Prevalence of Administrative Segregation

Given the paucity of data on solitary confinement through administrative or disciplinary segregation, both types of segregation are difficult to quantify with any precision, and estimates from studies in individual states may not be representative of trends more generally. Prevalence estimates vary widely across sources, and many of those estimates are dated. Early estimates suggested somewhere between 1 percent and 3 percent of the total correctional population were incarcerated in highly restrictive administrative segregation units (King, 1999; O'Keefe et al., 2011). These data, however, have been criticized as underestimates, as prison systems have been accused of failing to report or of underreporting as a strategy for avoiding the controversy associated with solitary confinement and administrative segregation policies (Naday, Freilich & Mellow, 2008).³

As a result of several recent comprehensive reports on the use of administrative segregation in federal prisons, some of our most current and best estimates of prevalence and cost come from analyses of its use in the federal system (McGinnis et al., 2014; United States Government

² A good example is the BOP, which has refused to acknowledge it uses solitary confinement. The recent U.S. GAO report on the federal use of administrative segregation included the following note: "According to BOP officials, the BOP does not hold anyone in solitary confinement because BOP staff frequently visit inmates held in single-bunked cells alone" (United States Government Accountability Office, 2013, p. 12).

³ The BOP again serves as an example as it reported to the American Correctional Association in 2008 that it had no inmates in administrative segregation (cited in O'Keefe et al., 2011).

Accountability Office, 2013). At the federal level, administrative segregation covers three distinct types of restrictive housing (see Appendix Table A1). The BOP refers to these as special housing units (SHUs), special management units (SMUs), and administrative maximums (ADXs). All three types of administrative segregation share the same purpose, which is to separate inmates, identified for their disruptive or violent behavior, in a controlled setting that emphasizes the safety, security and orderly operation of BOP facilities. In the first report, the U.S. GAO (2013) reviewed the use of administrative segregation across the federal system. According to the GAO report, 7 percent of all federal inmates in BOP facilities are held in administrative segregation. The report notes that most segregated inmates in the federal system were in SHUs (81 percent), slightly less than 2,000 inmates (or approximately 16 percent) were in SMUs, and the ADX facility housed roughly 450 inmates. The GAO report found that per capita cost estimates for housing inmates in segregated housing were higher than in nonsegregated units or general population housing units. Specifically, the GAO report found that, for fiscal year 2012, the total cost of housing 1,987 inmates in SMUs was \$87 million (whereas it would have cost approximately \$42 million to house those same inmates in a medium-security facility or \$50 million in a high-security facility).⁴

In addition to prevalence estimates from reviews of the federal system, staff members from the Liman Program and the Association of State Correctional Administrators (ASCA) recently collaborated on a survey of directors of correctional systems across 46 different jurisdictions (Liman Program & Association of State Correctional Administrators, 2015). In fall 2014, the survey specifically asked jurisdictions to account for the number of prisoners held in any form of segregated housing, including disciplinary segregation, protective custody and administrative segregation. The recent report sent to the Department of Justice, *Time-In-Cell*, offers a detailed current assessment of the prevalence of the use of restrictive housing across the country. Only 34 of the 46 responding jurisdictions provided counts of inmates across all forms of restricted housing, which included roughly 66,000 people (Appendix Table A2).⁵

The *Time-in-Cell* report also reported a relatively stable trend in the numbers of inmates housed in administrative segregation, noting an average decrease of less than 1 percent (0.59) of the percentage of prisoners in administrative segregation between 2011 and 2014. With regard to time spent in administrative segregation, 32 jurisdictions reported no fixed minimum time period for being in administrative segregation, and 42 jurisdictions reported no maximum limit at which point prisoners must be released into the general population. The survey also focused on continuous days that prisoners had spent in administrative segregation. Of the 24 jurisdictions reporting systemwide data on length of stay, 11 reported that most prisoners held in administrative segregation were there for fewer than 90 days (Liman Program & Association of State Correctional Administrators, 2015).

⁴ After the release of the GAO's fairly critical report, the BOP commissioned an independent evaluation of its operation of administrative segregated housing and sought strategies for improving policies, operations and overall services (McGinnis et al., 2014).

⁵ It should be noted that California, one of the largest prisons systems in the country, was not one of the responding states and therefore is not included in the Liman/ASCA report.

ISSUES RELATED TO THE USE OF SOLITARY CONFINEMENT

Some of the most controversial issues related to the use of solitary confinement arise in the context of its use among special populations, most notably juveniles but also suspected or known security threat group members and the mentally ill.

Juveniles and Solitary Confinement

If research on solitary confinement through administrative segregation among adult correctional populations can best be described as scarce, the research on the use of solitary confinement among juvenile correctional populations is almost nonexistent. Moreover, the limited data we have on the solitary confinement of juveniles comes from just a handful of sources. Within juvenile corrections there has been even less empirical research, but more determined efforts have been made to end the practice of punitive isolation for juvenile inmates. In juvenile corrections, sometimes a distinction is drawn between punitive confinement and nonpunitive solitary confinement, where the latter is described as confinement for the protection and safety of others (Weiss, Kraner & Fisch, 2013). Most of what we know about juvenile solitary confinement comes from either the national Survey of Youth in Residential Placement (SYRP) or reports authored by advocacy organizations like Human Rights Watch and the ACLU (Human Rights Watch & American Civil Liberties Union, 2012; Sedlak & McPherson, 2010). In the recent SYRP, almost a third of all juveniles in custody reported having spent time in solitary confinement, with more than half of those reporting having spent more than 24 hours in solitary (Sedlak & McPherson, 2010).

In recent years, legislatures have been particularly active around the issue of solitary confinement of juveniles (Therolf, 2015). West Virginia became the first state to ban the solitary confinement of youth in custody in 1998; Alaska, Colorado, Mississippi and West Virginia followed with bans on juvenile solitary confinement in 2012; Nevada and Oklahoma passed restrictions on the use of juvenile solitary confinement in 2013; and a slew of states followed with bans on juvenile solitary confinement in 2014, including New York (Hager & Rich, 2014). After several scathing critiques of the treatment of inmates in New York City's Riker's Island jail in early 2015, in one of the most sweeping decisions, the New York City Department of Corrections announced it would no longer allow solitary confinement of anyone 21 years of age or younger (Winerip & Schwartz, 2015).

Solitary Confinement to Control Gangs

In some jurisdictions, inmates have been isolated in administrative segregation simply because of a suspected or known gang affiliation. As noted in the Introduction, a settlement agreement reached between a group of inmates incarcerated at Pelican Bay and the CDCR is expected to bring about the gradual end to this practice in California (St. John, 2015). Although it is based on evidence suggesting that prison gangs bear responsibility for much of the prison violence experienced in some correctional systems (Griffin & Hepburn, 2006), this is among the most criticized of practices because no clear endpoint to the isolation exists. Some inmates classified to administrative segregation as a result of their status as having known or suspected gang affiliations have spent decades in isolation units (Baker & Goode, 2015). As noted, in California, the decision to release almost all gang members currently held in solitary confinement will result in the release of almost half of all those currently incarcerated in secure housing units across the

state. With this settlement occurring so recently, it is not yet clear what impact, if any, it will have on other jurisdictions that routinely incarcerate known or suspected gang members in administrative segregation.

Mental Illness and Solitary Confinement

Although the precise numbers are hard to come by, some have argued that most who end up in solitary confinement are mentally ill (Toch, 2001). The mentally ill, often by virtue of their mental illness, have trouble conforming to institutional rules and receive more disciplinary misconduct histories (Kurki & Morris, 2001). The Bureau of Justice Statistics (BJS) has reported that close to 45 percent of federal inmates and greater than half of all jail and state prison inmates suffer from mental health problems as measured by diagnosis and treatment of symptoms (James & Glaze, 2006). Earlier estimates, which focused narrowly on mental illness, tended to be much lower, with about 16 percent of prison inmates classified as suffering from serious mental illness (Ditton, 1999; Osher et al., 2012).

Some prevalence estimates of mental illness across populations in administrative segregation have been derived from the empirical research (O'Keefe, 2007). Lovell and colleagues have produced several estimates of the levels of psychosocial impairment (a construct that includes several measures of mental health deterioration) and serious mental illness among the supermax population in Washington state. Lovell (2008) randomly sampled inmates from all three of Washington's supermax housing units and found that 45 percent of supermax prisoners were suffering from serious mental illness. By using similar methods, Lovell and colleagues had previously found serious mental illness among approximately 13 percent of general population inmates (Lovell et al., 2000). Cloyes and colleagues similarly reported that almost 30 percent of inmates in supermax units meet the criteria for serious mental illness, and in their study of the supermax unit in Washington, they found that 22 percent of the inmates were actively experiencing high levels of "psychosocial distress" (Cloyes et al., 2006). Many researchers have used statistics like this to argue that the mentally ill are more likely to end up in solitary confinement.

The courts have also been particularly active around the issue of confining the mentally ill in administrative segregation, based in part on the accumulated evidence that confinement under such restrictive and isolating conditions is especially harmful for this already vulnerable population.

COURT DECISIONS AND CONSENT DECREES

A comprehensive review of all court cases and legal decisions relative to the use of solitary confinement is beyond the scope of this relatively brief white paper, so we review just a few of the more significant and directly relevant court decisions and consent decrees that have been issued (for a comprehensive review, see Collins, 2004).

The most notable litigation around the issue of administrative segregation has focused on supermax confinement or solitary confinement in administrative rather than disciplinary

segregation.⁶ State and federal cases related to the use of solitary confinement have tended to focus on the overall conditions of confinement in supermax settings, and several have focused on the placement of the mentally ill in facilities that involve solitary confinement for extended periods of time.

An early federal case signaled that the courts were not likely to get involved in the administration of facilities used for administrative segregation. In 1984, a group of inmates housed at the Marion Federal Penitentiary filed a Section 1983 complaint alleging that federal prison officials were violating their constitutional rights. In *Bruscino v. Carlson* (1988), the primary complaints were related to arbitrary placements, conditions of confinement, extended solitary confinement, use of force, and cavity searches. The Supreme Court, in considering both the context and the complaint, found that the “ghastly” conditions at Marion, although “depressing in the extreme,” did not amount to cruel and unusual punishment. After describing Marion’s inmates as “among the most dangerous people in this nation,” the Court was “not persuaded that any relaxation in the controls instituted in the fall of 1983 [was] constitutionally required, given the extraordinary security problems at the prison.” The Court went on to note, “The controls are a unitary and integrated system for dealing with the nation’s least corrigible inmates; piecemeal dismantling would destroy the system’s rationale and impair its efficacy.” The *Bruscino* decision signaled that the federal courts would be unlikely to interfere with the management of administrative segregation units. As Feeley and Rubin (1999) have noted in the comprehensive overview of correctional cases, “Whatever the reasons for the judiciary’s positive response to Marion, the correctional establishment chose to interpret it as validating the concept of a supermaximum-security prison” (Feeley & Rubin, 1999, p. 142).

A few years later, in 1990, a group of prisoners being held in Pelican Bay State Prison similarly filed a Section 1983 claim against the CDCR. In the 1995 *Madrid v. Gomez* decision, the court found in favor of the inmates, ruling that:

In particular, defendants have failed to provide inmates at Pelican Bay with constitutionally adequate medical and mental health care, and have permitted and condoned a pattern of using excessive force, all in conscious disregard of the serious harm that these practices inflict. With respect to the SHU, defendants cross the constitutional line when they force certain subgroups of the prison population, including the mentally ill, to endure the conditions in the SHU, despite knowing that the likely consequence for such inmates is serious injury to their mental health, and despite the fact that certain conditions in the SHU have a relationship to legitimate security interests that is tangential at best. (p. 1280)

Although its concern for the mentally ill was clear, the Court was less definitive when it came to those inmates not suffering from mental illness, noting, “while the conditions in the SHU may

⁶ Placements into disciplinary segregation for infractions are subject to the landmark U.S. Supreme Court case, *Wolff v. McDonnell* (1974). The *Wolff* decision established the minimal procedural due process rights that must be accorded inmates during prison disciplinary hearings, and these rights have since been reaffirmed in *Dixon v. Goord* (2002). The minimum procedural due process rights during disciplinary hearings include providing the inmate with an advance written notice of charges and an advance written statement of evidence on which the determination will be made, and the right to call witnesses and present his or her evidence.

press the outer bounds of what most humans can psychologically tolerate, the record does not satisfactorily demonstrate that there is a sufficiently high risk to all inmates of incurring a serious mental illness from exposure to conditions in the SHU to find that the conditions constitute a per se deprivation of a basic necessity of life” (p. 1267). As a result of the *Madrid* decision, a special marshal was appointed to work with the CDCR to develop a plan to remedy the conditions at Pelican Bay (Fathi, 2004). In many ways, the *Madrid* case provided the first in-depth look into the conditions of confinement in supermax settings, and the court monitoring continued for more than a decade until the court, finally satisfied that the conditions had been remedied, dismissed the case in 2011 (Simon, 2014).

Other prison systems have drawn the attention of the courts as well. In *Ruiz v. Johnson* (1999), it was the administrative segregation units of the Texas Department of Corrections that came under judicial scrutiny, and it was in this case that the federal courts came close to declaring the solitary confinement in administrative segregation unconstitutional per se. After describing the conditions of confinement in administrative segregation units across the Texas Department of Corrections, the court in *Ruiz* declared:

Before the court are levels of psychological deprivation that violate the United States Constitution's prohibition against cruel and unusual punishment. It has been shown that defendants are deliberately indifferent to a systemic pattern of extreme social isolation and reduced environmental stimulation. These deprivations are the cause of cruel and unusual pain and suffering by inmates in administrative segregation, particularly in Levels II and III. (pp. 914-915)

The *Ruiz* decision was in many ways more sweeping than that of *Madrid* several years earlier. Most subsequent cases have resulted in settlements or consent decrees, but it is worth noting that conditions of confinement in administrative segregation have been challenged in Connecticut, Indiana, New Mexico, Ohio and Wisconsin, among other states (see Fathi, 2004).

Although the court in *Ruiz* came close to ruling solitary confinement unconstitutional, we can say with confidence that we are moving toward a general consensus (which can be found across the various court decisions, consent decrees, and settlement agreements reached) that these environments are not appropriate for the mentally ill and might constitute cruel and unusual punishment for this subset of the inmate population. The U.S. Supreme Court has regularly denied certiorari in administrative segregation cases, but with Justice Anthony Kennedy repeatedly expressing his concern about solitary confinement in recent months, it seems likely that there could be some U.S. Supreme Court movement on this front in the coming years (Hananel, 2015).

In addition to court cases and consent decrees, several notable, recent congressional and legislative hearings have been related to the use of solitary confinement.⁷ The U.S. Senate Judiciary Subcommittee on the Constitution, Human Rights, and Civil Rights held two hearings

⁷ Written and oral testimony, as well as videos of the hearings discussed in this section, can be accessed on the advocacy group Solitary Watch’s website (Solitary Watch, 2015).

on the use of solitary confinement in June 2012 and February 2014.⁸ In California, where conditions of confinement in general and administrative segregation in particular have been the focus of ongoing litigation, several notable legislative hearings have also occurred. The California Assembly and Senate Public Safety Committee twice held hearings on the CDCR use of solitary confinement.⁹ As noted, the CDCR recently reached a settlement agreement to end a class action lawsuit on behalf of inmates at Pelican Bay (500 of whom had been held in solitary confinement for more than 10 years at the time the suit was filed). The lawsuit was preceded by a series of well-publicized hunger strikes across CDCR facilities that also triggered the legislative hearings on the issue.

THE UTILITY AND EFFECTS OF ADMINISTRATIVE SEGREGATION

Proponents of administrative segregation and the supermax model argue that solitary confinement is necessary for maintaining the safety and security of the entire correctional system. Some inmates, it is argued, are so disruptive to the orderly running of a facility that they simply cannot or should not be maintained among the general population (O'Keefe, 2008; Pizarro & Narag, 2008; Pizarro & Stenius, 2004; Pizarro, Stenius & Pratt, 2006). This view is far from universal though. The most obvious division is between scholars (who study either incarceration in general or solitary confinement in particular) and the correctional administrators responsible for drafting and enforcing official correctional policies and practices.

Recent reviews of policies related to placement in administrative segregation also emphasize the official view that segregation exists to minimize threats to institutional security (Butler et al., 2013; O'Keefe, 2008). A recently published study reviewing official policies across 42 states reported that 98 percent of the states identified the catch-all “threats to institutional security” as a justification for placement in administrative segregation (Butler et al., 2013). The most commonly noted threats to institutional security triggering administrative segregation included repeated violent behavior (78 percent), escape risk (67 percent), riotous behavior (45 percent), and security threat group membership (36 percent). Concerns remain about the specific criteria used to determine that an inmate represents such a threat, particularly in the absence of full due process rights that typically accompany placement in disciplinary segregation after a discrete incident of violent or disruptive behavior (O'Keefe, 2008).

Despite a dearth of empirical evidence demonstrating effectiveness, those charged with running correctional facilities overwhelmingly believe that administrative segregation achieves its aims (particularly related to increasing the safety and security of the correctional system). In one of the largest studies of practitioner’s views, Mears and Castro (2006) noted that prison wardens, who maintain primary responsibility for running the nation’s correctional facilities, were not only “largely unanimous in saying that supermax prisons serve to increase safety, order, and control throughout the prison system and to incapacitate violent and disruptive inmates” (p. 407) but also “strongly believe that supermax prisons are effective in achieving these four goals”

⁸ The hearings on “Reassessing Solitary Confinement: The Human Rights, Fiscal, and Public Safety Consequence” each included oral and written testimony from heads of departments of corrections, researchers who have studied solitary confinement, and those engaged in advocacy against the practice (Solitary Watch, 2015).

⁹ Both hearings before the California Assembly, held in February 2013 and February 2014, focused on the CDCR’s proposed reforms to inmate segregation policies and to the use of secure housing units.

(Mears & Castro, 2006, pp. 407, 409). Those who argue for the effectiveness of administrative segregation units and supermax facilities often base those arguments on appeals to the self-evident rather than on an evidence base (Sundt, Castellano & Briggs, 2008, p. 115). By noting that these units and facilities house the “worst of the worst,” they argue that these facilities will reduce violence in prison systems and assaults on other inmates and staff because those who are most likely to engage in such conduct have been isolated and further incapacitated (Butler et al., 2013; Lanes, 2011; Mears et al., 2013).

The public, at least as gauged by opinion in Florida, also overwhelmingly supports supermax prisons, even when their utility is less than clear. Mears and colleagues (2013) reported that 80 percent of the public supported supermax incarceration in general and that 60 percent maintained their support, even if there was no associated public safety benefit. Moreover, little public support seems to exist for the notion that these facilities are inhumane, with 70 percent of those surveyed indicating that they did not consider supermax facilities inhumane (Mears et al., 2013).

Evaluation Research

Mears and Watson (2006) identified several of the most frequently cited justifications for (and goals of) solitary confinement through administrative segregation, including (1) increasing prison safety, (2) increasing systemwide order and control of prisoners, (3) improving the behavior of violent and disruptive prisoners, (4) reducing gang influence, (5) punishment (of violent and disruptive prisoners), (6) increasing public safety, and (7) improving the efficiency of correctional system operations. Although some are easier to operationalize than others, each of these intended impacts could be evaluated. In their 2006 article, Mears and Watson even offered potential measurable indicators for each of these “performance measures,” which are reproduced here (Appendix Table A3) as they may prove useful for those seeking to apply an evaluation framework. Alongside these intended goals, Mears and Watson also offered some observations around potentially unintended impacts (both positive and negative). Finally, they raised questions related to the mechanisms by which supermax confinement is expected to achieve these goals; identify barriers to achieving the goals; and offer some moral, political and fiscal dimensions that would need to be considered in any comprehensive assessment of supermax prisons.

When Mears (2008) tried to apply an evaluation framework to supermax incarceration, he struggled to find the research base necessary to answer key questions across five domains, ultimately concluding that:

[T]here is (a) minimal indication that supermax prisons were needed as long-term solutions to any of a range of problems (e.g., order, safety, escapes, public safety); (b) no strong or consistent theoretical foundation for anticipating that they would exert any substantial effect on a range of outcomes, and, to the contrary, strong theoretical grounds to anticipate a worsening of these outcomes; (c) minimal documentation of their implementation (including the procedures and adherence to these procedures) for admitting and releasing inmates, monitoring of inmate behavior, or compliance with state and federal laws as well as constitutional requirements, juxtaposed against accounts showing that mentally ill and other inmates inappropriate for extended solitary confinement reside in supermaxes; (d) minimal evidence of any positive impact on any of

a range of outcomes, with considerable evidence of harmful, unintended effects; and (e) no evidence that they are cost-efficient. (Mears, 2008, p. 61)

If dangerous and violent inmates represent a real threat to others within the correctional environment, the options for containing them without resorting to isolation in restrictive housing units seem to be few. Correctional administrators often feel they are left with no other option than to isolate inmates who represent a threat to themselves, other inmates, or to staff. Moreover, the most ardent critics of solitary confinement often have little to say about alternatives to the practice if and when solitary confinement were to be eliminated on evidence-based grounds or outlawed on constitutional grounds. Those charged with running prisons, even those who have argued that there are problems with the practice of confining inmates in highly restrictive environments for extended periods of time, lament the lack of options at their disposal for those inmates who are truly dangerous to both the staff who work in prisons and the other inmates who have to live in them. Rick Raemisch, Executive Director of the Colorado Department of Corrections, for example, spent 20 hours in solitary confinement to understand the experience and has worked to reduce its use significantly in the Colorado system, but he still acknowledges the need for the practice in some instances (Goode, 2014; Raemisch, 2014). Raemisch recently argued, “If someone has committed a violent assault ... until you can solve that problem, that person is going to need to be isolated” and then went on to note, “There are those who say this is bad, but when you look around for an alternative, people have left the room” (Baker & Goode, 2015, p. A16).

Violence in Correctional Institutions

As demonstrated by the earlier overview, it is difficult to say with any degree of precision how prevalent solitary confinement through administrative or disciplinary segregation is across U.S. correctional systems (Naday et al., 2008). Perhaps not surprisingly, few good estimates exist of either the levels of disruptive behavior among those sent to administrative segregation or of the impact of administrative segregation on reducing levels of violence in prisons.

Some of our estimates of violence within correctional institutions come from victimization surveys and research. Wolff and colleagues, for example, reported that in their study of inmates incarcerated in 1 of 14 institutions in a mid-Atlantic state, greater than 20 percent of inmates reported being the victim of physical violence in the previous 6 months (Wolff et al., 2007). Importantly, although rates of victimization were roughly equal for male and female inmates, prevalence rates of victimization varied substantially across facilities (even within this single state’s correctional system). Although little hard data exist on the subject, some evidence shows that serious assaults against correctional officers are rare but tend to be more, not less, common in administrative segregation units (Sorenson et al., 2011).

One study that provided a profile comparing inmates in administrative segregation with general population inmates (in this case, in Colorado) suggested that the inmates in administrative segregation had significantly more disciplinary infractions, were significantly more likely to have been previously placed in punitive segregation, and were significantly more likely to have been identified as having a known or suspected security threat group affiliation (O’Keefe, 2008). When Lovell (2008) focused in on those supermax inmates in Washington state who could safely be considered to be suffering from mental illness, he found that these mentally ill inmates had

substantially higher infraction rates and that many of these infractions were indeed indicative of disruptive institutional behavior:

These 60 inmates had committed 135 assaults: 45 aggravated and 65 (including five aggravated) on staff. Four of them had infractions for homicide. Less-violent forms of disruptiveness included 220 infractions for threatening, 168 for throwing objects (often urine or feces), 83 for destroying property, and 28 for flooding cells. Twelve men had been infraacted for mutilating themselves, usually two or three times. (p. 990)

In addition to the work on levels of violence across inmates sent to segregated housing, some attempts have been made to assess the impact of SHUs on levels of correctional system violence.

Institutional Violence and Administrative Segregation

In the late 1980s and 1990s, a series of authors offered some (mostly speculative) evidence that the expanded use of administrative segregation seemed to be related to lower levels of violence across correctional systems. In their discussions of the effects of court-ordered changes to the Texas correctional system in the wake of the sweeping *Ruiz v. Estelle* (1980) decision, Marquart and colleagues tied reductions in prison violence and inmate murders, as well as increases in inmates' perceptions of safety, to the extensive use of administrative segregation, particularly of gang members, across the Texas Department of Corrections (Crouch & Marquart, 1989, 1990; Ralph & Marquart, 1991). Austin and Irwin (2001) similarly tied declines in prison violence in California's prison system to increased use of segregation. In both instances, the authors were looking back at declines in violence and speculating that an increased reliance on segregation might be a cause. More recently, attempts have been made to assess the impact of administrative segregation on levels of prison violence by using more sophisticated research designs, and those have typically reported mixed support for the thesis that the increased use of segregation has resulted in decreases in prison violence.

In a national study of inmate violence that used multilevel data from more than 4,000 inmates across 185 correctional institutions, Huebner (2003) found that the use of solitary confinement for disciplinary purposes, measured as "the percent of the total inmate population that received solitary confinement as a disciplinary response to the most recent rule infraction," was unrelated to levels of inmate assaults (Huebner, 2003, p. 110). By using data from three states (Arizona, Illinois and Minnesota) and one control state (Utah), and a multiple interrupted time-series design, Briggs, Sundt and Castellano (2003) found no evidence that the introduction of a supermax facility had any effect on inmate-on-inmate violence in any state. Their findings for inmate-on-staff violence were mixed, with no effect found in Minnesota, decreased inmate-on-staff assaults shown in Illinois, and a counterintuitive temporary increase in staff injuries seen in Arizona (Briggs, Sundt & Castellano, 2003). Briggs et al. (2003) concluded that "the bulk of the evidence presented here suggests that supermax is not effective at reducing system-wide levels of prison violence" (p. 1368).

By using a quasi-experimental interrupted time-series design, Sundt and colleagues (2008) examined the effect of the opening of a supermax facility on subsequent levels of inmate-on-inmate and inmate-on-staff violence in prisons in Illinois, and they found that the opening of the supermax did not significantly impact the number of inmate-on-inmate assaults but did result in a

“gradual permanent reduction in assaults against staff” and an “abrupt, permanent reduction in the use of system-wide lockdowns” (Sundt et al., 2008, pp. 115, 117). These findings lend credence to the notion that supermax facilities might increase the safety of the entire correctional system. However, because of the unique (and volatile) political context in which the Illinois supermax emerged, the results are not particularly generalizable to other states (Sundt et al., 2008). Overall, there is little evidence that the introduction of supermax facilities has reduced levels of violence across the correctional system. Given the paucity of research in this area, however, it seems fair to say that this, like so many things related to the use of administrative segregation, is still an open empirical question.

THE EFFECTS OF SOLITARY CONFINEMENT

Psychological Effects of Solitary Confinement

Two types of studies on the psychological effects of isolation have been used: (1) qualitative studies that have focused on providing rich descriptions of the effects of the experience on inmates who have typically spent lots of time in solitary confinement (often having spent many years incarcerated in isolation), and (2) quantitative studies that have tried to study the effects among larger groups of inmates, sometimes using matched comparison or control groups, but typically focusing on inmates in disciplinary units or serving shorter terms in administrative segregation.¹⁰

The only clear statement that can be made about the body of literature assessing the psychological effects of solitary confinement is that researchers using different methods to study different populations have come to different conclusions about the psychological effects on inmates (Arrigo & Bullock, 2008; Gendreau & Labrecque, 2015). A fair summary statement would say that there is a collection of scholars who have been studying solitary confinement for many years and that these scholars strongly believe that the experience can have lasting and substantial damaging psychological effects. The most well-known studies of the impact of extended solitary confinement on the mental health of prisoners have come from the accumulated work of Stuart Grassian and Craig Haney, both of whom have testified extensively on behalf of inmates in class action lawsuits (Grassian, 1983; Grassian & Friedman, 1986; Haney, 2002, 2003, 2008; Haney & Lynch, 1997). In one of his earliest studies, Grassian conducted extensive interviews with 14 prisoners challenging the conditions of their confinement in a lawsuit against the Massachusetts Department of Corrections, and he documented a long list of damaging psychopathological effects, including difficulty concentrating and thinking, perceptual distortions and affective distortions changes, and problems with impulse control (Grassian, 1983). Grassian concluded that the psychopathology he documented “strongly suggests that the use of solitary confinement carries major psychiatric risks” (p. 1454).

Many other studies employing the case study approach across a variety of settings have similarly documented far-reaching and long-lasting psychological effects (for more comprehensive

¹⁰ Although rarely acknowledged, the psychological/psychiatric effects research frequently relies on a large body of literature on the effects of sensory deprivation (Gendreau & Labrecque, 2015). Reviewing that literature is beyond the scope of this review of administrative segregation as a practice, but suffice to say, it is often taken for granted that isolation will have severe and lasting detrimental effects on the psychological well-being of all those exposed to it, even though the evidence in this area does not always bear out this assumption (for a comprehensive review, see Gendreau & Labrecque, 2015).

reviews of studies of the psychological effects, see Gendreau & Labrecque, 2015; Labrecque & Smith, 2013; Shalev, 2008; Smith, 2006). In summarizing the psychological literature in 2002, Haney reported that:

[D]ocumented negative psychological consequences of long-term solitary-like confinement include: an impaired sense of identity; hypersensitivity to stimuli; cognitive dysfunction (confusion, memory loss, ruminations); irritability, anger, aggression, and/or rage; other directed violence, such as stabbings, attacks on staff, property destruction, and collective violence; lethargy, helplessness and hopelessness; chronic depression; self-mutilation and/or suicidal ideation, impulses, and behavior; anxiety and panic attacks; emotional breakdowns, and/or loss of control; hallucinations, psychosis and/or paranoia; overall deterioration of mental and physical health. (Haney, 2002, pp. 85-86)

Without question, a substantial body of work has established that solitary confinement can have damaging psychological effects, particularly when that confinement involves near complete isolation and sensory deprivation, or when the term of such confinement is extended. Moreover, despite the methodological limitations of some of the studies documenting these effects, most agree that extended confinement under extreme conditions of isolation in some segregation units is indeed harmful and should be avoided where possible. More questionable, however, is how representative the populations who were the subjects of study across this body of research are of inmates experiencing administrative segregation more generally. Although Haney is confident in his assertions regarding the psychological effects of long-term solitary confinement, other research involving in-depth case studies has reached an opposite conclusion in terms of the psychological effects of shorter-term solitary confinement.

In an early study based on the experience of just four inmates, Suedfeld and Roy (1975) argued that short-term solitary confinement (ranging from 1 week to 30 days) was beneficial to those inmates, resulting in a lower incidence of violence, aggression and self-injurious behavior as well as in improved adjustment. In later work, involving a much larger group of inmates incarcerated in five different facilities across the United States and Canada, Suedfeld and colleagues again found “no support to the claim that solitary confinement ... is overwhelmingly aversive, stressful, or damaging to the inmates” (Suedfeld et al., 1982, p. 335). Several decades later, Zinger and colleagues (2001) compared inmates held in administrative segregation in Canada with those in the general population and found that the “segregated prisoners had poorer mental health and psychological functioning. There was no evidence, however, that, over a period of 60 days, the mental health and psychological functioning of segregated prisoners significantly deteriorated” (Zinger et al., 2001, p. 48). Other respected scholars have also been less than convinced by the accumulated evidence regarding psychological effects. Bonta and Gendreau (1990), for example, argued that little evidence exists of deteriorating mental health among inmates, emphasizing that “long-term imprisonment and specific conditions of confinement such as solitary, under limiting and humane conditions, fail to show any sort of profound detrimental effects” (Bonta & Gendreau, 1990, p. 364).

In another prospective longitudinal study, albeit for a more extended period of time (1 year as opposed to 60 days), O’Keefe and colleagues (2011) sought to improve understanding of the psychological effects of solitary confinement on inmates in administrative segregation in

Colorado. By relying primarily on assertions about the effects of solitary confinement made in earlier psychological research, the authors hypothesized that those who had served time in administrative segregation (1) would experience aggravated psychological symptoms while in administrative segregation, (2) would exhibit deteriorating mental health over time (with that effect exacerbated among those with preexisting mental health issues), and (3) would experience greater mental health deterioration than those in comparison groups of inmates who had not served time in segregation.

The researchers collected data through a series of interviews and assessments of inmates in administrative segregation, the general population, and a specialized mental health unit. To their apparent surprise, none of their initial hypotheses were borne out by their data (O'Keefe et al., 2011). Inmates in administrative segregation exhibited more mental health issues than "normative adult samples," but few differences existed between inmates in administrative segregation and those in comparison groups. In other words, the researchers documented elevated levels of mental health problems across each group but those problems were not significantly more pronounced among those in administrative segregation. Moreover, although inmates in administrative segregation did initially exhibit signs of elevated psychological distress, those tended to dissipate over time. Psychological problems tended to decrease between the first and the second testing period, and this was true across each group, not just the group in administrative segregation. Finally, the researchers reported that the mentally ill groups demonstrated greater psychological impairment across all groups, not just in the segregated setting, and did not deteriorate more rapidly as they had initially hypothesized (O'Keefe et al., 2011).

Perhaps what is most interesting about O'Keefe and colleagues' Colorado study was not that time in administrative segregation had no deleterious effects but that the deleterious effects experienced by those in administrative segregation were no different from those experienced by prison inmates in general. In some ways, this finding is equally, if not more, disturbing. O'Keefe and colleagues' findings could just as easily be interpreted as demonstrating that incarceration *in and of itself* has damaging effects on the mental health of individuals subjected to it, especially initially. Of course, because these findings undercut some of the earlier research and call into question the extent to which administrative segregation has distinct and distinguishable damaging psychological effects, the research has come under enhanced scrutiny (Bulman, Garcia & Herson, 2012).

Shortly after it was published, the Colorado study was subjected to a series of methods critiques that called into question the validity of its results, and several attempts were made to undermine its potential impact (Grassian & Kupers, 2011; Rhodes & Lovell, 2011; Shalev & Lloyd, 2011). The various critiques had some merit but, as Gendreau and Theriault (2011) noted, work like the Colorado study (with controversial or unpopular findings in a highly contested domain) is frequently attacked on methods grounds, adding that "none of the work we are aware of that has been cited by those who contend that prisons produce serious psychological trauma comes close to the Colorado study in terms of its methodological rigor (e.g., repeated measures, comparison group design, and the choice of constructs to assess psychopathology)" (Gendreau & Theriault, 2011, p. 1). It is also worth noting that the findings in the Colorado study are not antithetical in

that other researchers have reported similar findings on the basis of previous research (Suedfeld et al., 1982; Zinger et al., 2001).

It should be noted that one key distinction between the separate bodies of work related to psychological effects is that those who have found marked psychological distress among inmates subjected to solitary confinement have tended to study those held in solitary confinement for extended periods of time, whereas those finding no convincing evidence of distress have tended to study those held in solitary confinement for far more abbreviated periods (for 30, 60 or 90 days, for example). It should also be noted that those finding excessive harm tended to employ an intensive qualitative case study approach, conducting extensive interviews with (and assessments of) inmates held, often indefinitely, in solitary confinement. In some instances, these have been experts, retained on the behalf of inmates filing claims against departments of corrections, preparing for written or oral testimony to be given in cases to be heard in state and federal courts.

Behavioral Effects of Solitary Confinement

Other researchers have sought to measure the effects of segregation on behavioral rather than psychological outcomes. Researchers seeking to better understand behavioral effects typically rely on deterrence theories to argue that, if effective, solitary confinement should reduce levels of institutional misconduct (both individual and systemwide) and should be expected to have some effect on post-release behavior (where one could argue for effects in either direction). These researchers have tended to focus on one of two behavioral outcomes — institutional misconduct or post-release recidivism — and they have typically studied inmates that have experienced solitary confinement, irrespective of the type of restrictive housing unit. For the most part, researchers' have found that inmates who spent time in solitary confinement through administrative or disciplinary segregation fare no better or worse than inmates never exposed to it.

The effects of solitary confinement on institutional misconduct

Relatively few studies have focused on the effect of solitary confinement on subsequent institutional misconduct, which is a somewhat surprising finding, given that a primary claim about administrative segregation is that it should restore order and lead to greater safety and security in correctional facilities.

Labrecque (2015) recently provided an assessment of the impact of solitary confinement on subsequent institutional misconduct among inmates incarcerated for at least one year between 2007 and 2010 who experienced at least one instance of solitary confinement in the Ohio Department of Corrections. The study focused solely on those who had experienced solitary confinement (14,311), and those inmates represented approximately 21 percent of the inmates in the overall sampling frame covered by the time period (69,149). Labrecque employed a pooled time-series panel design to “assess whether [the solitary confinement] experience has an influence on being found guilty of subsequent institutional misconduct” (p. 76).

In his assessment, Labrecque (2015) included all of the various types of misconduct, finding (1) that an experience of solitary confinement had no effect on subsequent levels of misconduct and (2) that the duration of solitary confinement (SC) also had no effect on subsequent institutional

misconduct. Labrecque concludes “that neither the experience of SC, nor the number of days spent in SC, had any effect on the prevalence or incidence of the finding of guilt for subsequent violent, nonviolent, or drug misconduct” (Labrecque, 2015, p. 122). As Labrecque notes, his findings related to institutional outcomes suggest that such confinement neither decreases nor increases subsequent institutional misconduct and adds to the growing body of literature that suggests that solitary confinement has few demonstrable effects on behavioral outcomes for those exposed to it.

Also recently, Morris (2015) studied the effect on violence of short periods of solitary confinement after misconduct. By acknowledging that short-term solitary confinement might be beneficial (reducing subsequent violence through deterrence), harmful (exacerbating problem behavior among inmates exposed to it), or inconsequential, Morris used a propensity score matching (PSM) technique to create treatment and control groups, in which the primary difference between the groups was exposure to solitary confinement. As Morris noted, “PSM approximates the conditions of an experiment by establishing ‘synthetic’ treatment and control groups, which are balanced across all available variables known or believed to potentially confound the effect of exposure to [solitary confinement]” (p. 6).¹¹ Morris hypothesized that those exposed to punitive solitary confinement (typically of up to 15 days) after an initial act of violent misconduct would be more likely to engage in subsequent violence, would engage in violence sooner than those not exposed, and would exhibit more antisocial tendencies than those in the control group. Morris’s results indicated that “on average, the initial experience with SC alone (i.e., as a direct and independent effect) may not play a causal role in subsequent physical violence, its timing, or its downstream effect on misconduct development. In tandem these findings suggest neither a positive nor a negative relationship between SC and subsequent violent behavior, and for misconduct in general (post initial violence)” (Morris, 2015, p. 17).

Although certainly not without limitations, among studies of solitary confinement (and like O’Keefe et al., 2011), Morris’s study represents an analytically sophisticated attempt to isolate the effect of solitary confinement on subsequent behavior (in this case, subsequent violence). The study overcame many of the methods limitations of earlier work by including a relatively large sample from a single state, measured over time; incorporating treatment and control groups (with controls for selection bias); and assessing effects across multiple outcome measures. Of course, Morris’s study focuses on only those sentenced to solitary confinement in disciplinary segregation for a relatively short period of time and cannot speak to any behavioral effects of longer term confinement or of confinement for purposes other than punishment. That study has yet to be conducted.

The effects of solitary confinement on recidivism outcomes

Several attempts have been made to understand the impact of solitary confinement on post-release outcomes, usually recidivism rates. In one of the few studies of supermax incarceration in federal prisons, Ward and Werlich (2003) examined post-release outcomes for inmates who had been incarcerated at both Alcatraz and Marion and reported the extent to which inmates released were later returned to custody. They found that only 3 percent of prisoners returned to the

¹¹ The PSM technique is increasingly used when random assignment to treatment and control groups is not possible. PSM results in a quasi-experimental counterfactual design and is generally considered to be the next best analytical approach when experimental designs are not feasible.

general prison population from Alcatraz and 16 percent of prisoners returned to the general prison population from Marion were returned to higher custody (with less than half of those returned being returned for violent or assaultive behavior). The post-release outcomes for those incarcerated in federal supermax suggested the reincarceration rate (for inmates who had spent time in Alcatraz or Marion) was approximately 49 percent. This study, although interesting, was largely descriptive and included no control or comparison group (Ward & Werlich, 2003).

In a more recently published study of recidivism outcomes, Pizarro, Zgoba and Haugebrook (2014) examined the covariates of recidivism among inmates who were in supermax custody in a northeastern state in 2004 and found that the covariates for these inmates were almost identical to those for inmates in general. Supermax inmates who recidivated post-release tended to be younger, have more extensive criminal histories, and were more likely to have histories of disciplinary misconduct than those supermax inmates who did not recidivate (Pizarro, Zgoba & Haugebrook, 2014). Although interesting, this study compared supermax inmates with other supermax inmates, so it said little about how inmates who have served time in supermaxes compare with inmates never exposed to extended solitary confinement.

Other research on recidivism outcomes has attempted to overcome the effects of selection bias inherent in much of the research on the effects of solitary confinement in general. In one such study, by using a retrospective matched control design, researchers examined recidivism outcomes for prisoners in Washington state and reported that, although no statistically significant differences were found in recidivism rates for supermax prisoners (compared with their matched controls), significantly higher recidivism rates were found among those released directly from supermax to the streets (Lovell, Johnson & Cain, 2007). In other words, those held in supermax confinement until the day of their release offended more quickly and more often than their counterparts who had either never served time in supermax or had been returned from supermax to the general population at least 3 months prior to their release. The supermax offenders released directly to the street also differed from the others in that they tended to be younger and to have more extensive criminal histories (that began at an earlier age). As age and criminal history are two of the most significant predictors of recidivism, Lovell and colleagues (2007) matched the direct-release offenders with those who were returned to the general population at least 3 months prior to release on age and criminal history. Although there were differences between the groups, when matched on age and criminal history, these were not statistically significant. The authors attribute the nonsignificance in part to the small sample sizes of the two groups. It is just as plausible that the finding may not be an artifact of sampling size but instead may reflect the lack of an effect of supermax exposure on recidivism outcomes when one controls for other relevant factors. Although provocative, these findings cannot be considered in any way definitive as a result of the nonexperimental retrospective research design and the small sample size when a matched control group was incorporated.

A second study to examine the impact of supermax confinement on recidivism, this time among inmates incarcerated in supermax settings in Florida, added to the evidence that supermax incarceration might have negligible effects on post-release recidivism (Mears & Bales, 2009). In their study of the impact of supermax incarceration on recidivism, Mears and Bales examined recidivism outcomes for more than 1,200 inmates who had been released after having served time in Florida's supermax prisons and found that, when compared with all Florida inmates,

those who had served time in supermax were much more likely to recidivate. However, and crucially, when they compared supermax inmates with a PSM control group, almost all of the differences in recidivism disappeared (with only violent recidivism remaining elevated), which suggests that the initial differences were likely an artifact of selection bias. Like Lovell and colleagues (2007), Mears and Bales also examined the potentially differential effects of amount of time spent in supermax and recency of supermax at the time of release, and they concluded that “neither the duration nor the recency of supermax incarceration seems to be consequential for recidivism” (p. 1153). In other words, although Lovell and colleagues had offered some preliminary evidence that those released directly to the streets might be at elevated risk for recidivism, Mears and Bales found no such evidence among Florida supermax populations.

Meta-Analyses

Recently, two sets of scholars have conducted meta-analyses. Meta-analyses essentially quantitatively synthesize research evidence by taking findings from existing research and calculating overall effect sizes across studies. In their recent meta-analysis, Smith, Gendreau and Labrecque (2015) used inclusion criteria that required a measure of solitary confinement as an independent variable, a research design that included either randomized selection or comparison and control groups, and sufficient data to calculate an effect size (Smith, Gendreau & Labrecque, 2015). Of the 150 studies of solitary confinement that the authors identified, 70 percent had been published in the past 15 years and only 14 could be included in the meta-analysis (in other words, about 90 percent of the studies they found did not meet the inclusion criteria). In their meta-analytic review, they found only weak effects of solitary confinement on inmate outcomes (most of which were psychological) and concluded that their meta-analytic review did not find support for the long-argued contention that solitary confinement has lasting psychological effects on those subjected to it (Smith et al., 2015). Significantly, the studies employing weaker research designs produced stronger effects than those employing the more rigorous research designs (Gendreau & Labrecque, 2015). A second meta-analysis reported similar results (Morgan et al., 2014, as cited in Labrecque, 2015), leading Labrecque (2015) to conclude that the findings from these recent meta-analyses: “cast some doubts about SC being as devastating to inmates as has often been portrayed in the media and by some human rights organizations, activists, and scholars who vehemently oppose the practice on moral/ethical grounds,” adding, “these findings serve as a caution to reviewers about making judgments regarding the effects of SC too hastily, especially when they are based on qualitative rather than quantitative evidence” (Labrecque, 2015, p. 6).

THE FUTURE OF ADMINISTRATIVE SEGREGATION

Perhaps surprisingly, the research described in the previous three sections represents the bulk of the published empirical research related to the use of administrative segregation in U.S. prisons. The research evidence can easily be described in a short white paper, which suggests that much room exists for further research in this area.

At least three distinct perspectives emerge from a thorough review of the literature. Some researchers strongly believe that segregation, with its focus on isolation through solitary or near solitary confinement, is incredibly damaging, not only exacerbating mental health problems of inmates who already suffer from mental illness but also potentially creating mental illness where

there previously was none. These scholars find the practice to be morally and ethically objectionable, argue that it causes excessive harm, and frequently call for its immediate and absolute abolition. Most evidence supporting this perspective has emerged from research involving in-depth case studies with a few inmates incarcerated for long periods of time, usually in supermax prisons or settings.

Correctional administrators charged with running prisons daily represent a second perspective. Tasked with ensuring safety and security for all of those who live or work in correctional facilities (as well as contributing to the public safety mission more broadly), these experts tend to argue that restrictive housing units are necessary for the safety and security of the entire correctional system. Although the supporting evidence for enhanced institutional or systemwide safety and security as a result of the proliferation of restrictive housing units is thin, many correctional administrators strongly believe segregation has had positive effects, and public opinion tends to be on their side. Recently, as states have begun looking for ways to reduce reliance on incarceration more generally, correctional administrators have begun taking a critical look at their segregation policies and are increasingly seeking ways to safely reduce the use of administrative segregation across their systems as well.

A third group of correctional experts argues that we do not know enough about the utility and effects of administrative segregation to conclude with any degree of confidence that it is a harmful or necessary approach. These scholars typically point to the lack of an evidence base, highlighting the contradictory findings that can largely be explained by differences in methods. They tend to argue that the most analytically sophisticated studies, although certainly not perfect, have failed to document damaging long-term psychological effects or worse behavioral outcomes among those exposed to restrictive housing in all its varieties. It is crucial to note that these scholars do not therefore argue that solitary confinement through administrative or disciplinary segregation is sound, wise or worthwhile correctional policy. Indeed, they argue that the evidence that the practice achieves its intended or stated goals is equally lacking.

Although all three perspectives were given consideration, the focus here was on describing the empirical evidence, regardless of the perspective from which the evidence emerged. To be clear, we were not asked to draw conclusions about the harmfulness of the practice of *solitary confinement*; we were asked to review and describe the research on the practice of *administrative segregation* across the United States more broadly. Throughout this white paper, we have tried to remain cognizant of the numerous different types of confinement that fall under the moniker of administrative segregation and not focus exclusively on the most extreme versions of the practice. After a thorough review of the extant literature, it is clear that, in 2015, the answers continue to be few and the questions many. It is equally clear that when researchers have disagreed, and in this area they have tended to disagree passionately, they have not always been speaking the same language or conducting research with equivalent populations. What is more, for many researchers studying solitary confinement, the practice raises not only empirical questions but also moral and ethical concerns that will persist regardless of the breadth or depth of the evidence base. Across a literature replete with highly charged emotions, interpreting the evidence and separating evidence from strongly held beliefs have become exceptionally difficult. We turn now to some recommendations for future directions that research in this area might take. These recommendations are offered not to provide definitive answers but to launch an important

conversation about the future of research on administrative segregation. Developing an agenda for future research is important, given that the practice is increasingly facing scrutiny on the national and international stages.

What We Know — The Empirical Evidence

The review of the empirical evidence in the former sections demonstrates what many have been arguing for many years: that we know surprisingly little about the use of solitary confinement and its effects, particularly given the speed and extent to which the approach of segregating those deemed to be the “worst of the worst” in restrictive housing units proliferated across correctional systems around the country.¹² Indeed, the most concise summary would probably say that, although the jury is still out, some potentially devastating psychological effects seem to exist (especially for those who already suffer from mental illness and for those who are subjected to lengthy or indefinite terms of confinement in administrative segregation), but most existing research suggests that fewer negative effects of solitary confinement have been demonstrated when the term of confinement is relatively short. Critically, almost no literature documents the utility of the practice or demonstrates that the use of these units has achieved specific aims in demonstrable ways (Mears & Watson, 2006; Mears 2008).

What We Still Don’t Know — Gaps in the Knowledge Base

Relatively few well-designed quantitative studies have been conducted, and those that have been have tended to produce either null or inconclusive findings. Without question, it is difficult to design and carry out empirically sound research in the restrictive housing environment. The basic issues of access and feasibility are difficult to overcome in this context. In the era of evidence-based policy and practice, where the gold standard for validating a practice would be the implementation of an experimental design, no existing “evidence-based” research reaches any definitive conclusions on the wisdom or utility of the practice of solitary confinement through administrative (or disciplinary) segregation.

Therefore, the gaps in the knowledge base are many. Most agree, at least in principle, that long-term solitary confinement in administrative segregation — for periods of years or decades — is likely detrimental to the individual, but it is not as clear that short-term solitary confinement through disciplinary or administrative segregation is equally detrimental. The qualitative research tells us that long-term segregation in solitary confinement seems to have some profound psychological effects, particularly on those who are mentally ill, but there is far less evidence that short-term segregation in solitary confinement has pronounced or lasting negative effects, either psychologically or behaviorally. We do not know how those general insights that can be gleaned from the literature might apply to different types of inmates across different contexts. Do inmates placed in solitary confinement for their protection fare better or worse than those placed there for the protection of others? Growing evidence seems to show that those who enter solitary confinement with a serious mental illness do not fare well, but are those who are not suffering

¹² Even though the evidence for psychological effects is limited, the lack of a solid empirical evidence base leads even the most highly respected scholars to make assertions based on anecdotal evidence, with many agreeing that the experience is likely psychologically damaging in profound ways. For example, after reviewing the research, Kurki and Morris (2001) admitted that, “[a]lthough hard data and controlled clinical studies are lacking, we find it difficult not to believe that prolonged supermax conditions would cause serious psychological and social problems for anyone, whether mentally strong, weak, or something between” (p. 415).

from mental illnesses equally likely to deteriorate under such conditions, as some contend? Is it only extended isolation that results in negative effects? Are shorter periods of solitary confinement not damaging and, perhaps, even beneficial? If differential effects exist, how long is too long? The list of potential questions is endless. The key to the future of research on administrative segregation involves generating agreement around the right questions and the most appropriate methods for answering those questions.

Future Directions — Research and Funding Priorities

Given that some inmates spend months, years and even decades in administrative segregation, it is shocking how little we know about the contemporary use of this practice. The solitary confinement model associated with the early American penitentiaries was quickly abandoned as a result, in part, of concerns about the potential effects on inmates (but also in no small part to the far lower cost of keeping prison populations in congregate settings). Although concerns about costs and effects persist, the most that can be said is that researchers disagree about the effects of administrative segregation; they disagree about effects on violence levels within institutions and across correctional systems, on individuals psychologically, and on inmate outcomes behaviorally.

Establish agreed-upon definitions

With increasing calls for a hard look at solitary confinement and segregation in restrictive housing units, initial steps in formulating a research agenda for the future should, at a minimum, include coming to some agreement on terms and definitions. It is crucial that the field settle on generally agreed-upon terms and definitions so that scholars and practitioners can speak to each other in a common language. While reviewing the voluminous literature, it became clear that many of the apparent contradictions in the literature can be attributed to differences in what is being characterized, described and counted as administrative segregation. Rarely are those with opposing viewpoints describing the same thing.

Scholars almost exclusively refer to solitary confinement and use the term “supermax incarceration” as shorthand to characterize the restrictive housing units that use solitary confinement. Practitioners, including those who run supermax facilities, rarely use the term “solitary confinement” in either official policy or day-to-day practice, preferring to refer to the *types of units* that typically involve 22- to 24-hour isolation. But, in the correctional world, the term “administrative segregation” is sometimes used as an umbrella term capturing all sorts of types of confinement — some of which bear little resemblance to the solitary confinement that is generally described by scholars who conduct research in this area. These issues are not trivial. We invite those who run correctional facilities, together with those who fund or conduct correctional research, to begin a dialogue on how best to characterize and distinguish the various types of confinement in restrictive housing units and to develop definitions that would distinguish practices from units and would allow for a more refined understanding of the effects of varied correctional practices across contexts.

Collect and analyze data to establish reliable prevalence estimates

Once definitions are formulated, BJS might be encouraged to begin routinely collecting data regarding the prevalence of confinement in the various types of restrictive housing units around the country — whether through its annual effort to produce statistics related to the prevalence of

incarceration or through a separate program dedicated to the collection of data related to restrictive housing. State correctional systems should be encouraged to develop data systems that could track and distinguish placements in disciplinary segregation, administrative segregation, and protective custody. Despite a few recent reports offering some baseline estimates, we know little about the prevalence of any of these three types of confinement. Take, for example, the federal system. Most in the field are familiar with the ADX-Florence facility, the federal supermax, which houses some of the most notorious prisoners in the federal system. Through a review of the two recent reports on administrative segregation in the federal system, it becomes clear that those being held in ADX-Florence, while likely spending the most time in solitary confinement, hardly represent the bulk of inmates serving time in highly restrictive administrative segregation settings (McGinnis et al., 2014; United States Government Accountability Office, 2013).

Distinguish differential effects of short-term vs. long-term exposure to solitary confinement

Debates over the effects of administrative segregation tend to be so divisive that it is difficult to find an objective assessment of the evidence. A hard look at the available empirical evidence, though, makes clear that from the limited studies conducted to date, little good empirical evidence shows that time spent in isolation has demonstrable negative effects on psychological or behavioral outcomes for most inmates subjected to it. A crucial distinction that needs to be drawn as this debate continues, however, is that between time-limited segregation imposed for an infraction or series of infractions (typically referred to as disciplinary segregation) versus long-term segregation for management of prison populations (typically referred to as either supermax incarceration or administrative segregation).

It seems imperative that future research distinguish the findings related to the effects of short-term solitary confinement (as Morris, 2015, has done recently) from those related to long-term solitary confinement in supermax units or facilities. Both a qualitative and a quantitative difference exists in being incarcerated in a cell for 23 hours a day for a period of 1-90 days from being held under such conditions for months and years on end. Those appealing to the inhumane character of solitary confinement typically point to the latter, and they present devastating portraits of the relentless anguish and serious deterioration suffered by some of those incarcerated for years on end in supermax facilities. But those effects might not be representative, and certainly might not be reflective, of those confined for short periods of time as a more immediate behavioral management approach. That is not to say that the short-term solitary confinement of inmates is not harmful, but we do not know that, if it is harmful, for whom it is harmful and under what circumstances it is harmful. Little work has been done in this area, especially for distinct populations or in ways that would allow us to assess differences, controlling for what might be key explanatory variables like variations in time spent in solitary confinement or variations in the conditions of the confinement.

Establish standards for research access to populations in segregated housing units

We would be remiss if we did not point out that a big reason for the lack of an evidence base around anything related to solitary confinement comes from issues of access. Research within prisons is notoriously difficult. Until relationships are formed and trust is established between an external research team and correctional administrators, independent research is difficult to pursue. Much of what we know about supermax prisons and administrative segregation,

therefore, comes from official agency reports and statistics or research internal to corrections departments. If access to general prison populations has proven difficult for all but a few, access to those in isolation is almost, by definition, impossible. Inmates isolated in administrative segregation units or supermax facilities are permitted little contact with the inside world, let alone with the outside one.¹³

Without question, the use of administrative segregation has expanded, with limited evidence of its impacts on the operation of prisons or on the inmates subjected to it. Many researchers have argued that, given the extreme conditions sometimes associated with administrative segregation as it is currently practiced, the onus is on those advocating for the maintenance or expansion of administrative segregation and on those running such restrictive correctional units and facilities to prove their benefit, especially given their substantially greater cost. We tend to agree.

If we are to learn more about administrative segregation, whether it be its costs, benefits or impacts, it is incumbent on the research funding agencies to provide financial support for what will be costly research to conduct, and on the departments of corrections around the country to permit the access that would facilitate such research. This will require allowing independent researchers' access not only to data collected regarding use of these units but also unfettered access to the inmates being housed within these units. We recognize that this is easier said than done and that legitimate safety and security concerns exist that will likely be raised in the context of facilitating such access; nonetheless, an evidence base will never be established in the absence of empirically sound research that requires access.

Prioritize funding for research that can overcome the methods shortcomings

Access is not the only problem. The only way to escape the criticism that is sure to face research on controversial issues is to conduct research that gets as close as possible to experimental designs. Unfortunately, experimental designs are hard to come by and almost impossible to carry out in correctional settings, for both practical and ethical reasons (Clear, 2010). Several more recent quantitative studies of administrative segregation have employed PSM because it is not possible, nor would it be ethical, to assign inmates randomly to administrative segregation. Those that have used PSM have demonstrated that effects that exist with unmatched samples (e.g., prior to creating a matched comparison group) tend to diminish (and even disappear) when the potential selection effects are controlled for through PSM (Lovell et al., 2007; Mears & Bales, 2009; Morris, 2015). It is therefore highly recommended that funding be reserved for proposed research that can control for selection effects.

Evaluation research, particularly research that includes cost-benefit analyses, should also be prioritized. In 2008, when Mears applied an evaluation research framework to the emergence and growth in the use of supermax prisons, he concluded that only minimal evidence showed that such facilities were necessary, no evidence showed that they were designed on a sound theoretical base or were cost-effective, and minimal evidence showed that they were implemented in a consistent, principled manner or achieved their intended goals. In other words, the evidence was scant. His summary assessment remains relevant 7 years later.

¹³ As Kurki and Morris (2001) concluded at the end of their review of the thin research base around confinement in supermax prisons, "like so much else about a supermax prison, the walls of exclusion of knowledge are here, too, so much higher" (p. 418).

CONCLUSION

Few researchers would question that some prisoners being held in isolation are exceptionally dangerous and violent and might require some type of segregation. At the same time, few researchers would believe that all (or even most) of those held in isolation require the type of solitary confinement that is typical of such settings, especially for extended periods of time. Many have more fundamentally questioned whether administrative segregation requires the extreme isolation and sensory deprivation characteristics of some of these environments. Virtually all agree that the harm associated with extended solitary confinement could and should be avoided.

Notwithstanding the many gaps in the research base, the most important research going forward will be that which can lead to a substantial reduction in the need for solitary confinement through administrative segregation. It is incumbent on researchers and correctional administrators to work together to identify viable alternatives that can ensure institutional and public safety without compromising the occupational well-being of the correctional employees or the psychological well-being of the inmates in the care of departments of correction.

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APPENDIX TABLE A1: Administrative Segregation in the Federal Bureau of Prisons (BOP)

	Special Housing Unit (SHU)	Special Management Unit (SMU)	Administrative Maximum (ADX)
Referral:	Inmates placed in SHU are in either administrative detention (AD) or disciplinary segregation (DS). AD is intended to be temporary and nonpunitive. DS is the possible sanction for inmates who violate the rules. Length of stay is based on severity of offense.	BOP may consider designating an inmate to an SMU who (1) participated in or had a leadership role in disruptive geographical group/gang-related activity; (2) has a history of serious disruptive disciplinary infractions; or (3) committed any greatest severity-level prohibited acts after being classified a member of a disruptive group, among other reasons.	Inmates whose placement in another facility poses a risk to the safety of inmates, staff, or the public or good order of the facility and/or inmates whose status before or after incarceration does not allow them to be safely housed in another facility.
Population:	<ul style="list-style-type: none"> • Number of cells: 7,381 • Population: 10,050 • 5.7% of BOP inmates 	<ul style="list-style-type: none"> • Number of cells: 1,270 • Population: 1,960 • 1.1% of BOP inmates 	<ul style="list-style-type: none"> • Number of cells: 623 • Population: 450 • 0.3% of BOP inmates
Confinement conditions:	<ul style="list-style-type: none"> • Mostly double-bunked. • 5 hours per week out-of-cell exercise. • May shower/shave at least 3 times per week. • Minimum 1 completed call per month. • Minimum 4 hours of visitation per month. • Inmates eat all meals inside cells. 	<ul style="list-style-type: none"> • Conditions are to be made less restrictive when an inmate progresses from level 1 to level 4. • Mostly double-bunked. • 5 hours per week out-of-cell exercise. • May shower/shave at least 3 times per week. • Minimum 2 completed calls per month. • Mail and telephone calls subject to monitoring for intelligence purposes. • Minimum 4 hours of visitation per month. • Inmates eat all meals inside cells. 	<ul style="list-style-type: none"> • Nearly all single cells. • Inmates eat all meals inside cells.

Compiled from Figures 1 and 2 in the GAO’s report on segregation in the BOP (United States Government Accountability Office, 2013, pp. 7, 9).

APPENDIX TABLE A2: Percentage of Custodial Population (Both Sexes) in Administrative Segregation (Ad Seg) and Restrictive Housing (Fall 2014) (n = 34)

	Total	Ad Seg	% of Total	All Restrictive Housing	% of Total
Alabama	24,862	729	2.90%	1,253	5.00%
BOP	171,868	1,656	1.00%	11,387	6.60%
Colorado	20,944	207	1.00%	662	3.20%
Connecticut	16,564	74	0.40%	592	3.60%
Delaware	5,977	330	5.50%	847	14.20%
D.C.	2,067	62	3.00%	174	8.40%
Florida	100,869	2,416	2.40%	8,936	8.90%
Georgia	52,959	1,625	3.10%	1,658	3.10%
Indiana	28,318	692	2.40%	1,789	6.30%
Iowa	8,172	142	1.70%	542	6.60%
Kansas	9,529	557	5.90%	664	7.00%
Kentucky	12,103	794	6.60%	794	6.60%
Massachusetts	10,475	313	3.00%	518	4.90%
Michigan	44,925	1,122	2.50%	2,004	4.50%
Missouri	31,945	1,277	4.00%	3,929	12.30%
Montana	2,519	48	1.90%	52	2.10%
Nebraska	5,162	173	3.40%	685	13.30%
New Hampshire	2,714	17	0.60%	270	9.90%
New Jersey	18,968	1,092	5.80%	168	8.90%
New York	53,613	23	0.00%	4,198	7.80%
North Carolina	37,695	85	0.20%	3,052	8.10%
North Dakota	1,632	23	1.40%	63	3.90%
Ohio	50,554	1,553	3.10%	2,064	4.10%
Oklahoma	27,488	1,183	4.30%	1,317	4.80%
Oregon	14,591	239	1.60%	1,025	7.00%
Pennsylvania	49,051	1,060	2.20%	2,339	4.80%
South Carolina	21,575	483	2.20%	1,735	8.00%
South Dakota	3,627	105	2.90%	221	6.10%
Tennessee	21,030	445	2.10%	2,626	12.50%
Texas	150,569	6,301	4.20%	6,301	4.20%
Utah	6,995	95	1.40%	832	11.90%
Washington	16,554	296	1.80%	806	4.90%
Wisconsin	21,996	96	0.40%	1,363	6.20%
Wyoming	2,074	50	2.40%	110	5.30%
Total	1,049,984	25,363	2.57%	64,976	6.91%

Source: Liman Program and Association of State Correctional Administrators (2015, Table 1).

APPENDIX TABLE A3: Goals and Intended Impacts Associated With Supermax Prisons

Increase prison safety

- Fewer murders of staff and prisoners
- Fewer assaults on staff and prisoners
- Fewer riots
- Less concern and fear among inmates and staff about threats to personal safety

Increase systemwide prison order and control of prisoners

- Greater compliance with rules by prisoners
- Greater and more consistent fulfillment of daily routines and obligations by prisoners
- Fewer disruptions and outbursts
- Fewer lockdowns in general population prisons
- Fewer use-of-force incidents by staff
- Fewer warning shots fired by staff

Improve supermax prisoners' behavior

- More successful reintegration of supermax inmates into other prisons and society
- Greater rule compliance following release from supermax prison
- Less violence following release from supermax prison
- Fewer returns to supermax prisons

Reduce the influence of gangs

- Less gang involvement
- Less intimidation by gang members of fellow prisoners
- Less drug trafficking

Punish violent and disruptive prisoners

- Increase level of punishment for violent and disruptive inmates
- Increase perceived level of punishment among violent and disruptive inmates

Increase public safety

- Fewer escape attempts
- Fewer successful escapes
- Lower recidivism rates among supermax and general population prisoners
- Less crime
- Less fear of crime among residents

Improve operational efficiencies

- Reduce delays for prisoners awaiting placement into some type of segregation
- Reduce costs by operating fewer segregation cells and blocks in different facilities
- Reduce staff time devoted to transporting prisoners from facility to facility

Source: Table reproduced here from Mears and Watson (2006, p. 242).