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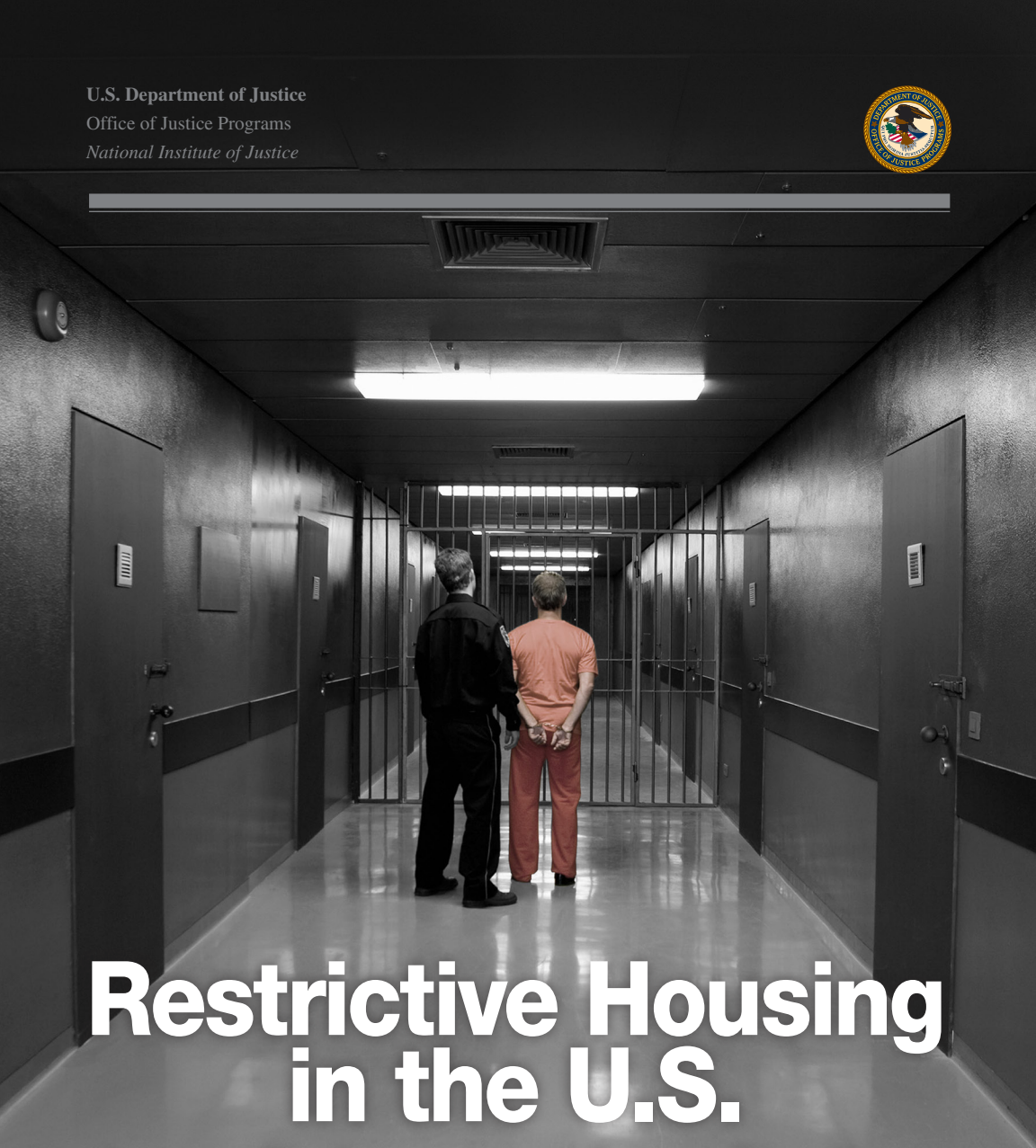

Restrictive Housing in the U.S.

Issues, Challenges, and Future Directions

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Introduction

Nancy Rodriguez, Ph.D.

For almost 50 years, the National Institute of Justice (NIJ) has invested in high-quality, high-impact research across disciplines to build knowledge that serves the needs of criminal justice professionals. Put simply, our mission as the science agency within the Department of Justice (DOJ) is to solve real-world crime and justice problems.

Given the current environment, it is clear that the work being carried out by officials in law enforcement, courts, and corrections is changing rapidly. This makes our work at NIJ even more critical and vital to the criminal justice community. As Director of NIJ, I've had the privilege of outlining and supporting research in key priority areas. Since arriving at NIJ, my commitment has remained the same: to make strategic research investments in areas that directly address the needs of the criminal justice field.

Mass incarceration and its impact on individuals, families, and communities will continue to be a focus of inquiry as we revisit its role and function in our society. NIJ is proud to have supported the National Academies' report, *The Growth of Incarceration in the United States: Exploring Causes and Consequences,* which

presents the blueprint for expanding an evidence base in areas such as the impact of incarceration on justice-involved individuals, on their children and families, and on how the incarceration experience shapes their way of life and re-entry process.

Consistent with this line of inquiry, institutional corrections, and more specifically restrictive housing and other strategies that facilities use to manage and control incarcerated individuals, have become a national priority for President Obama, DOJ, and corrections administrators at the federal, state, and local levels. Restrictive housing, commonly known as solitary confinement or administrative segregation, is a common practice in corrections. A recent national estimate by the Bureau of Justice Statistics reveals that as many as one in five individuals has spent time in restrictive housing while in jail or prison. Despite its use throughout facilities nationwide, we lack the scientific evidence to convey how corrections administrators use this strategy and its impact on incarcerated individuals, staff, and the organizational climate. While there are claims that this correctional strategy increases the safety and well-being of staff and inmates, there is increasing concern about its potential over-use and its effects on incarcerated individuals, especially those with mental illness.

To launch NIJ's dedicated strategic investment in this area, we held a two-day convening on October 22 and 23, 2015, composed of a diverse group of more than 80 experts from federal, state, and local corrections agencies, advocacy groups, academia, and research organizations. This group convened to discuss (1) what we know and don't know about the inmates who are put into this type of housing; (2) the relationship between institutional violence and restrictive housing; (3) issues related to the mental health of inmates, officer and inmate safety and wellness, civil rights, and safe alternatives to restrictive housing; and (4) the gaps in data collection efforts and the existing empirical literature.

Throughout the two days, attendees discussed the research gaps in restrictive housing and debated the multiple policy and practice concerns that currently exist. NIJ greatly appreciates these experts' participation as they shared their individual perspectives and contributed to identifying how best to move forward in developing restrictive housing policies and practices that are grounded in science. Certainly, the most comprehensive understanding of restrictive housing can only come when we consider the various facets that characterize its use and impact and consider how these issues affect our theoretical and practical understanding of this correctional practice.

With this goal in mind, this volume includes 10 chapters on restrictive housing, each with a distinct focus and written by leading experts from various disciplines including criminology, psychology, sociology, and law. The volume represents the most comprehensive review to date of emerging issues and concerns surrounding restrictive housing, including the roles that gangs, violence, and mental health play in the management of individuals in restrictive housing. Most importantly, readers of this volume will also find a strong focus on the conceptual and empirical challenges we face in addressing restrictive housing.

One critical conceptual challenge that readers will notice throughout the volume is the way authors use different, sometimes contradictory, terms to define and discuss this practice. Some authors use terms such as administrative segregation and restrictive housing interchangeably, while other authors carefully differentiate such terms to highlight critical nuances regarding this practice.

As a whole, these chapters offer an innovative perspective for guiding future research in this area and ensuring that our efforts have a strong scientific foundation. Individually, the chapters present an in-depth review of the important features that characterize restrictive housing.

The volume begins with Natasha Frost and Carlos Monteiro presenting a historical overview of the use and effects of administrative segregation. Frost and Monteiro discuss how terminology used to describe administrative segregation policies and practices varies greatly across jurisdictions, making it difficult to compare and monitor the use and impact of this strategy. The authors point to how the increased use of solitary confinement, as opposed to more general segregation, has brought the greatest legal and ethical concerns from the field, especially as it involves youth, gang members, and the mentally ill. They outline the challenges in conducting research on restrictive housing and how to overcome them to conduct research in this space.

The next chapter in the volume, written by Ryan Labrecque, focuses on two integral elements of administrative segregation: its use *and* function within correctional institutions. Labrecque conveys that in order to understand whether administrative segregation is an effective strategy for reducing crime and violence and increasing safety, we need to better understand how this practice is used to manage and control individuals in correctional facilities. His chapter presents the limitations of the current empirical research and makes recommendations for future research.

In the following chapter, Holly Foster presents a thorough synthesis and critique of the literature on the conditions of confinement in restrictive housing. Foster discusses the role that litigation has played in uncovering and addressing concerns raised over the conditions of confinement in restrictive housing. She outlines that additional information about the conditions across different types of restrictive housing practices (i.e., punitive, administrative, and protective segregation) will better inform just and humane policies and practices. Foster discusses how the general population of incarcerated individuals, their families, and society at large may benefit from further research in this area given the spillover effects of restrictive housing as well as individuals' eventual return to communities.

The volume also includes a chapter by David Pyrooz who places theoretical and practical focus on an important element of prison life: gangs. Pyrooz outlines the role that gangs play in prison violence and misconduct, and establishes that restrictive housing is the most common practice used to remove gang affiliates from the general population. While various strategies have been implemented to maintain control and order and develop programming as it relates to gangs and gang affiliates, Pyrooz notes that there is no evidence that any of these strategies are effective. The author highlights the role that hunger strikes at Pelican Bay, *the Ashker v. California* class-action lawsuit in 2012, and the resulting settlement in 2015 have played in bringing attention to this important subpopulation of incarcerated individuals.

In Benjamin Steiner and Calli Cain's chapter, the focus moves to institutional violence and misconduct, that is, how acts of violence and misconduct threaten the safety and order of an institution and how administrative segregation is used to address institutional violence and misconduct. To date, few scholars have examined whether administrative segregation is overwhelmingly used to address violent or at-risk individuals and whether administrative segregation actually achieves its goal of reducing individuals' problematic behavior. The authors present a comprehensive review of the research on the use and behavioral effects of administrative segregation. Importantly, they highlight the leading theories used to explain why administrative segregation is used and the most common elements that predict its use.

Reena Kapoor and Robert Trestman's chapter continues the discussion by addressing another important element of restrictive housing, that is, the role of mental health and the availability of mental health treatment. Kapoor and

Trestman present the latest scientific knowledge on the relationship between mental health and restrictive housing from a variety of disciplines, including the medical, legal, and social and behavioral sciences. At the core of their review is establishing whether restrictive housing causes psychological harm. The authors focus on various behavioral outcomes including suicides, psychiatric hospitalizations, institutional misconduct, and post-traumatic stress disorder. The authors also place this work within the context of consensus statements of major mental health professional organizations and provide insight on future research directions.

In the next chapter, Daniel Mears and Mark Stafford review research on the effects of prolonged time in restrictive housing on individuals and on the institutional environment of correctional systems. The authors argue that any policy discussion on restrictive housing centers on understanding (1) under which circumstances it is appropriate to use restrictive housing, (2) whether its use leads to improved outcomes for individuals and the broader institution, (3) and when it is inappropriate and produces adverse effects. Mears and Stafford conclude that the evidence base that establishes the effectiveness of restrictive housing is very thin. In fact, the lack of consistent findings from existing research has shown that there may be benefits to its use, including improved behavioral outcomes, as well as harms such as worsened mental health or increased recidivism. The authors conclude by identifying prominent gaps in research that need attention.

The chapter by Jody Sundt applies an organizational perspective to examining the effects and the use of administrative segregation. The author presents research on the effectiveness of administrative segregation as a management strategy as well as its effect on prison organizational culture. Sundt outlines a research agenda to develop knowledge around how to use this correctional strategy to maintain secure and humane institutions. The organizational and management framework provides an important theoretical perspective to better understanding the effects of this practice.

Paula Smith's chapter discusses the availability of programming and re-entry-focused services in restrictive housing. The author presents the challenge in balancing the need to provide effective treatment to disruptive individuals in crowded settings with maintaining safety and control within the institution. Restrictive housing is presented as one of several options in a continuum of placement options within institutions. In the end, identifying the most

effective ways to ensure that programming and a long-term treatment plan for all individuals who are incarcerated is vital. Guidelines and best practices for correctional agencies, such as the one presented in the DOJ's 2016 *Report and Recommendations Concerning the Use of Restrictive Housing,* provide a start.

This volume concludes with Fred Cohen's legal analysis of the use of restrictive housing in correctional facilities throughout the country. The analysis includes discussions on the due process implications of disciplinary segregation, administrative segregation, and protective custody, as well as the Eighth and 14th Amendments and how they apply to the use of restrictive housing. Cohen also presents the legal implications of the conditions and duration of confinement, youth in restrictive housing, and the confinement of the mentally ill. This particular chapter thoroughly presents the significant court decisions in this area and outlines the impact they have had on the current practice.

In sum, these chapters provide a comprehensive look at what we currently know about the use of restrictive housing in U.S. correctional facilities and the effects of this practice on incarcerated individuals, corrections staff, and the institution as a whole. Just as important is what this work tells us about what *we do not know* about this practice, its effects, and potential alternatives. As a collection, these chapters enable us to develop a future research agenda to further expand our knowledge of this important correctional strategy and identify evidence-based solutions to the challenges currently presented by restrictive housing.

A volume of this breadth would not be possible without the concerted effort of many people. I want to thank the attendees of NIJ's two-day restrictive housing convening. These experts were generous with their time and knowledge, and they helped build the foundation of this effort. My sincere appreciation goes to the contributing authors because of their insight, expertise, and dedication to this important issue. Finally, this volume would not exist without the steady guidance of Marie Garcia. This work was her inspiration, and her hard work and dedication made it possible.

NIJ remains committed to investing in high-quality, multidisciplinary science to address the challenges faced by policymakers and criminal justice professionals working within corrections. I hope readers find this volume both informative and helpful in providing potential ways forward on the use and impact of restrictive housing.

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CHAPTER 1

Administrative Segregation In U.S. Prisons

Natasha A. Frost, Ph.D., & Carlos E. Monteiro, Ph.D.
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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 prison population, is expected to end CDCR's practices of indefinitely housing inmates in supermax confinement 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 is more common. The California settlement was announced amid a more general and growing concern about the practice of solitary or near-solitary confinement through administrative segregation.

In a July 2015 speech before the National Association for the Advancement of Colored People (NAACP), President Barack Obama questioned the practice of

solitary confinement by calling for a Department of Justice 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 (U.N.) passed the Mandela Rules, which represent the first modification to the U.N.'s standards for 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 ACLU chapters have published 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.

There is growing concern across the political spectrum 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 then-chief judge of the Third Circuit Court of Appeals, John J. Gibbons, and the former U.S. Attorney General, Nicholas de B. Katzenbach, noted that the rapid

[1] Although President Obama has called for a Department of Justice 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 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, with the cooperation of the Federal Bureau of Prisons, conducted an independent assessment (McGinnis et al., 2014).

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 those misconceptions are the common beliefs 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 brightly 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 in restrictive housing units is sometimes solitary. Whether they involve complete solitary confinement or not, restrictive housing units are intended to offer a more secure housing alternative for those who cannot be safe toward others, kept safe, or 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 restrictive housing units. As a result, this paper does not use "administrative segregation" as an umbrella term, instead opting for either *segregation* or *segregation in restricted housing*. Where possible, the paper

distinguishes between solitary confinement through *disciplinary segregation* and solitary confinement through *administrative segregation*. The former refers to short-term confinement after a specific infraction, and the latter refers to long-term classification to a supermax unit or facility within a correctional system. Most of the paper's early discussion focuses on administrative segregation (rather than disciplinary segregation), but when the paper begins discussing the empirical research, it refers more broadly to the practice of solitary confinement (whether in disciplinary or administrative segregation units). Although not all units and facilities used for disciplinary and administrative segregation follow a strict regimen of solitary confinement, this paper primarily describes the empirical research that has been conducted in settings that do follow such a regimen, 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 challenges that accompanied the rapid growth of 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. Administrators using the dispersion model 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 consolidation, the inmates 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 system between 1970 and 1980. After the rate 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 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 the increase in prison violence troubled correctional administrators, correctional historians often point to the 1983 killing of two correctional officers at Marion as the trigger for the revival of total lockdown units and facilities (King, 1999; Pizarro & Stenius, 2004). In the immediate aftermath of those 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 whenever an inmate was not in the cell area, and 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, in *Bruscino v. Carlson*, a federal court opined that BOP had not violated inmates' constitutional rights (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 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 units 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, entire sections of existing facilities were repurposed to segregate the inmates deemed the worst of the worst (Butler, Griffin, & Johnson, 2013). Although the clear general consensus is that supermax facilities are designed to isolate offenders who require the highest and most restrictive security classification, there is no universally accepted definition (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

about 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 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, units classified as supermax 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). A national survey of state wardens (Mears & Castro, 2006) found that more 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 gives rise to the first of many challenges to conducting research (or interpreting 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 restricted housing for disciplinary segregation or protective custody and temporary or long-term supermax 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 primarily for security and safety within the facility or across the correctional system.

There are at least three distinct types of segregation: 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 — their placement in segregation is sometimes voluntary. Solitary confinement for a specified period to punish misbehavior is generally referred to as disciplinary or punitive segregation. Disciplinary segregation is typically imposed as a sanction following a disciplinary hearing related to a specific instance of misconduct. It is crucial to note that 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 inmates deemed

to pose a significant threat to institutional security from the general population. Inmates are often classified or transferred to administrative segregation 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 tend 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 imposed 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 does placement in 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). With several pathways into the various restrictive housing units and different trajectories once there, one could anticipate substantial variations not only in prevalence but also in psychological and behavioral effects on inmates across restrictive housing types.

Solitary Confinement Versus 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 practice is the isolation of inmates for 22-24 hours per day in small cells, with minimal contact with others, in areas of the facility designed for the purpose of restricting inmates' movement. Other distinct features include reduced natural light; limited artificial lighting; little or no access to programming, classes, reading materials, or radio and television; and restrictions on visits from friends and family (American Civil Liberties Union, 2014). Although researchers tend to be most interested in this type of custody, 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.

[2] A good example is BOP, which has refused to acknowledge that it uses solitary confinement. The recent U.S. Government Accounting Office 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).

Prevalence of Administrative Segregation

Given the paucity of data on solitary confinement through administrative or disciplinary segregation, both types are difficult to quantify with any precision. 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 that somewhere between 1 percent and 3 percent of the total correctional population was 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 Accountability Office, 2013). At the federal level, administrative segregation covers three distinct types of restrictive housing (see Appendix Table A1) which BOP refers to as special housing units (SHUs), special management units (SMUs), and administrative maximums (ADXs). All three types of administrative segregation share the same purpose: 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. Government Accounting Office (GAO) (2013) reviewed the use of administrative segregation across the federal system. According to the 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 (approximately 16 percent) were in SMUs, and the ADX facility housed approximately 450 inmates. The GAO report found that per-capita cost estimates for housing inmates in segregation were higher than in nonsegregated or general population housing. Specifically, the GAO report found that, for fiscal year 2012, the total cost of housing 1,987 inmates in SMUs was $87 million (it would have cost approximately $42 million to house those same inmates in a medium-security facility; $50 million in a high-security facility).[4]

In addition to prevalence estimates from reviews of the federal system, staff of the Liman Program and the Association of State Correctional Administrators (ASCA) recently collaborated on a survey of correctional systems directors

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

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

across 46 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 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 approximately 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) in 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 period, and 42 jurisdictions reported no maximum duration after which prisoners must be released into the general population. The survey also focused on the number of consecutive days spent in administrative segregation. Of the 24 jurisdictions reporting system wide 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).

A recently published Bureau of Justice Statistics (BJS) special report also provided more recent estimates of the extent of the use of restrictive housing across U.S. prisons and jails (Beck, 2015). Using 2011-2012 data from the National Inmate Survey, Beck (2015) provided a detailed accounting of the housing status of inmates, including measures of time spent in restrictive housing during their past 12 months. Beck notes that roughly 20 percent of prison inmates and 18 percent of jail inmates had spent time in restrictive housing during the past 12 months and that restrictive housing rates correlate with common predictors of prison misconduct (such as age and prior criminal history). One of the most important findings in this special report is that facilities with higher rates of restrictive housing tended to have higher levels of facility disorder and a larger proportion of vulnerable inmates (inmates with mental health problems; lesbian, gay, and bisexual inmates; and younger inmates) in their populations.

Issues Related to the Use of Solitary Confinement

Some of the most controversial issues related to the use of solitary confinement involve its use among special populations, most notably young people but also suspected or known security threat group members and mentally ill inmates.

[5] It should be noted that California, one of the largest prison systems in the country, did not respond and, therefore, is not included in the Liman Program/ASCA report.

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 young persons come 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 young 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 is known about juvenile solitary confinement comes from either the national Survey of Youth in Residential Placement (SYRP) or reports authored by advocacy organizations such as Human Rights Watch and the ACLU (Human Rights Watch & American Civil Liberties Union, 2012; Sedlak & McPherson, 2010). In the recent SYRP, almost one-third of all young persons in custody reported having spent time in solitary confinement, with more than half of those reporting having spent more than 24 hours there (Sedlak & McPherson, 2010).

In recent years, legislatures have been particularly active in the issue of solitary confinement of young persons (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 solitary confinement of young persons in 2012; Nevada and Oklahoma passed restrictions on the solitary confinement of young persons in 2013; and a slew of states, including New York, banned solitary confinement of young persons in 2014 (Hager & Rich, 2014). After several scathing critiques of the treatment of inmates in New York City's Rikers Island jail in early 2015, the New York City Department of Corrections announced, in one of the most sweeping decisions, that it would no longer allow solitary confinement of anyone 21 years of age or younger (Winerip & Schwirtz, 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 between a group of inmates incarcerated at Pelican Bay and 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), segregation of confirmed or suspected gang members is among the most criticized of practices because there is no clear endpoint to the isolation. Some inmates classified to administrative segregation for known or suspected gang affiliations have spent

decades in isolation units (Baker & Goode, 2015). The decision to release almost all gang members currently held in solitary confinement in California will result in the release of almost half of inmates incarcerated in secure housing across the state. It is not yet clear what impact, if any, the settlement will have on other jurisdictions that routinely incarcerate known or suspected gang members in administrative segregation.

Mental Illness and Solitary Confinement

Although precise numbers are hard to come by, some have argued that most inmates who are placed into solitary confinement are mentally ill (Toch, 2001). By virtue of their illness, these individuals may have trouble conforming to institutional rules and accrue more disciplinary misconduct sanctions (Kurki & Morris, 2001). The Bureau of Justice Statistics (BJS) has reported that close to 45 percent of federal inmates and more 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: approximately 16 percent of prison inmates were 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 (2008) 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 inmates were suffering from serious mental illness. Lovell and colleagues (2000) earlier used similar methods to find serious mental illness among approximately 13 percent of general population inmates (Lovell et al., 2000). Cloyes and colleagues (2006) 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." Many researchers have used similar statistics to argue that inmates with mental illness are more likely to be placed in solitary confinement.

The courts have been particularly active in the issue of confining mentally ill inmates 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

It is beyond the scope of this paper to comprehensively review all court cases and legal decisions relative to the use of solitary confinement; therefore, a review of only a small sampling of the more significant and directly relevant court decisions and consent decrees are presented (for a comprehensive review, see Collins, 2004).

The most notable litigation that addresses 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 mentally ill inmates into facilities that use solitary confinement for extended periods.

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. The primary complaints *Bruscino v. Carlson* (1988) were related to arbitrary placements, conditions of confinement, extended solitary confinement, use of force, and cavity searches. The U.S. 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 [is] 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) 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."

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

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[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 afforded to 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 advance written notice of charges, an advance written statement of evidence on which the determination will be made, and the right to call witnesses and present evidence.

> *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 inmates with mental illness was clear, the Court was less definitive when it came to inmates not suffering from mental illness; it noted, "while the conditions in the SHU may 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 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. The Court continued to monitor the case for more than a decade until, finally satisfied that the conditions had been remedied, it dismissed the case in 2011 (Simon, 2014).

Other prison systems have drawn the attention of the courts as well. In *Ruiz v. Johnson* (1999), the administrative segregation units of the Texas Department of Corrections came under judicial scrutiny, and the federal courts came close to declaring that solitary confinement in administrative segregation is 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, and other states (see Fathi, 2004).

Although the court in *Ruiz* came close to ruling solitary confinement unconstitutional, it can be said with confidence that this country is moving toward a general consensus (as illustrated by various court decisions, consent decrees, and settlement agreements) that these environments are not appropriate for inmates with mental illness 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, there have been several notable, recent congressional and legislative hearings related to the use of solitary confinement.[7] In June 2012 and February 2014, the U.S. Senate Judiciary Subcommittee on the Constitution, Human Rights, and Civil Rights held two hearings on the use of solitary confinement.[8] Several notable legislative hearings have also been held in California, where conditions of confinement in general and administrative segregation in particular have been the focus of ongoing litigation. The California State Assembly and Senate Public Safety Committee held two hearings on CDCR's use of solitary confinement.[9] As noted, 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, however, is far from universal. The most obvious division is between scholars (who study either incarceration in general or solitary confinement in particular) and

[7] Written and oral testimony, as well as video recordings of the hearings discussed in this section, can be accessed on the advocacy group Solitary Watch's website (http://solitarywatch.com/).

[8] The hearings, "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 activists against the practice (Solitary Watch, 2015). See https://www.judiciary.senate.gov/imo/media/doc/CHRG-112shrg87630.pdf

[9] Both hearings before the California Assembly focused on CDCR's proposed reforms to inmate segregation policies and to the use of secure housing units.

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 minimizes threats to institutional security (Butler et al., 2013; O'Keefe, 2008). A recently published study that reviewed official policies across 42 states reported that 98 percent of the states identified the catch-all term "threats to institutional security" as a justification for placement in administrative segregation (Butler et al., 2013). The most commonly noted threats to institutional security that trigger 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 the dearth of empirical evidence demonstrating effectiveness, those charged with running correctional facilities overwhelmingly believe that administrative segregation achieves its aims (particularly as 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" (Mears & Castro, 2006, pp. 407, 409). Those who argue for the effectiveness of administrative segregation units and supermax facilities often base their arguments on appeals to the self-evident rather than on an evidence base (Sundt, Castellano, & Briggs, 2008, p. 115). Noting that these units and facilities house the worst of the worst, proponents of the practice 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 that support even if there was no associated public safety benefit. Moreover, there appears to be little public support for the notion that these facilities are inhumane: 70 percent of those surveyed said that they did not consider supermax facilities to be 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 increasing prison safety, increasing systemwide order and control of prisoners, improving the behavior of violent and disruptive prisoners, reducing gang influence, punishment (of violent and disruptive prisoners), increasing public safety, and improving the efficiency of correctional system operations. Although some are easier to operationalize than others, any of these intended impacts could be evaluated. In their 2006 article, Mears and Watson even offered measurable indicators for each "performance measure," (see Appendix Table A3), which may prove useful to those seeking an evaluation framework. Mears and Watson also offered observations about some unintended potential impacts (both positive and negative). Finally, they raised questions related to the mechanisms by which supermax confinement is expected to achieve these goals; identified barriers to achieving them; and offered some moral, political, and fiscal dimensions that should be considered in any comprehensive assessment of supermax prisons.

When Mears (2008) attempted 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 seem to be few. Correctional administrators often feel that 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 — lament the lack of options at their disposal for those inmates who are truly dangerous to both the prison staff and other inmates. Rick Raemisch, executive director of the Colorado Department of Corrections, spent 20 hours in solitary confinement to understand the experience and has worked to significantly reduce its use in the Colorado system but 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." He 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

It is difficult to determine with any degree of precision the prevalence of the use solitary confinement through administrative or disciplinary segregation across U.S. correctional systems (Naday et al., 2008). Perhaps not surprisingly, there are few accurate estimates 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 the estimates of violence within correctional institutions come from victimization surveys and research. Wolff and colleagues, for example, reported in their study of inmates incarcerated in 1 of 14 institutions in a mid-Atlantic state that more than 20 percent of inmates reported being the victim of physical violence in the previous six months (Wolff et al., 2007). It is important to note that although rates of victimization were roughly equal for male and female inmates, prevalence rates of victimization varied substantially across facilities (even within this state's correctional system). Although there are little hard data 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 Colorado suggested that those housed in administrative segregation incurred 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). In his study of supermax inmates in Washington that focused on inmates suffering from mental illness, Lovell (2008) found that these inmates had substantially higher infraction rates and that many of those 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 infracted for mutilating themselves, usually two or three times* (p. 990).

In addition to the work on levels of violence committed by inmates sent to segregated housing, some effort has 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 resulted in lower levels of violence across correctional systems. In their discussions of the effects of court-ordered changes in 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. The authors of both studies looked back at declines in violence and speculated that increased reliance on segregation might be a cause. More recently, researchers have assessed the impact of administrative segregation on levels of prison violence by using more sophisticated research designs; those researchers 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). 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 related to inmate-on-staff violence were mixed, with no effect found in Minnesota, decreased inmate-on-staff assaults in Illinois, and a counterintuitive, temporary increase in staff injuries in Arizona (Briggs, Sundt, & Castellano, 2003). Briggs and colleagues (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).

Sundt and colleagues (2008) used a quasi-experimental interrupted time-series design to examine 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. They found that the opening of the supermax facility did not significantly affect 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 facility was built, the results are not particularly generalizable to other states (Sundt et al., 2008). Over all, 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, like so many factors related to the use of administrative segregation, this remains an open, empirical question.

More recently, Wooldredge and Steiner's (2015) research examined the extent to which misconduct levels in prisons are driven by the effects of inmate population composition (concentrating the highest risk inmates in particular facilities) versus by the prison's organizational context (tighter institutional security and control). In their macro-level analysis of 247 state-operated prisons across the country, using both official and self-reported data collected through inmate surveys, Wooldredge and Steiner's (2015) multi-level models revealed that compositional effects were more influential than contextual effects in shaping behavioral outcomes. The authors reported that inmate population composition characteristics (demographics, social demographics, and criminal histories) were more important than administrative and contextual controls (classification, security, supervision, expenditures, and punishment philosophies) for understanding differences in prison misconduct levels. In essence, the results suggest that coercive controls do not necessarily promote lower levels of violence within facilities, and that the concentration of high-risk populations typically drives violence levels. Although this was only a partial test of the authors' full thesis, the results are consistent with other studies that have identified compositional effects as more significant indicators of violence levels.

The Effects of Solitary Confinement

Psychological Effects of Solitary Confinement

Two types of studies of the psychological effects of isolation have been used: qualitative studies that focused on providing rich descriptions of the effects of the experience on inmates who have typically spent considerable time in solitary confinement (often having spent many years incarcerated in isolation), and

quantitative studies of such effects among larger groups of inmates, sometimes using matched comparison or control groups, but typically focusing on inmates in disciplinary units or those serving shorter terms in administrative segregation.[10]

The only clear statement that can be made about the body of literature that assesses 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; these scholars strongly believe that the experience can have lasting and substantial damaging psychological effects. The most well-known findings about 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 who were in the process of challenging the conditions of their confinement in a lawsuit against the Massachusetts Department of Corrections. 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 a case-study approach across a variety of settings have similarly documented far-reaching and long-lasting psychological effects (for more comprehensive 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).

[10] Although rarely acknowledged, the research on psychological or psychiatric effects 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 it to say that 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).

A substantial body of work has shown 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 studies, 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 whether the populations who were the subjects of study across this body of research are representative of inmates experiencing administrative segregation more generally. Although Haney is confident in his assertions about the psychological effects of long-term solitary confinement, other research involving in-depth case studies has reached the opposite conclusion in terms of the psychological effects of shorter-term solitary confinement.

In an early study of the experience of just four inmates, Suedfeld and Roy (1975) argued that short-term solitary confinement (ranging from one week to 30 days) was beneficial to those inmates and resulted in a lower incidence of violence, aggression, and self-injurious behavior, as well as improved adjustment. In later work involving a much larger group of inmates incarcerated in five facilities across the United States and Canada, Suedfeld and colleagues again found "no support [for] 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 pertaining to psychological effects of segregation. Bonta and Gendreau (1990), for example, argued that there is little evidence 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 (one 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 in earlier psychological research about the effects of solitary confinement, the authors hypothesized that inmates who had served time in administrative segregation would experience aggravated psychological symptoms while in administrative segregation, exhibit deteriorating mental health over time (with that effect exacerbated among those with preexisting mental health issues), and experience greater mental health deterioration than would those in comparison groups of inmates who had not served time in segregation.

The researchers collected data through a series of interviews with 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 was borne out by their data (O'Keefe et al., 2011). Inmates in administrative segregation exhibited more mental health issues than did "normative adult samples," but there were few differences between inmates in administrative segregation and those in comparison groups. In other words, the researchers documented elevated levels of mental health problems across both groups, but those problems were not significantly more pronounced among those in administrative segregation. Moreover, although inmates in administrative segregation initially exhibited signs of elevated psychological distress, those signs tended to dissipate over time. Psychological problems tended to decrease between the first and the second testing period, which was true across both groups, not just for the group in administrative segregation. Finally, the researchers reported that inmates with mental illness demonstrated greater psychological impairment across all groups, not just in the segregated setting, and did not deteriorate more rapidly than initially predicted (O'Keefe et al., 2011).

Perhaps the most interesting finding of O'Keefe and colleagues' Colorado study was not that time in administrative segregation had no deleterious effect 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 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, & Hernon, 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 impact (Grassian & Kupers, 2011; Rhodes & Lovell, 2011; Shalev & Lloyd, 2011). The various critiques had some merit but, as Gendreau and Theriault (2011) noted, the type of work represented in 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 — 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 a key distinction among 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; whereas researchers who find no convincing evidence of distress have tended to study inmates held in solitary confinement for far more abbreviated periods (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, the researchers have been experts, retained on behalf of inmates who were filing claims against departments of corrections, preparing for written or oral testimony for cases to be heard in state and federal courts.

Behavioral Effects of Solitary Confinement

Some 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 have typically studied inmates who 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, 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 who were incarcerated for at least one year between 2007 and 2010 and experienced at least one instance of solitary confinement in an Ohio Department of Corrections facility. The study focused solely on inmates who had experienced solitary confinement. Those inmates represented approximately 21 percent of the inmates in the overall sampling frame covered by the period. Labrecque (2015) 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).

Labrecque (2015) included in his assessment all of the various types of misconduct, finding that an experience of solitary confinement had no effect on subsequent levels of misconduct, and that the duration of solitary confinement also had no effect on subsequent institutional misconduct. Labrecque concludes "that neither the experience of [solitary confinement] nor the number of days spent in [solitary confinement] had any effect on the prevalence or incidence of the finding of guilt for subsequent violent, nonviolent, or drug misconduct" (Labrecque, 2015, p. 122). Labrecque's findings related to institutional outcomes suggest that such confinement neither decreases nor increases subsequent institutional misconduct and add to the growing body of literature that suggests that solitary confinement has few demonstrable effects on behavioral outcomes for those exposed to it.

Morris (2015) recently studied the effect on violence of short periods of solitary confinement after misconduct. 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 inmates 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, engage in violence more quickly than would those not exposed, and exhibit more antisocial tendencies than would those in the control group. Morris' results indicated that "on average, the initial experience with [solitary confinement] alone (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. These findings suggest neither a positive nor negative relationship between solitary confinement and subsequent violent behavior, nor for misconduct in general (following 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 effort to isolate the effect of solitary confinement on subsequent behavior (in this case, subsequent violence). The study overcame

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

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 inmates sentenced to solitary confinement in disciplinary segregation for a relatively short period; it cannot speak to behavioral effects of longer-term confinement or to confinement for purposes other than punishment. That research has yet to be conducted.

The effects of solitary confinement on recidivism outcomes

Some effort has 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 who had been released from restrictive housing were later returned to such custody. They found that only 3 percent of prisoners who had returned to the general prison population from Alcatraz and 16 percent of prisoners returned to the general prison population from Marion were returned to higher custody. Less than half of those who returned to higher custody were returned for violent or assaultive behavior. The post-release outcomes for inmates incarcerated in federal supermax facilities suggest that 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 in supermax custody in a northeastern state in 2004. They found that the covariates for these inmates were almost identical to those for inmates in general. Supermax inmates who recidivated tended to be younger, have more extensive criminal histories, and were more likely to have histories of disciplinary misconduct than were 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 supermax facilities 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, 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 the recidivism rates of supermax inmates (compared with their matched controls), significantly higher recidivism rates were found

among inmates released directly from supermax confinement to society (Lovell, Johnson, & Cain, 2007). In other words, inmates held in supermax confinement until the day of their release offended more quickly and more often than did their counterparts who had either never served time in supermax confinement or had been returned from supermax confinement to the general population at least three months prior to their release. The supermax inmates released directly to society also differed from the others in that they tended to be younger and to have more extensive criminal histories (beginning at an earlier age). Because age and criminal history are among the most significant predictors of recidivism, Lovell and colleagues (2007) matched by age and criminal history direct-release inmates with those who were returned to the general population at least three months prior to release. Although there were differences between the groups, when matched on age and criminal history, these differences were not statistically significant. The authors attribute the nonsignificance in part to the small sample sizes of the two groups. It is equally 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 to be definitive in any way because of the nonexperimental retrospective research design and small sample size when a matched control group was incorporated.

A second study that examined the impact of supermax confinement on recidivism in Florida added to the evidence that supermax incarceration might have negligible effects on post-release recidivism (Mears & Bales, 2009). 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 confinement were much more likely to recidivate were those who had not. However, and crucially, when they compared supermax inmates with a PSM control group, almost all of the differences in recidivism disappeared (only violent recidivism remained 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 the duration and recency of supermax confinement at the time of release. 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 inmates who were released directly to society might be at elevated risk for recidivism, Mears and Bales found no such evidence among Florida supermax populations.

Meta-Analyses

Two teams of scholars have recently conducted meta-analyses. Meta-analyses 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 identified by the authors, 70 percent had been published in the past 15 years and only 14 could be included in the meta-analysis (in other words, approximately 90 percent of the studies did not meet the inclusion criteria). Their meta-analytic review found only weak effects of solitary confinement on inmate outcomes (most of which were psychological). The team 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 that employed weaker research designs produced stronger effects than those employing more rigorous research designs (Gendreau & Labrecque, 2015). A second meta-analysis (Morgan et al., 2016)reported similar results, leading Labrecque (2015) to conclude that the findings from recent meta-analyses "cast some doubts about [solitary confinement] 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 [solitary confinement] too hastily, especially when they are based on qualitative rather than quantitative evidence" (Labrecque, 2015, p. 6).

The Future of Administrative Segregation

It may come as a surprise that the research described in the previous three sections of this paper represents the bulk of the published empirical research related to the use of administrative segregation in U.S. prisons. The research findings can be described in a relatively short white paper, which suggests that considerable 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, and not only exacerbates inmates' existing mental health problems but also may create 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 of a few inmates incarcerated for long periods, usually in supermax settings.

Correctional administrators charged with day-to-day prison operations 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 is necessary for the safety and security of the entire correctional system. Although the evidence supporting enhanced institutional or systemwide safety and security as a result of the proliferation of restrictive housing units is thin, many correctional administrators strongly believe that segregation has had positive effects. The public tends to agree. 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 either a harmful or necessary approach. These scholars typically point to the lack of an evidence base, noting that contradictory findings 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 evidence that the practice achieves its intended or stated goals is equally lacking.

Although all three perspectives were given consideration, this paper focused on describing the empirical evidence, regardless of the perspective from which the evidence emerged. To be clear, the authors of this paper 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 in restrictive housing units across the United States more broadly. Throughout this white paper, the authors have remained cognizant of the numerous types of confinement that fall under the administrative segregation umbrella and have not focused exclusively on the most extreme versions of the practice. After a thorough review of the extant literature, it is clear that even today, the questions continue to be many and the answers few. 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. Moreover, 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 body of literature replete with highly charged emotions, interpreting the evidence and separating research evidence from strongly held beliefs have become exceptionally difficult.

This white paper turns now to some recommendations for future research. These recommendations are offered not to provide definitive answers but to launch an important conversation about the future of research on segregation in restrictive housing units. 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

This review of the empirical evidence reinforces what many have been arguing for many years: We know surprisingly little about the use of solitary confinement and its effects, particularly given the speed and extent to which the practice of segregating those deemed to be the worst of the worst in restrictive housing units has proliferated across correctional systems.[12] Indeed, the most concise summary would likely say that, although the jury is still out, there may be some potentially devastating psychological effects on inmates in restrictive housing (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 that most 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 administrative segregation has demonstrably achieved specific aims (Mears & Watson, 2006; Mears 2008). It is equally important to note that despite a growing body of literature on correctional officer stress and wellness, we know almost nothing about the potentially differential effects of working in restrictive housing units on health and safety outcomes for correctional employees.

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

There are relatively few well-designed quantitative studies of the effects of administrative segregation, and those have tended to produce either null or inconclusive findings. 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 an 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

[12] Although evidence of 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) acknowledged 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).

reaches any definitive conclusions about 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 inmates with mental illness, 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 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 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? Can some inmates develop survival strategies that might help them become more resilient, mitigating the potentially damaging effects?[13] The list of potential questions is endless. The key to the future of research on administrative segregation involves generating agreement on the right questions to ask and the most appropriate methods for answering those questions.

Future Directions — Research and Funding Priorities

Given that some inmates spend months, years, or 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, in part, as a result 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.

[13] See O'Donnell (2014, 2016).

Establish agreed-upon definitions

With increasing calls for a hard look at solitary confinement and segregation in restrictive housing, initial steps toward 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. A review of the voluminous literature makes it 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. In the correctional world, however, the term "administrative segregation" is sometimes used as an umbrella that covers many 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, and 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 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 on the prevalence of confinement in the various types of restrictive housing 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. Consider, for example, the federal system. Most in the field are familiar with the ADX-Florence facility, the federal supermax facility that 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 inmates 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 versus 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 empirical evidence, though, makes clear from the limited studies conducted to date that there is little good empirical evidence that time spent in isolation has demonstrable negative effects on psychological or behavioral outcomes for most inmates subjected to it. As this debate continues, however, a crucial distinction must be drawn between time-limited segregation imposed for an infraction or series of infractions (typically referred to as disciplinary segregation) and long-term segregation for management of prison populations (typically referred to as either supermax incarceration or administrative segregation).

It seems imperative that future research distinguishes 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 (as Haney and Grassian have done for many years). There are both qualitative and quantitative differences between incarceration in a cell for 23 hours per day for one to 90 days and being held under such conditions for months and years on end. Those who decry the inhumane character of solitary confinement typically point to the latter. They present devastating portraits of the relentless anguish and serious deterioration suffered by some inmates incarcerated for years on end in supermax facilities. However, those effects might not be representative — and certainly might not be reflective — of those confined for short periods as a more immediate behavioral management approach. That is not to say that the short-term solitary confinement of inmates is not harmful, but if it is harmful, we do not know to whom it is harmful or the circumstances in which 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 such as 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

This paper would be remiss if it did not note that a major reason for the lack of an evidence base related to solitary confinement is 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.[14]

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. The authors of this paper 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. Doing so will require allowing independent researchers access not only to data pertaining to use of these units but also unfettered access to the inmates being housed within them. This is easier said than done. There are legitimate safety and security concerns 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. Studies 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). Therefore, it is highly recommended that funding be reserved for research that can control for selection effects.

[14] As Kurki and Morris (2001) concluded at the end of their review of the thin research base for 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).

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 there was minimal evidence that such facilities were necessary, no evidence that they were designed on a sound theoretical base or were cost-effective, and minimal evidence 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 seven years later.

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. 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 any 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 upon 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 correctional employees or the psychological well-being of inmates in the care of departments of corrections.

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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:	• Number of cells: 7,381 • Population: 10,050 • 5.7% of BOP inmates	• Number of cells: 1,270 • Population: 1,960 • 1.1% of BOP inmates	• Number of cells: 623 • Population: 450 • 0.3% of BOP inmates
Confinement conditions:	• 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.	• 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.	• Nearly all single cells. • Inmates eat all meals inside cells.

Compiled from Figures 1 and 2 in the GAO 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) ($n = 34$) (continues next page)

	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%

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

	Total	Ad Seg	% of Total	All Restrictive Housing	% of Total
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 inmates.
- Fewer assaults on staff and inmates.
- 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 inmates.
- Greater and more consistent fulfillment of daily routines and obligations by inmates.
- 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 prison.

Reduce the influence of gangs:

- Less gang involvement.
- Less intimidation by gang members of fellow inmates.
- 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 inmates.
- Less crime.
- Less fear of crime among residents.

Improve operational efficiencies:

- Reduce delays for inmates 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 inmates between facilities.

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

CHAPTER 2

The Use of Administrative Segregation and Its Function in the Institutional Setting

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Introduction

Administrative segregation — often referred to as solitary confinement — involves housing an inmate in conditions characterized by substantial isolation from other inmates (American Bar Association, 2011). Administrative segregation is the prison system's answer for dealing with serious inmate misbehavior within the institution, in the same way that incarceration is society's solution for dealing with dangerous criminals in the community. From this perspective, administrative segregation represents a form of detention within the institution — *a prison within the prison* (Browne, Cambier, & Agha, 2011). The historical origins of this practice trace back to the silent penitentiaries in the early 19th century, where inmates were subjected to extreme forms of social isolation and sensory deprivation (Rothman, 1998a). The function and extent of the use of administrative segregation have since undergone several changes in the United States, from serving as the main reformation strategy for entire prison populations to being used as a risk-management tool aimed at removing select inmates from the general prisoner population (Shalev, 2009). There is a widely held belief among policymakers and corrections officials that

using administrative segregation makes prisons and communities safer (see Mears, 2013). However, those critical of the practice contend that administrative segregation is an overused correctional policy, which has many damaging effects on inmates (Cloud, Drucker, Browne, & Parsons, 2015; Haney, 2012a) and staff (Ferdik, 2015; Haney, 2008).

Beginning in the mid-1980s, there has been an increased amount of scholarly attention given toward the study of administrative segregation (O'Keefe, 2008). The majority of the available research is qualitative in nature and includes interviews with inmates and mental health professionals in administrative segregation settings (Labrecque & Smith, 2013). As a group, these anecdotal reports tend to use powerful excerpts from these interviews to suggest that administrative segregation violates prisoners' constitutional rights, contributes to psychological problems, increases criminogenic risk, and is used excessively in the United States (e.g., Fellner & Mariner, 1997; Haney, 2009; Kupers, 2008; Lovell, 2008; Toch, 2003). Subsequently, there is a strong consensus in the literature, as well as a growing public sentiment, that administrative segregation is responsible for producing these devastating effects (e.g., Bauer, 2013; Gawande, 2009; Goode, 2012; Guenther, 2012; Keim, 2013). These perceived negative effects have helped make this practice an issue of national prominence for correctional administrators.

Although administrative segregation is widely used in many jail and prison systems throughout the United States, it also remains an elusive subject of scholarly research (Smith, Gendreau, & Labrecque, 2015). From an empirical standpoint, very little is known about the extent of the use of this policy or its effects on inmates and staff in the correctional environment. Likewise, there is a need to better understand if administrative segregation is an effective strategy for reducing crime and promoting justice. This white paper aids in this endeavor by examining the use and function of administrative segregation in institutional settings in the United States. More specifically, this paper synthesizes the literature on how administrative segregation is used to manage and control inmates in correctional facilities, discusses the limitations of the current empirical research, and makes recommendations for future research. The process for locating relevant studies for this paper included searching several databases (e.g., Criminal Justice Abstracts, Google Scholar, National Criminal Justice Reference Service) followed by an ancestry approach, where the reference lists of each identified study were used to locate additional studies.

Definitional Challenges and the Importance of Terminology

Policy evaluations must begin by defining which specific strategy or intervention is being tested (Rossi, Lipsey, & Freeman, 2004). However, there is no universally agreed-upon definition of what constitutes segregated confinement

(Butler, Griffin, & Johnson, 2013). A review of state and federal administrative segregation policies reveals that, in practice, segregation settings are referred to by a variety of names, including "Security Housing Units," "Restricted Housing Units," and "Intensive Management Units."[1] It is likely that correctional agencies consciously choose the names of their segregation units to reflect the underlying notion of what purpose they believe the practice should serve. This idea about terminology and function has been raised elsewhere — under different circumstances — for example, when Hans Toch (1978) questioned whether or not a "correctional officer" by any other name was still a "screw." It remains unknown, however, whether changing the name of a segregation setting to include the terms "management," "behavioral," or "modification" — rather than the terms "security," "housing," or "restricted" — represents a fundamental shift in the underlying ideology of the practice and a move toward redefining how these units should be used. Do these new labels reflect notions of rehabilitation or are they mere semantics? Do these settings still represent more of the same old style of segregation under a new name?

Types of Segregation

Segregation is used in many jails and prisons throughout the United States, ranging from minimum- to supermaximum-security facilities (Browne et al., 2011). Correctional institutions use segregation for four distinct purposes: responding to serious misconduct (disciplinary segregation), ensuring the well-being and order of the facility (administrative segregation), protecting the inmate from harm (protective segregation), and meeting other institutional needs (temporary segregation).

Disciplinary Segregation

Disciplinary segregation — also referred to as punitive segregation — is a form of punishment for inmates who violate the institution's rules (Harrington, 2015). Whenever an institutional violation occurs, a staff member may write up the perpetrator for the misconduct and a hearing before the rule infraction board will determine the facts in the case. At the hearing, evidence is presented against the accused and he or she can either accept blame (i.e., plead guilty) or defend

[1] In California, segregation units are called "Security Housing Units" or "SHUs," and in New York, the same acronym stands for "Special Housing Units." Texas segregation units are called "High Security Units"; in Rhode Island, they are "High Security Centers"; in Louisiana, they are "Closed Cell Restricted" or "CCRs"; and in Pennsylvania they are called "Restricted Housing Units" or "RHUs." In the federal prison system, one type of extreme segregation is the "Communication Management Unit" or "CMU." In Washington State, the term "Intensive Management Unit" or "IMU" is used, and in Maine these units are called "Special Management Units" or "SMUs." This is by no means a comprehensive list, but even this short review highlights that segregation settings are referred to in many different ways within the United States.

himself or herself against the charges (e.g., call witnesses). If the inmate is found guilty, a range of sanctions may be imposed. These punishments can include the removal of specific privileges, loss of good time, or a sentence for a specific length of time in disciplinary segregation. The type and severity of the specific sanction for any one case depend largely on the nature of the misconduct and the perpetrator's prior behavioral history in the facility. Departmental regulations often place limits on the amount of time an inmate may be housed in disciplinary segregation (e.g., 30 days). However, if the offender is charged with multiple violations, or if he or she accrues new violations while in segregation, the length of stay can be extended (Metcalf et al., 2013).

Administrative Segregation

Administrative segregation is used for managerial purposes, including as a response to an inmate who demonstrates a chronic inability to adjust to the general population, or when authorities believe an inmate's presence in the general population may cause a serious disruption to the orderly operation of the institution (Shalev, 2008). Administrative segregation is often enforced for indeterminate periods of time. In some systems, inmates are not told the reason for their transfer to the administrative segregation unit, and options for reevaluation or release back to the general prison population are few (Fellner, 2000). For those inmates considered to be a continued threat to the safety and security of the facility, segregation can be imposed for very long periods (Mears & Bales, 2010). In more rare cases, some inmates are held in segregation until they are discharged to the community at the expiration of their sentence (Lovell, Johnson, & Cain, 2007).

Protective Segregation

Protective segregation — also referred to as protective custody — is used to separate vulnerable inmates from the general inmate population due to personal physical safety concerns. These inmates often include sex offenders, police and prison informants, former police and correctional officers, and those at risk for self-harm (Wormith, Tellier, & Gendreau, 1988). Although inmates in protective custody are segregated for their own protection, restrictions on their contact with others and the programming they receive are often similar to those inmates held in segregation for disciplinary or administrative purposes (Browne et al., 2011).

Temporary Segregation

Temporary segregation is the placement of an inmate in restrictive housing that can occur for a wide range of institutional needs. For example, it may be used as an interim status for inmates pending their transfer to another institution or awaiting a judicial proceeding, to facilitate a criminal investigation, or when

limited bed space in an institution necessitates the use of an otherwise empty segregation cell (Labrecque, 2015a). Due to its nature, temporary segregation is usually short in duration, but it can often precede disciplinary or administrative segregation placements (Harrington, 2015).

Although correctional institutions segregate inmates for many reasons, the differences in the living arrangements and privileges granted to those residing in these settings are described as minimal (see Kurki & Morris, 2001). That is, within a particular segregation unit, inmates held for disciplinary, administrative, protective, or other purposes are generally exposed to the same restrictive conditions and treatment by staff. To an outside observer, the type of segregation being imposed on any particular offender may not be apparent when walking through the unit. Therefore, the term "segregation" is used in this paper to refer to the general practice of isolation in restricted environmental settings. However, where appropriate, the specific type of segregation being discussed will be acknowledged.

Conditions in Segregation

The conditions in segregation are often characterized by intense isolation and absolute control (see Shalev, 2008). To assess these conditions, the segregation policies from state and federal departments of corrections were collected and reviewed.[2] For agencies that did not have their policies available online, a written copy was requested by email or phone. These policies led to several insights regarding the living conditions in segregation. First, prisoners are typically confined to a single cell for 22-23 hours a day and are subjected to increased cell restrictions and heightened security procedures. Prisoners in segregation are granted limited access to education, vocation, visitation, recreation, and other services that are available to the general prison population (see also the review by Metcalf et al., 2013). Prisoners are often taken out of their cells for only one to two hours per day, usually for a shower or exercise. Recreation in many segregation units takes place in a small fenced-in area that is exposed to the weather. During extreme weather conditions, prisoners must choose between going into these areas or remaining in their cells, thereby taking no out-of-cell exercise for the day (Browne et al., 2011). Before leaving their cell for any reason, inmates are handcuffed, and sometimes even shackled at the waist and placed in leg irons.

Except when overcrowded conditions require double-bunking, virtually all forms of social interaction with staff and other inmates are eliminated (Browne et al., 2011). Inmates eat, sleep, and use the toilet in their cells. Food is delivered

[2] Policies were collected from a total of 49 jurisdictions, which include 48 state departments of corrections and the Federal Bureau of Prisons. A request was made to Delaware and Louisiana, but their policies were not received at the time of this publication.

through a slot in the door, meetings with counselors and mental health providers are often conducted through the cell door, and exercise is taken alone. Visits are often restricted and can be prohibited for a certain period of time when the inmate first arrives in the segregation unit. When family visits are allowed, the visitor and the inmate often sit on separate sides of a thick glass window and must communicate via a telephone. Finally, even mental health and medical services are extremely limited for prisoners in segregation, which further reduces their opportunity for human contact (Butler, Johnson, & Griffin, 2014). By comparison, inmates living in the general prison population have greater access to various activities (i.e., programming, recreation), which affords them a degree of meaningful social interaction (Gendreau & Labrecque, 2016).

The Function of Segregation in Institutional Settings

Since the inception of the penitentiary in the early 19th century, segregation has remained an important component of the American penal system. Throughout history, the use of segregation has sought to serve many purposes, including reformation, punishment, protection, behavior modification, and prisoner management and control (Shalev, 2009). These diverse, and at times contradictory, objectives make this practice the center of much controversy and debate (see Haney, 1997; and Scharff-Smith, 2006). Furthermore, each of these goals is rooted in several different theories about human nature, crime, and punishment, which make assessing the effectiveness of this correctional policy difficult (Mears, 2008). To understand the function that segregation serves in modern correctional institutions, it is helpful to recognize the pretenses under which the practice was first developed. It is also important to understand how various social and political events in society have led to changes in the use of segregation and the role it is expected to serve.

The Penitentiary

Segregation as a penal strategy first emerged in the United States in the early 19th century (Rothman, 1998a). During this time, penal reformers began to view the rising national crime rates as evidence that many of the country's prisons were not effective at reducing crime (Kann, 2005). However, despite the perceived inadequacies of these institutions, reformers did not give up on the concept of prison (Rothman, 1980). For many, imprisonment as a societal response to crime still represented a vast improvement over the capital and corporal punishments that were used during the colonial era (Foucault, 1995). With no ready alternatives to take its place, reformers turned their attention to correcting what they perceived to be the defects of these early institutions: *the destructive nature of the prison environment* (Rothman, 1971). In this social context, the

penitentiary emerged ready to replace those institutions that were built in the previous generation (Ignatieff, 1983).

Largely influenced by the ideology of evangelical Quakers, penitentiaries were built by intent and design to separate inmates from all contact with corruption, including staff and other inmates (Cullen & Gilbert, 1982). Initially, two competing organizational schemes emerged: the Pennsylvania "solitary" system and the Auburn "silent" system. The Pennsylvania model compelled inmates to work alone in their cells and demanded absolute isolation (Franke, 1992). By contrast, the Auburn model allowed inmates to congregate during the day for meals, work, and prayer, but otherwise forced them to remain in their cells alone (McGowen, 1998). Whereas the Pennsylvania system used physical barriers to separate inmates from interacting with one another, the Auburn system relied on corporal punishments (e.g., whipping) to enforce the rule of silence (Rothman, 1980).

Despite this fundamental difference, both systems emphasized the use of isolation, obedience, and a steady routine of labor as an integral part of the plan for reformation (Rothman, 1998b). The underlying philosophy of both models was that isolation would afford prisoners the ability to repent and reform (Rogers, 1993). Correctional administrators were confident in the power of faith to reform prisoners and were distinguished in their belief that rehabilitation was the only real task of the institution (McGowen, 1998). By removing the person from all temptations and substituting a steady and regular regimen, the segregation setting would ultimately reform the individual (Lieber, 1838/2010).

Initially, many state facilities followed the Pennsylvania model of total isolation, but it was the Auburn model that became the blueprint for nearly every prison built during the mid-19th century (Blomberg & Lucken, 2010). This was, perhaps, because congregate living was less expensive than unbroken solitary living; and that the Auburn model promised to hold more inmates, and thus could bring in more money through convict labor (Rothman, 1998a). The congregate model also had to rely on corporal punishments to ensure compliance on the rules of silence. As soon as these institutions became crowded and corruption became rampant, ensuring silence and isolation simply became impossible (Rotman, 1990). In addition, there were growing concerns that isolated confinement caused psychological damage and that despite its hype and promises, the penitentiary did not eradicate crime (Kann, 2005). Prison officials were thus forced to rethink how prisons should operate.

Throughout the early decades of the 20th century, there was broad optimism that prisons could rehabilitate criminal offenders (Allen, 1964). Although much is credited to the advancements during this time period (e.g., expansion of parole, probation, juvenile court), a number of historians argue that the actual practices associated with prisons, despite the rehabilitative rhetoric to the contrary, were still largely characterized by punishment and control (e.g., Pisciotta, 1994; Rothman, 1980; Rotman, 1998). During this time, prisoners were not universally

being placed in solitary cells; however, segregation was still used for those inmates for whom other methods of discipline (e.g., corporal punishments) proved ineffective (Miller, 1980).

The Supermax

Maintaining prison order and safety has long been the primary task for correctional administrators (Reisig, 1998; Useem & Reisig, 1999). There are two conflicting management strategies for dealing with difficult inmates in the prison system: *the concentration model* and the *dispersal model*. The concentration model seeks to consolidate the most violent and dangerous inmates from the entire prison system into one tightly controlled prison (Shalev, 2009). It is a selective incapacitation strategy that supports the segregation of subgroups of offenders as a means to achieve safety and order throughout the prison system (Ward & Werlich, 2003). An example of this approach is the Alcatraz Federal Penitentiary. When it opened in San Francisco in 1933, officials boasted that it housed the country's most notorious criminals (Ward, 2009).

In contrast, the dispersal model argues that the best way to manage difficult prisoners is to spread them throughout different institutions to dilute their negative influence in populations of generally conforming inmates (Pizarro & Stenius, 2004). When Alcatraz was closed in 1963, many of its prisoners were initially transferred throughout the federal prison system. Shortly thereafter, another federal prison — United States Penitentiary (USP) Marion (Illinois) — became known for housing the most violent and disruptive federal and state prisoners (Richards, 2008). Initially, prisoners in USP Marion were able to congregate for certain activities (e.g., meals, recreation). However, in 1983, after several inmates and two officers were killed, the prison declared a state of emergency and "locked down," thus becoming the country's first supermaximum (or supermax) prison (Ward & Werlich, 2003).

Supermax facilities represent a management style in corrections that focuses on providing increased control over inmates who are known (or thought to be) violent, assaultive, major escape risks, or otherwise disruptive in the general population (Riveland, 1999). Supermax settings seek to hold the most serious and chronic troublemakers from the general prison population — the so-called "worst of the worst" (Henningsen, Johnson, & Wells, 1999; Shepperd, Geiger, & Welborn, 1996). This concentrated approach to managing offenders represents a return to the tenants of the strict control practices found in the early penitentiaries (Haney, 1993; Toch, 2001).

In the 1980s, several "get tough" penal policies were enacted in the United States that helped contribute to an increase in the number of incarcerated offenders (e.g., mandatory minimum sentencing laws, three-strikes laws, truth in sentencing laws) (Austin & Irwin, 2012). The coupling of overcrowded living

conditions and increased institutional violence led to growing concerns for staff and inmate safety throughout the country (Steiner & Wooldredge, 2008; Useem & Kimball, 1991). In response, many states constructed their own supermax prisons and increasingly relied on segregation to reduce violence throughout the prison system (Sundt et al., 2008).

Contemporary Use of Segregation

Policymakers often justify the use of segregation — at least in part — on the premise that the public demands its use (Pizarro et al., 2006). However, there is little research that has assessed public opinion in this area. One notable exception is a recent study by Mears and his colleagues (Mears, Mancini, Beaver, & Gertz, 2013). Their 2006 survey of 1,308 Florida residents found that public support for supermax prisons is strong when residents anticipate a safety benefit (82 percent). Mears et al. (2013) also report that such support diminishes by 21 percent when no such benefit is expected. These results come with the caveat that they are from only one state, and it is unknown if they will generalize to other jurisdictions. However, this research is important because it suggests that the public prefers correctional practices that reduce recidivism rather than those that do not.

The use of segregation implicitly expresses sentiments of punishment and retribution; however, its goals often include incapacitation, deterrence, and rehabilitation (see Mears & Watson, 2006). Two recent studies independently reviewed the available official segregation policies of state and federal jurisdictions in the United States. First, Butler et al. (2013) examined the supermax admission criteria in 42 state jurisdictions. They found that 98 percent of the state systems they examined had official policies in 2010 that allowed officials to place inmates in supermax custody because they were believed to pose a threat to institutional safety. Other reasons found for sending inmates to supermax include repeat violent behavior (74 percent), escape risk (67 percent), riotous behavior (45 percent), and belonging to a group that is deemed a security threat (36 percent). In the second study, Metcalf et al. (2013) reviewed 46 state and federal segregation policies. They reached a similar conclusion, reporting that in 2012, many jurisdictions placed inmates in segregation because officials believed they posed a threat to "the life, property, security, or orderly operation of the institution" (p. 5).

These findings, coupled with the current review of segregation policies, indicate that the function of segregation in the modern era is to remove inmates who pose a threat to the order of the institution from the general prison population, which can occur for disciplinary, protective, or administrative reasons (Butler et al., 2013; Browne et al., 2011; Metcalf et al., 2013; Shalev, 2009). Furthermore, policymakers and corrections officials often justify the use of segregation because they believe it is an effective strategy for increasing safety and promoting

order throughout the prison system (Mears, 2013). However, among the many controversial issues that the practice raises is the contention that segregation increases (rather than decreases) the likelihood of subsequent criminal behavior and thus makes prisons and communities less safe over time (see Pizarro et al., 2006). It has further been widely speculated that long-term durations in segregation exacerbate the detrimental effects of the setting on inmate outcomes (i.e., leads to even more criminal behavior; Pizarro, Zgoba, & Haugebrook, 2014). Before examining the empirical literature on the effects of segregation, this paper first examines the research on the use of this practice in the United States.

The Use of Segregation

Prevalence of Segregation

In 1997, the National Institute of Corrections conducted a national survey of departments of corrections that focused on the use of supermax-style housing. The results of this survey reveal tremendous variation in the supermax facilities across the state and federal prison systems. Some supermax institutions are stand-alone buildings, whereas others consist of units within an existing correctional facility that have been redesigned to meet the strict control needs of the supermax model. As of 2004, 44 states are known to operate 57 supermax facilities, collectively housing at least 25,000 inmates nationwide (Naday, Freilich, & Mellow, 2008).

In 1999, King supplemented the National Institute of Corrections (1997) data with further information acquired from state and federal departments of corrections. King (1999) estimates that less than 2 percent of all state and federal inmates serving one year or more in prison were held in a supermax setting. His assessment also reveals that the extent of the use of supermax varies widely among states. For example, some organizations (e.g., Pennsylvania) report incarcerating less than 1 percent of inmates in supermax settings, while others (e.g., Mississippi) report incarcerating up to 12 percent.

These studies, while informative, focus specifically on supermax confinement and ignore the many other forms of segregation, or segregation-like, settings to which inmates may be exposed during their incarceration (Zinger, 2013). More broadly, estimates on the prevalence of segregation vary from 25,000 to 100,000 (Metcalf et al., 2013). Some of the best estimates come from the Federal Bureau of Prisons (BOP), where a recent U.S. Government Accountability Office report reveals that approximately 6 percent of all federal prisoners are held in some form of segregated confinement (McGinnis et al., 2014). This report also shows that this percentage has decreased since at least 2011, when the BOP housed approximately 7 percent of inmates in segregated confinement.

More recently, the Liman Program — in conjunction with the Association of State Correctional Administrators (ASCA) — conducted a national survey of departments of corrections to assess how many inmates were held in segregation during the fall of 2014 (Liman Program & ASCA, 2015). This study found that approximately 66,000 inmates were under some form of disciplinary, protective, and administrative segregation, which equated to an average segregated population of approximately 7 percent. These rates also vary greatly from a low of 2 percent in Montana to a high of 14 percent in Delaware. However, these estimates are derived from only 33 of the state and the federal prison systems.

Estimating the use of segregation in the United States is a continued challenge, particularly because many jails and prisons do not track this information in a way that is easily accessed by researchers. The lack of a clear definitional consensus on what practices constitute segregation further make estimating its use more difficult (Frost & Monteiro, 2016), which is likely a contributing factor to the differences found in the previous estimates. Further, some prison systems have been accused of failing to report, or underreporting, their use of segregation to avoid acknowledging the use of solitary confinement in their department (see Naday et al., 2008). If the accusations prove to be true, the current estimates may be low.

Another challenge for determining the extent of the use of segregation is that inmates are often held in such settings for varying lengths of time (see Mears & Bales, 2010). A problem with relying on prevalence estimates, therefore, is that there may be many inmates who occupy a specific segregation cell over a given length of time. Likewise, the use of only snapshot assessments — at one point in time — may produce estimates that appear much lower than those that include the incident counts of all of the inmates held in the setting over a specific time. There are two recent studies that address this issue by examining how many inmates are held in segregation over an extended period (see Beck, 2015, and Labrecque & Smith, 2015).

Incidence of Segregation

The first incidence-based estimate comes from Labrecque and Smith (2015), who conducted a five-year evaluation of the use of segregation in the state of Ohio. Labrecque and Smith (2015) report that 36 percent (or 42,632) of the 118,447 admitted to the Ohio Department of Rehabilitation and Correction (ODCR) between 2007 and 2012 experienced some form of segregation within the same time frame. It is important to note that this estimate is derived from longitudinal information and includes all forms of segregation (i.e., disciplinary, administrative, protective, and temporary), something that is not typical in estimating the use of segregation. As a comparison, the Liman and ASCA (2015) report, which uses a prevalence estimate, reports that approximately 4 percent of the ODRC population was held in segregation during the fall of 2014. Although

these two investigations are from different years and are not directly comparable, this illustration highlights the importance of examining both the prevalence and incidence estimates of the use of segregation.

More recently, the Bureau of Justice Statistics (BJS) released a special report on the use of restrictive housing that gives a better picture of how the practice is used in jails and prisons throughout the United States (see Beck, 2015). The BJS study is important because it includes a national representative sample of incarcerated persons in both prisons and jails. Information from the latter group has been much less discussed in the research literature (see Haney, Weill, Bakhshay, & Lockett, 2015). Beck found that on any given day in 2011-2012, approximately 4 percent of state and federal inmates and 3 percent of jail inmates were being held in some form of restrictive housing. Further, this study revealed that nearly 20 percent of prison inmates and 18 percent of jail inmates spent time in segregation in the previous year. These estimates include inmates in segregation for both disciplinary and administrative reasons, but due to the nature of the survey questions it was not possible to disaggregate how many were in each type separately.

Continued research is needed in this area. Such work will not only better inform how segregation is used throughout the United States but will also be an essential component for effectively reducing its use. That is, to develop any knowledgeable strategy for reducing the use of segregation, prison officials must first understand the basics: *how many inmates are held in segregation on any given day and how many inmates experience segregation during their incarceration*. This will require researchers and correctional agencies to continue to work together toward overcoming the challenges associated with estimating such use.

Duration in Segregation

Many of the criticisms of the use of segregation focus on the perceived psychological damage that occurs from spending prolonged durations in such settings. However, there is no universally agreed upon length of time that is considered an extended period. Those critical of the practice generally argue for setting standards that would limit stays in segregation to 90 days (e.g., Jackson, 1983; Haney & Lynch, 1997). Likewise, the evaluation literature on this topic tends to use 90 days as the cut-point for defining long-term segregation (e.g., Lovell et al., 2007; Mears & Bales, 2009). Others, however, argue for much shorter time caps. More than 30 years ago, Gendreau and Bonta (1984) suggested limiting the use of segregation to 14 days. More recently, the United Nations (2015) used 15 days to define a prolonged duration. Given these concerns about duration in segregation, there is a need to better understand how long inmates spend in these settings, how many times they are placed in them, what proportion of their total prison sentence is served in segregation, and what length of time (if any) is optimal for inmates to spend in segregation settings.

In a study of the Florida Department of Corrections, Mears and Bales (2010) found that approximately 2 percent of the inmates released from custody between 1996 and 2001 experienced at least one stay in supermax confinement for 30 days or more. Mears and Bales (2010) point out that most accounts of supermax housing assume that it is a one-time event; however, their data reveal that the average supermax inmate experiences four separate segregation placements, and some have more than 10 separate stays. Mears and Bales (2010) also show considerable range in the duration of time that inmates are held in supermax, extending from one month to more than three years. Finally, the authors report that approximately 14 percent of the sample spent half of their prison term or more in supermax, 39 percent spent a quarter or more of their prison term in supermax, and 15 percent spent less than 5 percent of their prison term in supermax.

In their study of segregation in Ohio, Labrecque and Smith (2015) found that more than half of the inmates who spent time in segregation served fewer than 30 days; however, 9 percent of the sample served 180 days or more. With each successive placement in segregation, the mean duration of that segregation increased, from an average of 17 days for the first stay to an average of 28 days by the fifth stay. Of those experiencing segregation, 45 percent had only one stay; however, 16 percent had five or more total placements. Finally, more than half of the sample spent less than 5 percent of their total prison time in segregation, but 9 percent (or 3,880 inmates) spent more than a quarter of their total sentence in segregation.

The findings from these two studies indicate that the frequency and duration of segregation vary widely. These findings are admittedly limited to these two states and may not necessarily generalize to other jurisdictions; however, the results from the Liman and ASCA (2015) national-level investigation reveal a similar pattern in segregation use throughout the United States. Of the 24 jurisdictions reporting systemwide data on the length of stay in this study, 11 reported that most prisoners were held in segregation for fewer than 90 days and 18 described holding some prisoners in segregation for more than three years (Liman & ACSCA, 2015).

This research indicates that although some inmates remain in segregation settings for very long durations, the vast majority of inmates experience much shorter stays. What remains a mystery, however, is what is an optimal time for being held in segregation? The policy recommendations aimed at placing time caps on segregation to date are based on personal opinion and clinical wisdom rather than empirical evidence (e.g., Jackson, 1983; Gendreau & Bonta, 1984; Haney & Lynch, 1997). An effort should be made to assess if there is a tipping point of diminishing marginal returns for time spent in segregation. Such research would better inform correctional officials about what limits to place on inmate stays in segregation.

Inmates in Segregation

Segregation settings are described as targeting the "worst of the worst" inmates, which includes those who are escape risks, gang members, predators, and high profile or notorious inmates (Shalev, 2009). Some raise concerns, however, that in practice these settings actually consist of many "nuisance" inmates (i.e., those who do not pose a direct threat to the safety and security of the institution), rather than those who are truly violent or dangerous (Kurki & Morris, 2001; Shames, Wilcox, & Subramanian, 2015). Given this discrepancy, there is a critical need to better understand which types of offenders are being held in segregation settings.

Recently, Labrecque (2015b) took stock of the empirical literature on the predictors of segregation to address the question of "who ends up in segregation"? More specifically, his meta-analysis examines the differences in key variables between inmates who are held in segregation settings and those held in the general prison population. Labrecque (2015b) identified 16 studies that met his inclusion criteria: (1) the study must have been conducted on prisoners in a custodial setting (i.e., prison or jail), (2) the study must have compared the characteristics of inmates in a segregation setting to those in the general population, and (3) the study had to have contained sufficient data to calculate an effect size (i.e., Pearson's *r* or phi coefficient). The segregation and non-segregation groups were then compared on a range of available inmate characteristics, criminal history, institutional behavior, and criminogenic needs variables.

The findings of this meta-analysis suggest that segregated inmates tend to be younger and are more likely to be an ethnic minority, have a mental disorder, be a gang member, and be rated as at high risk to recidivate, when compared to the inmates from the general prison population. Segregated inmates were also more likely to have a violent criminal history, have prior juvenile justice involvement, and be higher risk on their initial institutional classification rating. Finally, inmates in segregation settings were much more likely to have a history of engaging in institutional misconduct and to have previously served time in segregation.

This meta-analysis also examined the differences between the two groups with respect to their levels of criminogenic need. Across every domain assessed, the inmates in segregation possessed much greater levels of criminogenic needs when compared to those in the general prison population. The magnitudes of these differences also varied by type of criminogenic need. Specifically, the areas of need with the largest magnitude of difference included *motivation for treatment, education, and antisocial attitudes*. The next largest set of differences was found in the areas of *personal/emotional, substance abuse*, and *antisocial associates*. The areas with the smallest magnitude of differences were found in the domains of *community functioning/leisure, employment*, and *family/marital*.

The findings of this meta-analysis are important but must be interpreted with caution because many of the estimates were derived with small sample sizes and, in some cases, with only a few effect sizes. The studies included in the meta-analysis were also limited to investigations from a subset of correctional systems that were willing to share their data on this controversial and potentially litigious practice. Therefore, these results may not necessarily generalize to all correctional systems in the United States. Fortunately, the recent BJS report on segregation also examines the differences between prisoners held in segregation and those found in the general prison population (see Beck, 2015).

The findings of the BJS study support those from the Labrecque (2015b) meta-analysis. Specifically, the BJS report found that younger inmates, inmates without a high school diploma, and lesbian, gay, and bisexual inmates were more likely to have spent time in restrictive housing than older inmates, inmates with at least a high school diploma, and heterosexual inmates (Beck, 2015). The report also found that inmates sentenced for violent offenses (not including sex offenses) and inmates with extensive arrest histories or prior incarcerations were more likely to spend time in restrictive housing than those held for other offenses and with no prior arrests or incarcerations. Finally, inmates who were involved in serious institutional violence (i.e., assaulting other inmates or staff) and those suffering from serious psychological distress were significantly more likely to spend time in restricted housing than those who were well behaved and did not have any mental health issues (Beck, 2015).

This review of the available evidence does not support the contention that segregation settings are reserved only for the most highly incorrigible and dangerous offenders. Rather, the available evidence indicates that perhaps a better way to describe the segregated population is "difficult to manage." This research suggests that the segregated population tends to possess those traits that correlate more highly with antisocial behavior. They are mostly younger, have more extensive criminal histories, worse institutional behavior, and more criminogenic needs. On a positive note, this does indicate that prisons are effectively targeting the inmates who are most at risk for engaging in criminal behavior for placement in segregation. However, segregation is used under the assumption that the setting will improve safety and security within the prison system and beyond (Mears, 2013), but there are many theoretical reasons that suggest this practice may not be the best strategy for effectively achieving these goals (see Gendreau & Labrecque, 2016). Next, the empirical literature is reviewed to assess what effect segregation has on subsequent inmate outcomes.

The Effects of Segregation

There is a critical need to determine if segregation is an effective strategy for making prisons safer and more humane settings (Labrecque, 2015a). This review

of the evaluation literature begins by first examining its effect on psychological outcomes. Because improving mental health function is not a goal of segregation, this literature is only briefly discussed. It is left to other white papers to more comprehensively examine the psychological impact of segregated confinement (e.g., Frost & Monteiro, 2016). Instead, the current discussion focuses more extensively on the effect that segregation has on a variety of criminal behavior outcomes (e.g., institutional levels of violence, post-release recidivism, institutional misconduct), because one of the often-cited rationales for the practice is that it is an effective deterrent of such behaviors (Angelone, 1999; Gavora, 1996).

Psychological Outcomes

Without a doubt, the most contentious debates in this area involve the psychological effects of segregation. The belief that segregated confinement causes psychological damage is not new. After visiting some of the early United States penitentiaries in the 19th century, several notable European contemporaries condemned the practice, suggesting it causes inhabitants undue psychological distress (e.g., de Beaumont & de Tocqueville, 1833; Dickens, 1842/1985). The majority of the research conducted to date, however, has largely been limited to qualitative investigations (e.g., Grassian, 1983; Haney, 2003; Kupers, 2008; Lovell, 2008). Some scholars insist these anecdotal reports are the unequivocal evidence that segregation causes serious mental health issues amongst its inhabitants (Haney, 2012b).

More recently, however, other scholars point out the methodological shortcomings in much of the literature that contributes to this conclusion (e.g., selection bias, response bias, inadequate or no control groups), which in their estimation limits the credibility of their results (Gendreau & Labrecque, 2016; Suedfeld, Ramirez, Deaton, & Baker-Brown, 1982; Zinger, Wichmann, & Andrews, 2001). Two recent independent meta-analytic reviews on this topic (Labrecque, Smith, & Gendreau, 2013; Morgan et al., 2014) conclude that not only has segregation been an elusive subject of empirical research, but also the effects on inmate physical and mental health functioning found from the available studies tend to be in the "small" to "moderate" range, rather than "large" as has been predicted by those critical of the practice (see also Smith, Gendreau, & Labrecque, 2015). These findings suggest that segregation may not produce any more of an iatrogenic effect than do other housing options in prison (i.e., general population).

Although more research is clearly needed in this area before any definitive conclusions should be drawn, these findings serve as a caution to reviewers about making judgments regarding the effects of segregation too hastily, especially when they are based on qualitative rather than quantitative evidence. More empirical research is needed on the psychological effects of segregation. It should address the number of research design issues that have been identified

in this literature base. It should also assess the moderating effects of the quality of staff-inmate interactions, conditions of confinement, increased length of time in segregation, and other offender-level characteristics (e.g., age, gender, mental health status, risk level; see Gendreau & Labrecque, 2016). This type of research is important to corrections administrators because it can help them identify which inmates to exclude from placement in segregation. It could also serve as a guide for improving the conditions in such settings in order to achieve more desirable outcomes (e.g., less psychological deterioration, improved behavior).

Behavioral Outcomes

Despite the many calls for more empirical evaluations of the effects of segregation (e.g., Briggs, Sundt, & Castellano, 2003, p. 1342; Kurki & Morris, 2001, p. 393; and Ward & Werlich, 2003, p. 54), a very limited number of behavioral outcome studies have been conducted to date. Within this limited research base, three types of outcomes are examined: *institutional violence, post-release recidivism*, and *institutional misconduct*. One of the key reasons that the field lacks sound empirical knowledge on the effects of segregation is due, in part, to the type of research methodology employed in these investigations. Therefore, the current literature base is reviewed and is further separated by the type of research methodology used.

Institutional violence

One of the often-stated purposes of the use of segregation includes improving the systemwide order in prison systems (see Mears & Watson, 2006). Very little empirical research has assessed whether segregation is effective in reducing aggregate levels of violence. The limited research in this area typically examines trends in measures of institutional violence across correctional systems over time. It looks specifically for differences before and after changes in the use of segregation (e.g., construction of supermax facility) and has produced mixed findings.

In their discussion on the effects of policy changes in the Texas prison system in the late 1980s, Marquart and colleagues attribute the decline in institutional violence and inmate murders to the massive lockdown of the state's gang members into segregation settings (Crouch & Marquart, 1989, 1990; Ralph & Marquart, 1991). Ralph and Marquart acknowledge that this policy change drastically increased the number of inmates held in administrative segregation but remain convinced that the concentration strategy is effective in reducing levels of violence throughout the prison system. More recently, Useem and Piehl (2006) used a similar analytical approach with national-level prison data over a longer period. However, they concluded that the decrease in the number of prison riots, disturbances, arsons, escapes, assaults, and murders between the 1980s and early 2000s did not correlate with the changes in segregation practices, which they point out actually declined between 1982 and 2001. The

use of segregation, therefore, was not directly responsible for the improvements in prison order. It is worth pointing out that this type of research design is speculative because it fails to consider the other historical threats to validity (i.e., other changes within the system that occurred during the same time).

More recently, researchers have employed more advanced statistical techniques to assess the influence of segregation on institutional violence, which has also produced mixed findings. For example, using a multilevel model design with a nationally representative sample of 4,168 male inmates from 185 state correctional facilities, Huebner (2003) assesses the effect of different types of administrative control on inmate assaults. She found segregation use — defined as "the percent of the total inmate population that received solitary confinement as a disciplinary response to the most recent rule infraction" (p. 110) — was ultimately unrelated to levels of inmate-on-inmate or inmate-on-staff assaults.

Another study conducted by Briggs et al. (2003) uses a multiple interrupted time series design to examine whether the emergence of supermax housing in three states (Arizona, Illinois, and Minnesota) produced a reduction in systemwide levels of violence, when compared to a comparison state that did not construct a supermax prison in the same period (Utah). They found supermax prisons did not reduce levels of inmate-on-inmate violence but did find mixed support for their ability to increase staff safety. Specifically, the implementation of a supermax prison had no effect on levels of inmate-on-staff violence in Minnesota, temporarily increased staff injuries in Arizona, and reduced assaults against staff in Illinois. It is worth noting that only four of the 24 states sampled provided the researchers with sufficient data to conduct the time series analysis (i.e., monthly violence estimates over the five years before the construction of the supermax facility in their state), which "raises concern about the generalizability of the sample" (p. 1352).

The evidence does not support the contention that supermax prisons are responsible for reducing systemwide levels of violence. This finding calls into question the justification of the practice on the basis that it improves safety and order throughout the prison system. However, more research is needed in this area, particularly for investigations that can overcome some of the shortcomings found in the prior research.

Recidivism

Approximately half of the respondents in a national survey of prison wardens identify rehabilitation as a goal of segregation (see Mears & Castro, 2006). Likewise, several empirical investigations assess the effect of segregation on measures of post-release recidivism. These studies, however, vary widely in their methodological quality and results.

In a study from the federal prison system, Ward and Werlich (2003) use a nonequivalent comparison group design to examine the differences in the return-to-prison rates between a group of inmates released from Alcatraz (i.e., segregation group; n = 1,550) and a random subsample of inmates released from Leavenworth (i.e., non-segregation comparison group; n = 257) between 1934 and 1963 (see also Ward, 2009). Ward and Werlich (2003) found that inmates released from Alcatraz were more likely to be returned to federal custody during follow-up (50 percent) compared to those released from Leavenworth (37 percent). However, the offenders sent to Alcatraz had more extensive and serious criminal histories (Ward, 2009). Likewise, it is reasonable to suspect that differences between these two groups may have also had an influence on the results.

In 2011, Seale and colleagues also conducted a nonequivalent comparison group recidivism study in the California Department of Corrections and Rehabilitation. They found that, of the inmates who were released from custody during fiscal year 2006-2007, those who had served time in the Security Housing Unit (SHU) had a higher return-to-prison rate during a three-year follow-up (70 percent) compared to those who did not spend any time in SHU during their commitment (65 percent). However, prior group differences may have affected the results. For example, prior research suggests that inmates in segregation are more likely than inmates in the general population to possess many characteristics (e.g., younger age, greater criminal histories, higher risk for recidivism, gang affiliation) that also place them at a greater likelihood for recidivating (Lovell, Cloyes, Allen, & Rhodes, 2000). The results from these studies should be interpreted cautiously.

In Washington state, Lovell and colleagues (2007) employed another type of research methodology to assess the effects of segregation on recidivism: the matched comparison group design. They identified 200 inmates who were released from the Washington Department of Corrections in 1997 and 1998 and who also served at least 12 weeks in a supermax setting during their commitment. These supermax inmates were matched one-to-one to a comparison group of non-supermax inmates from the larger pool of 6,453 offenders released during the same time. These two groups were matched based on nine demographic and criminal history variables. Lovell and colleagues (2007) found that the inmates who experienced supermax were more likely to be found guilty of a new felony within three years of release (53 percent) compared to the inmates who did not experience supermax (46 percent); however, this difference was not statistically significant. They also reported that inmates who were released into the community directly from the supermax setting were more likely to be found guilty of a new felony (69 percent), compared to those who experienced segregation, but spent three or more months in general population before being released into the community (46 percent).

It is worth noting that offenders from the former group were also younger and had more extensive criminal histories, compared to those from the latter

group. When the direct-release and later-release inmates were matched for age and criminal history — two well-known predictors of criminal behavior — the significance of the group difference disappeared. Lovell and colleagues (2007) argue that this finding may be an artifact of the small sample size in their study. However, it is also possible that segregation may not have any effect on recidivism once other relevant factors are considered.

More recently, researchers have started employing more analytically advanced matching techniques — most notably propensity score matching — in an attempt to reduce the selection group biases in segregation research. In a study of the Florida Department of Corrections, Mears and Bales (2009) examined three-year recidivism outcomes between a group of supermax inmates who spent more than 90 days in a supermax setting (n = 1,267) with a comparison group of inmates who were propensity score matched from the larger pool of inmates in the Florida system during the sampling time frame (n = 58,752). Although the differences found between the two groups for any recidivism was not significant (59 percent for supermax compared to 58 percent for non-supermax), inmates in the supermax group were significantly more likely to violently recidivate during follow-up than those in the control group (24 percent for supermax compared to 21 percent for non-supermax). Further, Mears and Bales (2009) found no evidence that the duration spent in segregation, or the timing of release from segregation (direct or later release), had any significant effect on the outcomes examined.

Another outcome evaluation using propensity score analysis matched 57 inmates who had served time in the Ohio supermax prison during select periods in 2003 and 2005 to a control group of inmates from the general prison population who did not serve any time in the supermax setting (n = 1,512) (Butler, Steiner, Makarios, and Travis, 2013). Inmates were matched on the characteristics of age, race, risk level, sentence type and severity, gang member status, sex offender status, education, and time served. The results showed no statistically significant difference between the two groups in terms of rearrest or return to prison during a seven-year follow-up period.

It is important to note that the recidivism studies with the weaker methodological designs produce much larger effect sizes than those with more scientific integrity. The findings from the more methodologically rigorous studies reveal a null effect of segregation on recidivism. These findings challenge the use of segregation to reduce post-release recidivism. However, much more work is needed in this area. In particular, studies are needed that can overcome the challenges of identifying appropriate comparison group cases.

Institutional misconduct

Increasing prison safety is an often-cited goal of segregation (see Mears & Castro, 2006). Likewise, researchers have begun to assess what effect segregation has on individual levels of institutional misconduct. Recently, Morris (2016) evaluated

the effect of short-term exposure to segregation on subsequent misbehavior in a sample of male inmates who were admitted into the Texas Department of Corrections between 2004 and 2006. He used a multilevel counterfactual research design (i.e., propensity score matching) to assess group differences between inmates who were sent to segregation as a punishment for an initial act of violence (the treatment group) and those who were not sent to segregation as a punishment for an initial act of violence (the control group) during the first two years of their commitment. He found that the use of short-term disciplinary segregation (i.e., 15 days or less) had no statistically significant effect on the occurrence or timing of subsequent violent infractions.

Another recent study conducted by Labrecque (2015a) examined the impact of segregation on subsequent misconduct among inmates who were admitted into the Ohio Department of Rehabilitation and Correction between 2007 and 2010 and who experienced at least one stay in disciplinary segregation during their commitment (n = 14,311). He used a pooled time series design to assess whether the experience of segregation in a preceding time wave (and the number of days spent in segregation) influenced the probability of engaging in misconduct during the next time wave.[3] This research design is particularly useful because it takes advantage of the within-individual variation in the exposure to segregation to assess whether the experience had an influence on the probability of being found guilty of an institutional misconduct charge in the subsequent time wave. Labrecque also found that neither the experience of disciplinary segregation, nor the number of days spent in such settings, had any significant effect on the prevalence or incidence of the finding of guilt for subsequent violent (e.g., assault), nonviolent (e.g., damage to property, theft), or drug infractions (e.g., possession of drugs and alcohol).

These two studies — although certainly not without their limitations — represent methodologically rigorous tests using sophisticated analytical procedures to assess the influence of segregation on subsequent measures of institutional behavior. The findings of both studies indicate that the experience of disciplinary segregation does not decrease, or increase, institutional misbehavior. Instead, they support the contention that segregation has no significant effect on criminal behavior. This research is naturally in need of replication, and further investigations of institutional behavior should include segregation stays of a longer duration and for different reasons (i.e., administrative).

Discussion

This white paper explored how segregation is used to manage and control inmates within correctional institutions. It shows that definitional and reporting

[3] Time waves were constructed into three-month intervals beginning with the inmate's initial admission date.

challenges make it difficult to determine how this practice is used throughout the United States. Despite these obstacles, this investigation revealed several important findings on the use of segregation that are important for researchers and practitioners alike. Further, these findings help move the National Institute of Justice forward in its attempt to advance knowledge on the use and effect of segregation in the United States and to help translate research findings so criminal justice professionals can make informed decisions regarding the future use of this practice (Rodriguez, 2015).

First, the differences found in the prevalence estimates between studies are likely due to the parameters that researchers place on the definition of segregation. Estimates derived from only examining the number of inmates in supermax settings are much lower than those that also include other forms of segregation (e.g., administrative, disciplinary, protective, temporary). Second, estimates of the incidence of segregation suggest that many more inmates experience such settings during their commitment, when compared to the estimates of the prevalence of segregation. This difference is due to the fact that longitudinal examinations are able to capture the many inmates who cycle through these units over time rather than relying on a one-time snapshot assessment of the number of inmates held there on any given day. Third, the use of segregation varies considerably not only across jurisdictions but also between inmates. Some inmates experience segregation as a one-time event, while others experience it many times during their commitment. Fourth, the length of time inmates serve in segregation also varies considerably, from days to multiple years, with some inmates who spend the large portion of their entire incarceration sentence in such settings.

This white paper also examined the characteristics of the inmates who are sent to segregation. Inmates housed in segregation differ significantly from those in the general prison population in many easily identifiable factors that are routinely collected by many departments of corrections (Beck, 2015; Labrecque, 2015b). Inmates in segregation settings tend to be younger and are more likely to be an ethnic minority, have a mental disorder, be a member of a gang, have a more extensive criminal history, and have a record of prior misbehavior in the institution. They also are likely to be rated as at high risk to recidivate when compared to the inmates from the general prison population. This is important information because corrections officials could use it to proactively identify and treat inmates with greater propensities toward being placed in segregation settings in an effort to reduce the need for segregation. It is worth noting that Helmus (2015) recently developed a risk assessment scale — the Risk of Administrative Segregation Tool (RAST) — to predict inmate placements in administrative segregation in the Canadian federal prison system (see also Helmus, Johnson, & Harris, 2014).[4]

This work represents a crucial first step in assisting correctional agencies to better identify which inmates are at high risk for being sent to segregation. Such

knowledge could certainly be beneficial to efforts aimed at diverting offenders from such placements. A certain amount of caution, however, should be exercised before correctional agencies adopt risk instruments like the RAST. As Labrecque (2015b) notes, there is an inherent risk in using a segregation risk assessment that includes only static (i.e., unchangeable) factors. This information could potentially be used to justify isolating inmates based on their risk score. And because of the static nature of the items in the assessment, there is nothing the offender could do to reduce his or her risk. In short, the use of a static assessment has the potential of increasing the need for segregation rather than for reducing it.

The Labrecque (2015b) meta-analysis reveals that inmates in segregation differ from those in the general prison population not only on demographic and criminal history variables but also in their criminogenic needs. This finding has important implications for treatment because correctional administrators could use this information to help identify which criminogenic needs to target with intervention. The use of only a static risk assessment would provide no such information. Therefore, future efforts should be made to develop segregation assessment tools that include both risk and need items.[5] The development of such a tool has the potential of helping prison officials to improve institutional safety and reduce their need for segregation in both the short and long term.

Finally, the primary function in the contemporary use of segregation is to increase systemwide order, safety, and control (see Mears & Castro, 2006). However, upon review of the limited outcome evaluation research, it is questionable that these settings are capable of effectively achieving these goals. The empirical research on the effects of segregation on systemwide levels of order reveals mixed findings. Some of the early, largely speculative, research suggests that the increased use of administrative segregation in Texas was responsible for reducing systemwide levels of institutional violence (Crouch & Marquart, 1989, 1990; Ralph & Marquart, 1991). However, the studies conducted in this area that employ more advanced research designs tend to find much less support for this contention (Briggs et al., 2003; Huebner, 2003). Most notably, Briggs et al. (2003) found evidence that the emergence of supermax prisons did not reduce levels of inmate-on-inmate violence but appeared to reduce inmate-on-staff violence in one state (Illinois). In sum, the research does not support the contention that segregation is an effective strategy for reducing systemwide levels of disorder.

Another way researchers have attempted to evaluate the effectiveness of segregation is to use subsequent individual-level behavioral outcomes. Although there is some evidence that the experience of segregation may increase post-

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[4] The RAST includes six static items (age, prior convictions, prior segregation placements, sentence length, criminal versatility, and prior violence) and has been found to have a high predictive validity.

[5] It should be noted that Helmus (2015) attempted to include criminogenic needs in her risk assessment. However, she was unable to improve the predictive validity of the tool beyond using the six static items alone, so she chose to eliminate the dynamic needs factors from her final RAST model.

release recidivism, this finding is generally limited to those research studies using the weakest type of research methodology: the nonequivalent comparison group design. Therefore, these findings should be interpreted cautiously. The results from the more methodologically rigorous studies (e.g., propensity score matching) reveal no statistically significant differences in recidivism outcomes between the inmates who were housed in segregation and a matched sample of those who were housed in the general prison population. Further, the institutional misconduct literature — while much less extensive — similarly suggests that disciplinary segregation has a null effect on subsequent behavior. However, before any definitive conclusions are made about the effects of segregation on behavioral outcomes, it must be acknowledged that the evaluations in this area are few and have limitations that must be addressed by future research.

Recommendations for Research and Practice

This white paper provided a summary of the existing literature on the use and function of segregation, but more importantly, it seeks to serve as a springboard for future research. This paper also intends to help inform practitioners who work in segregation environments on the current state of research about the practice. The following six recommendations are made to help improve the state of the segregation research and to assist correctional authorities in making informed decisions regarding the use of segregation.

Obtain better estimates on the use of segregation

With increasing pressure to reduce the use of segregation throughout the United States, it is important to have a solid understanding of how this practice is used across the country. Prior estimates vary widely. Moving forward, researchers and correctional agencies should work together to obtain more reliable estimates of segregation use. Future research should also focus on estimating the prevalence and incidence of segregation, as both forms have important policy and practical implications. Attempts should also be made to further unpack how the different types of segregation are used in correctional institutions. It may be important to know, for example, what proportion of inmates is held for administrative versus disciplinary purposes. Finally, more research should be conducted on the duration, frequency, and proportion of total incarceration time spent in segregation. This information will be invaluable to correctional agencies seeking to develop alternative strategies for the use of segregation.

Develop segregation risk/needs assessments

Differences exist in the characteristics of the inmates who are sent to segregation units and those living in the general prisoner population. Researchers should

use this information to develop risk/needs assessment tools that can predict the probability of an inmate being sent to segregation and identify factors that can be targeted with intervention to decrease such risk. Priority should be given to research that includes additional information about criminogenic needs, as most of the prior group comparisons have been limited to data that correctional agencies collect for other purposes (e.g., education, substance abuse). Such a research strategy would provide useful knowledge about what types of services might have the best effect in helping agencies reduce their use of segregation.

Conduct case studies of segregation units

One of the main ways the function of segregation has been estimated is by analyzing the available state and federal segregation policies. However, there are some limitations to this approach that should be acknowledged. For example, some jurisdictions fail to provide their policies to researchers (see Butler et al., 2013), and some have policies that do not include enough information to be analyzed (see Metcalf et al., 2013). There is also the potential that differences may exist between what is written in policy and what is done in practice. Another approach to assessing the purpose of segregation is to survey correctional officials (see Mears & Castro, 2006). This method, while informative, also does not take into account differences that may exist between intent and practice. Researchers need to go into the prison environment and see firsthand how these units operate. These case studies in segregation units will not only help better determine what role segregation plays in modern institutions but also may be useful for determining which practices are more and less likely to help achieve positive outcomes (e.g., improved behavior, decreases in post-release recidivism).

Increase the number and quality of empirical evaluations of segregation

More methodologically rigorous empirical evaluations are needed on the effects of segregation. Such research should strive to investigate aggregate levels of disorder, as well as individual-level behavioral outcomes (e.g., institutional misconduct, post-release recidivism). This research should not only include violent outcomes but also other less serious and nonviolent measures. It is imperative that research in this area addresses concerns related to selection bias, as it is well known that inmates who are sent to segregation tend to possess a greater pre-existing disposition toward criminal behavior (Lovell et al., 2000). Likewise, the failure to appropriately match cases on these characteristics will likely lead to biased results. As the review of the prior empirical research shows, studies employing weak methodological research designs tend to reveal a large negative effect of segregation, whereas those studies with more scientifically rigorous designs generally find no statistically significant differences between the segregation and non-segregation groups.

It must be acknowledged that a randomized control trial — the gold standard of research designs — is not a reasonable possibility in segregation research

because it would simply be unethical to isolate inmates purely for research purposes, given the concerns that such placement may have a negative impact on their mental health. It is up to researchers to continue to come up with better methodologies and statistical techniques to obtain comparable matches for evaluation purposes. One technique that has been particularly helpful in this area is the use of propensity score matching. Propensity score matching affords researchers the ability to ascertain a comparison group that is as close as possible to the segregated group on the number of observable covariates (Rosenbaum & Rubin, 1983; Rubin, 2006). However, it must also be understood that propensity score matching is not a magic bullet and carries its own set of limitations. Propensity score analysis, for example, can only make comparisons between groups with the information that is available. Thus, this technique cannot account for any unobserved factors that may influence placement in segregation, which is a problem if those variables also have an impact on the outcome of interest. Given what is known about segregation, it is likely that there are some predictors of placement that are not captured on official records (e.g., situational information). Therefore, obtaining good matches in the future will require not only the use of more advanced statistical techniques but also the acquisition of more offender and situational information. Funding efforts should be made to encourage researchers to enter the institutions and collect this kind of data.

Prioritize research that investigates moderators

It has long been observed that the context in which segregation is delivered is crucial to its effect on outcomes (Bonta & Gendreau, 1990). However, there is very little research available that assesses for any differential effects of segregation on behavioral outcomes. Research should therefore be prioritized to include the investigation of the influence of moderators, especially for those offender characteristics that have been the subject of recent policy changes (i.e., mentally ill, juveniles, women). This research should also strive to include other situational variables (e.g., physical conditions, officer-prisoner relationships, how inmates are treated, institutional climate, reasons for being sent to segregation, health care and treatment services, in-cell provisions, access to outside contacts), which may also be responsible for mediating the effect of segregation on criminal behavior (see Gendreau & Labrecque, 2016). This type of research will provide a number of benefits to correctional agencies, including helping them to identify which offenders may be more likely to suffer the iatrogenic effects of segregation (e.g., young, mentally ill, and female inmates) and what types of modifications to these units may help alleviate such negative effects (e.g., ensuring a positive culture, increasing out-of-cell time, providing programming).

Continue to explore and evaluate changes to segregation units

As correctional systems continue to alter their segregation practices by modifying conditions and incorporating treatment options, it is imperative

that these strategies are well documented and evaluated. Such information will be imperative for establishing "what works" and "what does not work" in segregation. This research will be essential for helping correctional agencies choose which practices to adopt and which to avoid.

Conclusion

This review of the evidence finds very little support for the contention that the use of segregated confinement (otherwise known as restrictive housing) is responsible for reducing individual or aggregate levels of criminal behavior. The finding of a null effect should not be misinterpreted as support for the continued use of segregation, however, especially at its current rate in the United States. This result, rather, calls into question the logic of relying on an expensive and ineffective crime control strategy, when there are other potentially more viable options available that may achieve better outcomes (e.g., principles of effective intervention; Andrews & Bonta, 2010).

The best course of action for correctional administrators today is to use segregation judiciously and sparingly, while striving to create a system with little to no need for the practice in the first place. However, any effort aimed at reforming the use of segregation must acknowledge that this practice is a management tool that officials rely on for the effective management of jails and prisons (Mears, 2006). In fact, many continue to insist that its use is needed to ensure the safety and security of these institutions (e.g., Angelone, 1999; Gavora, 1996). This raises the important question, "If not for segregation, what do corrections officials do with difficult prisoners?"

It is unlikely that any significant progress will be made in reducing the segregated inmate population in the United States until correctional officials have alternative options available for offenders and until they are confident that their use will not affect institutional safety and security in a negative way. As the nation rethinks the use and function of segregation in institutional settings, the availability of empirical research is crucial for the development of evidence-based policies and practices. The recommendations and conclusion reached here are a starting point for research in this endeavor.

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CHAPTER 3

The Conditions of Confinement in Restrictive Housing

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Restrictive Housing: Purpose, Terms, and Report Objectives

Restrictive housing practices are used in American correctional institutions to manage and contain perceived threats to the safety of inmates and staff, and to keep order in the facility. The process involves segregating some inmates from the general prisoner population under specific circumstances, including violence and disruption (U.S. Department of Justice, 2016). Other than general overviews, however, little systematic and comparative information is available on the conditions of confinement involved in restrictive housing. This report will cover the following conditions of confinement: (1) physical and temporal dimensions, (2) incentives and disciplinary sanctions used, (3) social circumstances (e.g., family contacts), (4) psychological conditions, and (5) service provision (e.g., medical and educational services for prisoners). The absence of information about confinement conditions means that practitioners and researchers lack solid data on which aspects are especially influential on prisoners in both the short term and over time. More study of this topic would provide practitioners and researchers with systematic knowledge of how the conditions work to affect prisoner adaptation. This knowledge may assist practitioners in reducing the harmful effects that prisoners may incur from

living in these conditions. This report provides a synthesis of extant research on the conditions of confinement in restrictive housing to identify the current limitations of the practice and point to ways to address them.

Court decisions (e.g., *Madrid v. Gomez*; Simon, 2014) indicate that restrictive housing conditions are unconstitutional for mentally ill inmates. Systematic reviews are needed of the conditions that inmates face under different forms of restrictive housing over time. Some descriptive information on current conditions in restrictive housing is found in the U.S. Department of Justice's recent (2016) review, *Report and Recommendations Concerning the Use of Restrictive Housing,* and other key reports (Liman Program/Association of State Correctional Administrators [ASCA], 2015; New York Civil Liberties Union [NYCLU], 2015). Yet, missing from the literature is systematic research on how prisoners experience the conditions described. Such information would better inform the knowledge base regarding the levels and types of stress that prisoners face.

More detailed information is needed on the specific conditions that inmates face when placed in restrictive housing and the degree to which these conditions are similar or vary across its various forms. There are three major types of restrictive housing practices that reflect different correctional intentions (Shalev, 2009, p. 2) and that may involve both similarities and differences. Punitive segregation is used to discipline prisoner misconduct, usually for a period following a disciplinary hearing. Protective segregation (and custody) is used to house and separate vulnerable prisoners from the general population for their own protection. Administrative segregation is imposed for managerial reasons. It separates inmates who are deemed to be high risk from the general prison population — often for long periods (e.g., perceived gang members, members of security threat groups) (Liman Program/ASCA, 2015, p. 1). Additionally, supermaximum or "supermax" facilities are those designed to hold prisoners in long-term restrictive housing (Shalev, 2009, p. 9). When implemented for these three categories, restrictive housing reduces interaction with other inmates, limits programming opportunities, and restricts an inmate's privileges (Beck, 2015). Myriad terms are used to describe these conditions; this report will use "restrictive housing" to refer to all of them. However, the terms in the study's source documents will be used when referring to specific research studies when necessary.

To further synthesize and critique the extant research on conditions of confinement in restrictive housing, this white paper adopts Simon's (2014) explanation for the rising rates of incarceration in the United States from the 1970s to approximately 2009 (Garland, 2001; Clear & Frost, 2013). It also evaluates the practice through qualitative research, involving analyses of subjective data such as personal stories, and quantitative research, in which numerical data are analyzed. As Simon indicates, the qualitative story of mass incarceration is revealed through an analysis of major court decisions, with the quantitative story revealed through statistical trends and patterns. The qualitative

story may also be investigated through interviews with and observations of those in restrictive housing. The quantitative story, however, requires testing hypotheses and relationships among variables gathered through data collection. Criminological and sociological theories should guide the understanding of both the qualitative and quantitative information about restrictive housing. For the qualitative story, there is a need to list and describe the commonalities and the different experiences faced by various groups in restrictive housing, including those of overrepresented racial and ethnic minority groups, and often overlooked female and transgender prisoners. For the quantitative story, comparative designs are needed to more fully understand the frustrations and deprivations faced by those living in prison and the types and levels of "pains of imprisonment" that arise over time Sykes (1958/2007). Moving beyond description, a more empirically based, quantitative approach guided by theory would show how the pains of imprisonment affect prisoner outcomes, and adaptations for those living in restrictive housing (Agnew, 2001, 2006; Pearlin, Menaghan, Leiberman, & Mullan, 1981; Sykes, 1958/2007).

With very limited information available on restrictive housing conditions, this paper will draw on findings from several key reports on the topic (Liman Program/ASCA, 2015; NYCLU, 2012). These sources illuminate the conditions in restrictive housing; they also highlight the need for more information about these conditions and the repercussions they may have for inmates. For example, the most systematic resource on conditions of administrative segregation is the data gathered from correctional administrators by Yale University's Liman Program and the Association of State Correctional Administrators (ASCA). Although the Liman Program/ASCA study is an important source of information, it does not include prisoners' experiences of the conditions of confinement in restrictive housing that may be gleaned through the qualitative and quantitative approaches proposed here.

The report further identifies a need for research to explore gender differences and similarities pertaining to inmates' experiences of restrictive housing. Arguments are emerging about the need for gender-responsive programming in the criminal justice system (Covington & Bloom, 2006), although not yet in the realm of restrictive housing. Literature indicates that restrictive housing conditions were established to house "dangerous men" (Simon, 2014). However, within the limited information about restrictive housing, even less is known about how women experience these conditions. A lack of systematic attention to gender perpetuates the tendency to overlook the needs of female offenders in programming decisions, as criminal justice services are usually designed with the needs of men in mind (Covington & Bloom, 2006). This report uses data regarding female inmates in administrative segregation made available for analysis by the Liman Program, but not published elsewhere, alongside published information about the majority of those individuals living in these conditions — men (Liman Program/ASCA, 2015). A descriptive look at the conditions of restrictive housing for female prisoners suggests further research is needed, in particular,

to develop the gendered qualitative stories of restrictive housing. This focus on gender also leads to further consideration of other elements of social location (e.g., race and ethnicity) that may shape experience.

Trends and Patterns in Restrictive Housing

Part of the quantitative story surrounding restrictive housing is revealed by a description of trends and patterns regarding who tends to experience them, which links further back to trends in mass incarceration. As the National Research Council report (2014) documents, increases in incarceration rates in the United States are the result of policy changes, such as the War on Drugs, and changes from indeterminate to determinate sentencing practices constituting more punitive approaches to criminal justice. With these policy changes came a concomitant rise in the use of restrictive housing beginning in the 1980s. Shalev (2009) reports that all forms of prisoner segregation increased in the 1990s. Between 1995 and 2000, in particular, the number of prisoners who were isolated from the general prison population rose by 40 percent (p. 2). The most recent estimates indicate that approximately 80,000 to 100,000 people are confined in isolated conditions in U.S. prisons (Liman Program/ASCA, 2015, p. 3). Estimates across American jurisdictions report that the percentage of the custodial population confined in restrictive housing ranges from 2.1 percent to 14.2 percent (Liman Program/ASCA, 2015, p. 15). Furthermore, using data gathered from inmates as part of the National Inmate Survey (NIS), roughly 10 percent of all prison inmates and 5 percent of all jail inmates have spent 30 or more days in restrictive housing (Beck, 2015).

The survey also found race and ethnic disparities among the inmates who experience restrictive housing conditions. Black prison inmates were more likely than white and Latino prison inmates to have spent time in restrictive housing. Furthermore, inmates with lower education levels (i.e., without a high school diploma), young inmates, and lesbian, gay, and bisexual inmates were more likely to have spent time in restrictive housing than were more educated, older, and heterosexual inmates (Beck, 2015, p. 4). However, the NIS data show no difference in the percentage of each gender having spent time in restrictive housing (Beck, 2015, p. 4).

Further descriptive statistical information on inmates placed in administrative segregation is available by prisoner gender, race, and ethnicity and reflects broader demographic trends in mass imprisonment. For example, the data show that administrative segregation is more commonly used with male prisoners (7.5 percent) than female prisoners (0.1 percent) (Liman Program/ASCA, 2015, p. 17). The median estimates for female prisoners held in administrative segregation is less than 1 percent, although in one jurisdiction, a high of 6.4 percent of the female custodial population is held in these conditions (Liman Program/ASCA, 2015, p. 20).

The use of administrative segregation also varies by race and ethnicity. Research shows higher percentages of black and Latino men in administrative segregation than in the general population of prisons across responding jurisdictions (Liman Program/ASCA, 2015, p. 30). Furthermore, black women are overrepresented in administrative segregation compared to the general female custodial population (Liman Program/ASCA, 2015, p. 36).

The NIS data also reveal criminal justice status and history among inmates held in restrictive housing compared to other inmates. Those in restrictive housing are more likely to have been sent to prison for a violent offense than for other offenses (Beck, 2015, p. 5). Inmates in restrictive housing are also more likely to have been arrested more than once and to have had prior incarcerations as juveniles (Beck, 2015, p. 5).

The use of restrictive housing not only increased in prevalence alongside mass incarceration, but it also became increasingly severe with increased technological surveillance and more extreme facilities (Shalev, 2009), including the development and growth of supermax security prisons involving extended periods of isolation. In the 1980s, there were few supermax facilities other than those in the two founding locations — Marion, Illinois, and Florence, Arizona. However, as of 2005, as many as 44 states had these facilities (Shalev, 2009; Simon, 2014; Mears, 2005), with roughly 25,000 people held in supermax security conditions (Mears, 2013). Mears (2013) and Western (2007) link the policy context of mass incarceration with the increase of these facilities.

During this period, states also moved away from rehabilitative ideals in prison programming and toward "total incapacitation," which emphasizes sending people to prison to prevent crime rather than using other approaches (Haney, 2003; Simon, 2014). Simon argues that the rise of the supermax prison helped to legitimize mass incarceration, with an emphasis on locking away "dangerous men" (2014, p. 52).

Despite the considerable variation in the types of restrictive housing used in federal and state correctional systems across America, they share some common features (Haney, 2009; Liman Program/ASCA, 2015, p. 1). This report next provides a synthesis of what is currently known about the conditions of confinement in restrictive housing facilities, as well as an assessment of the limitations of extant knowledge. Academic books, journal articles, and comprehensive reports by research institutes constitute the basis of the information for this review. Furthermore, because information continues to emerge on proposed changes in restrictive housing practices in some states (e.g., California, New York), newspaper coverage is also used to update information on the conditions of confinement.

How Can Theory Be Used To Understand Restrictive Housing Conditions?

Theory is a powerful tool for guiding research, but it could also be used by practitioners as an integrative framework in working with restrictive housing practices. Theory may assist in considering the substantive meaning of the conditions of confinement in restrictive housing. Furthermore, since theoretical propositions can be tested through data analysis, they can, therefore, be found by evidence to be false, which occurs when empirical results do not support the theorized relationships (Bernard, Snipes, & Gerould, 2010). When theories are not supported empirically, they can be refined and subjected to further testing. However, if certain theoretical propositions are consistently supported by data, practitioners can be confident in the robustness of those results — providing a compelling rationale for decision-making with scarce resources. Furthermore, theory may provide a framework for how things work in the short and long term, with practical implications for when and why to adopt or curtail specific programs and practices.

One such theoretical tool for further synthesizing information on the conditions of confinement in restrictive housing is provided by the focus on stressors faced in prison, as highlighted by Robert Agnew's general strain theory (GST) (2001; 2006) for understanding how strains (or stresses) are associated with criminal behavior. Recent directions in GST apply this framework to understanding criminal justice settings (Blevins, Listwan, Cullen, & Johnson, 2010; Delisi, 2011; Agnew & Delisi, 2012), but not (so far) to the conditions of restrictive housing. Theorizing the connections between restrictive housing conditions and GST is one objective of this report.

Further theoretical insights are provided by classic research conducted more generally in prisons by Sykes (1958/2007) in his conceptualization of the "pains of imprisonment." GST attends to the implications of stressors and strains or events and conditions that are disliked (Agnew, 2006, p. 4). Among myriad strains that individuals generally face in prison, two are the most prominent: being treated in an aversive manner and losing something of value (Agnew, 2006). Prisoners in restrictive housing experience loss of privileges and extreme isolation resulting in a lack of meaningful human contact (Smith, 2006) — both of which qualify as strains or pains of imprisonment. In fact, a recent book develops the use of isolation as a contemporary "pain of mass imprisonment" (Fleury-Steiner & Longazel, 2014, emphasis added). However, further research is needed to understand the specific types of strains experienced by those in restrictive housing as well as their totality.

Sykes' (1958/2007) classic research in a men's maximum-security prison identified five primary pains of imprisonment: (1) the deprivation of liberty, which includes restricted freedom of movement and isolation from friends, family, and relatives (p. 65); (2) the deprivation of goods and services; (3) the

frustration of sexual desire (originally described in terms of lack of access to heterosexual relationships); (4) the deprivation of autonomy or the restricted ability to make choices (p. 73); and (5) the deprivation of security, where the prisoner may need to fight for safety and possessions. Insight into the contemporary pains of imprisonment for prisoners in the United States will be enhanced by considering the more extreme circumstances of restrictive housing.

Moreover, consideration of the pains of imprisonment in restrictive housing would best include comparisons to the general prison population. Although the conditions of confinement in restrictive housing differ from the circumstances in which general population prisoners are held, both entail pains of imprisonment. The recent report by the National Research Council (2014) includes an overview of conditions of confinement in prisons as environments tasked with maintaining order and safety, as well as meeting punishment and reformation goals. Conditions of confinement include a range of stressors, such as "material deprivations; restricted movement and liberty; a lack of meaningful activity; a nearly total absence of personal privacy; and high levels of interpersonal uncertainty, danger, and fear" (p. 174).

Stressors encountered in prison, and those experienced prior to prison, can lead to mental health problems, according to criminal justice models of importation (taking into account pre-prison influences and experiences) and deprivation (taking into account influences and experiences encountered in prison) (Goodstein and Wright, 1989). Both importation strains (stressors experienced prior to prison) and deprivation strains (stressors experienced in prison) influence an inmate's adjustment to prison, according to criminal justice models and the framework of GST (Agnew, 2006; Foster, 2012). The importance of further research into deprivation strains is described below.

General strain theory also includes a key role for *coping resources* that may offset the influences of strains on antisocial behavior (Agnew, 2006; Pearlin et al., 1981). Accordingly, although prisoners in the general population are subject to stressors and strains, they also have access to some mitigating factors that may include sharing a cell; having some contact with other prisoners in particular areas at designated times; and being offered some degree of vocational, educational, and therapeutic programs (Shalev, 2009). Furthermore, classic sociological research on prisoners reveals the importance of social interactions with other inmates in mitigating the pains of imprisonment, particularly when prisoners take on specific social roles and develop interpersonal relationships to contribute to the social order in men's and women's prisons (Clemmer, 1940/1965; Giallombardo, 1966; Heffernan, 1972; Sykes, 1958/2007). These early findings suggest that efforts to increase prisoner coping resources in restrictive housing may lead to more orderly settings as well, by offsetting the pains of imprisonment. Little is known about inmate and institutional coping resources available to prisoners held in restrictive housing conditions. Contemporary studies of imprisoned men describe how prison gangs have become a means of achieving

order in prisons (Skarbek, 2014). Yet, exploring other means of establishing order by fostering coping resources, even in extreme circumstances, may be more conducive to inmate and staff well-being according to GST premises.

Furthermore, confinement conditions within restrictive housing vary, from less to more restrictive and harsh circumstances regarding the severity of isolation, amount of deprivation, number of restrictions, and degree of degradation (Haney, 2009; National Research Council, 2014). During the development and growth of supermax prisons in the mid-1980s, a continuum from lesser to harsher and more restrictive conditions developed, with the harshest conditions incorporating intense social isolation and control (Browne, Cambier, and Agha, 2011, p. 47). A synthesis of what is known about the conditions of confinement in restrictive housing will begin to describe some of the pains of imprisonment in these circumstances and provide a basis for future comparative research.

In addition to using GST and the pains of imprisonment framework, another theoretical tool for understanding restrictive housing is provided by examining critical sociological perspectives focused on the body (Foucault, 1977; Wacquant, 2004). These perspectives draw attention to "embodied experience," which acknowledges that extreme restrictions enacted over the body, such as those used in restrictive housing, also have a direct effect on prisoners' cognitive and emotional health. A connection with more critical sociological perspectives provides a basis for interpreting how the pains of imprisonment may vary by social location (e.g., across demographic groups). This perspective underpins a call for more information on prisoners' experiences in restrictive housing to bring about more just and humane policies and practices. It will also provide insight into potentially diverse experiences within restrictive housing. This direction of research will begin to fill some of the missing aspects of the qualitative story surrounding restrictive housing.

Synthesis and Critique of Evidence on Restrictive Housing Conditions

Data on the conditions of confinement in restrictive housing are generally lacking and are mostly embedded within broader reports and articles, rather than being the focus of empirical inquiry. For example, extant resources include some detailed observational information on conditions in supermax facilities (e.g., Shalev, 2009); however, these findings are often descriptive in nature. The most nationally informative and recent data on restricted housing conditions are available for conditions in administrative segregation, specifically, where comparative, survey-based information has been gathered across jurisdictions (Liman Program/ASCA, 2015). These data were gathered through surveys administered to correctional officials in 46 responding jurisdictions across the United States. That report, *Time-In-Cell: The ASCA-Liman 2014 National Survey of Administrative Segregation in Prison,* follows a systematic review of policies

covering the conditions of confinement in administrative segregation, which was also conducted by the Liman Program (2013). Key findings of the Liman Program/ASCA data are synthesized here to provide a rare glimpse into extant conditions. New information also will be gleaned from data made available by the Liman Program/ASCA on the 10 jurisdictions that reported information on administrative segregation conditions for women: Delaware, Georgia, Iowa, Kansas, Montana, Nevada, South Carolina, Texas, Wisconsin, and Wyoming.

The Liman Program/ASCA data pertain to institutionally reported information, but they also contain some sparse information from prisoners themselves. The prisoner-reported data tend to be based on convenience samples, which are samples composed of participants who are accessible but not randomly or representatively selected. One key report is based on communication with 100 prisoners who served time in punitive segregation in New York (NYCLU, 2015). However, it is limited to men's experiences, as 99 percent of the prisoners in punitive segregation, or "extreme isolation," in New York state are male.

Some sparse qualitative research is also available, the most prominent being Rhodes' (2004) work with incarcerated men. The only available qualitative research on the restrictive housing of incarcerated women is embedded in a larger (but older) study of a women's prison in California (Owen, 1998). Information about women in restrictive housing was included as an aside and was not the purpose of the study. Qualitative research may involve smaller numbers of cases, but it yields more nuanced information to add to the knowledge base.

One question that has not been addressed — but should be — is to what degree are there similarities and differences across genders? In the Liman Program/ASCA data, 26 jurisdictions across the United States answered a general question about whether facilities have different staffing, programming, or privileges in administrative segregation for women and men, which elicited qualitative, text-based responses.[1] Most correctional administrators indicated that there was no difference in the conditions for men and women in administrative segregation. Among the responses that support this point, the following were selected as examples:

- Alaska: "Administrative Segregation policy and procedure applies to both male and female prisoners, without variance."
- Connecticut: "There are not any notable differences between how the males and females are confined or managed."

[1] The questionnaire item reads, "If your system also houses female inmates in administrative segregation, please describe any differences in the facilities, staffing, programming, privileges, or other aspects of confinement that differ from what you have described above" (Liman Program, 2015, Appendix C (Section III): http://www.law.yale.edu/system/files/area/center/liman/document/liman-asca_adseg_appendix_cappendix_c.pdf.

- Florida: "No differences — same as males."
- Nebraska: "We have the same policies and physical layout for restrictive housing at the men's and women's facilities."

Yet, other qualitative responses suggest that there are some differences in conditions for men and women in administrative segregation:

- Utah: "Restrictive housing is similar to the males. One major difference is the step-down process, which is not as extensive or structured. Programming is about the same."
- Nevada: "There is only [one] institution that houses female inmates for administrative segregation. Limited housing and there is no other institution that the inmate can be transferred to."

Therefore, the qualitative data suggest that similarities exist across genders, but they also indicate some differences that seem to pertain to women's smaller numbers in administrative segregation conditions.

Physical and Temporal Dimensions

Supermax conditions also vary, but there are some commonalities of space that adhere to legal standards requiring that cells measure 70-80 square feet (Shalev, 2009). In California, Pelican Bay State Prison's Secure Housing Unit (built in 1989) has cells that measure 7.6 feet by 11.6 feet, with some cells facing concrete walls (Goode, 2015). Arrigo and Bullock (2008) further explain that secure housing units tend to be small cells (6 feet x 8 feet), with solid steel doors (p. 624). Pizarro and Narag (2008) synthesize the literature on supermax conditions, indicating that inmates tend to be held in 7- by 12-foot cells, often without windows.

Double-celling can also occur in restrictive housing conditions (NYCLU, 2015, p. 34). Some inmates have a "bunkie" or cellmate in these small spaces, which can lead to tension and has the potential for violence (p. 34, endnote 115). The NYCLU report describes cellmates sharing "roughly 100 square feet — about the size of a parking space — that includes a toilet, open shower stall, writing platform, and bunk beds" (p. 35). A key issue, according to prisoners in these confined conditions, is the lack of privacy. This finding points to how the physical dimensions of restrictive housing cells may well constitute deprivation strains.

Regarding time-in-cell, a common feature of restrictive housing includes the "physical isolation of individuals in which they are confined in their cells for around twenty-three hours each day (typically twenty-two to twenty-four hours)" (Smith, 2006, p. 448). Jurisdictions report that most men in administrative segregation spend 23 hours per weekday in their cells. In roughly

half of the jurisdictions, prisoners spend 23 hours per weekend day in their cells, as well (Liman Program/ASCA, 2015, p. 37).

Reporting jurisdictions state that prisoners can stay in administrative segregation for less than 90 days but that stays can range up to three or more years (Liman Program/ASCA, 2015, p. 28). In supermax facilities, this means long-term isolation for indeterminate terms (Haney, 2003); however, legal settlements in California and New York have called for ending the use of indeterminate stays in restrictive housing (Canon, 2015; Schwirtz & Winerip, 2015).

Some sources indicate that the cells in restrictive housing units lack windows and are often illuminated by artificial light 24 hours per day, where "prisoners have no means of controlling the brightness or dimness of their units" (Arrigio & Bruce, 2008, p. 625). Conditions can include isolation cells that have no windows, as at Pelican Bay (Lovett, 2015). Some supermax units have skylights in the hallways (Shalev, 2009). Most jurisdictions indicate that both men and women in administrative segregation have access to natural light (Liman Program/ASCA, 2015, p. 39), and two-thirds of jurisdictions for men report that prisoners can control their in-cell lights (Liman Program/ASCA, 2015, p. 39). Sixty percent of jurisdictions report that female inmates can control in-cell lighting. However, these results do not address the quality or duration of inmates' exposure to light, which is part of inmates' sensory experiences — their embodied experience of restrictive housing.

Other physical conditions of restrictive housing include air conditioning and noise levels. Among both men and women in administrative segregation, most jurisdictions report having air conditioning (Liman Program/ASCA, 2015, p. 39), although whether it is functioning is an open question. Some literature about noise suggests an "eerie silence" in supermax conditions (Shalev, 2009), while other reports indicate uncontrollable noise levels, with prisoners banging their fists against cell doors and yelling. Descriptive reports of prisoner frustration and yelling are also indicated by Owen (1998) for women in secure housing (p. 163). Additionally, the NYCLU (2015) report describes the noise conditions in the recreation pen as catcalls, "guys screaming like crazy people" (2015, p. 39), and pens filled with men "yelling and screaming about nothing" (p. 39).

Another physical concern is access to showers in restrictive housing. In most supermax conditions, both male and female inmates leave their cells for showers approximately three times per week (Pizarro & Narag, 2008), although some reported less-frequent showering (Liman Program/ASCA, 2015, p. 43).

Physical conditions may also encompass recreation and exercise provisions. Under supermax conditions, prisoners exercise alone, with no recreational equipment, in a cage or concrete exercise yard outdoors for one hour per day (Shalev, 2009). Sometimes, the exercise yard is indoors with an open, barred top. Prisoners describe the exercise "pen" as being surrounded by concrete walls or heavy metal grating that obstructs their view of the sky (NYCLU, 2015, p. 39).

The vast majority of jurisdictions report that men's administrative segregation facilities have outdoor exercise areas and that 60 percent have indoor exercise areas (Liman Program/ASCA, 2015, p. 41). For women, 90 percent of the 10 reporting jurisdictions indicate that outdoor exercise facilities are available, while 50 percent report indoor exercise facilities.

Some jurisdictions report similar access to group exercise activities among men (37 percent) (Liman Program/ASCA, 2015, p. 42) and women (40 percent). Roughly 20 percent of jurisdictions reporting on conditions for men in administrative segregation indicate that inmates can receive more hours of exercise as they progress through a step-down classification system (Liman Program/ASCA, 2015, p. 41). For men, most jurisdictions report a median of five hours of exercise per week. Among reporting jurisdictions for women, hours allotted for exercise range from three to 10 hours per week, with the median similar to that estimated for men — about five hours per week. The Liman Program/ASCA report indicates that group exercise tends to be offered as part of the final stages of a step-down classification system in administrative segregation conditions (2015, p. 42). Inmates in administrative segregation in general can skip their exercise periods. They can also be denied exercise privileges due to inclement weather, as punishment for rule violations, and if they are considered a threat to security.

Meals also constitute part of the physical conditions of confinement in supermax custody. Inmates eat meals in their cells (Pizarro & Narag, 2008), their food often passed through slots in the door (Browne et al., 2011).

Furthermore, inmates in restrictive housing are generally permitted no physical contact. The touch of another human being tends to happen only when correctional officers place handcuffs and other restraints on inmates, such as shackling them at the waist or placing them in leg irons (Browne et al., 2011). This finding speaks to the distinctive feature that human contact is generally lacking for prisoners held in restrictive housing (Smith, 2006). For example, in supermax conditions, inmates may experience cell extractions (the forceful removal of a prisoner from a cell) (Pizarro & Narag, 2008). Extractions are employed when inmates cover the glass windows of their cell doors or refuse to come out of their cells. Other physical conditions of confinement include four-point restraint, which can include strapping an inmate to a bed. When inmates become violent or refuse to follow orders, guards can place them in special cells that have no amenities — including no beds or toilets. Food delivery and other services can also be denied (Pizarro & Narag, 2008, p. 26).

Finally, technology and surveillance are part of the physical conditions that inmates in restrictive housing face (Shalev, 2009). Supermax units include surveillance by video cameras pointed at cells and intercom systems in the recreational yard, for example, to reduce contact between prisoners and staff.

Descriptive information indicates that at Pelican Bay, not only do doors open and close electronically but corrections officers speak to inmates through intercoms (Goode, 2015).

Limitations and Recommendations

The data show that the physical conditions in restrictive housing are consistent with guiding standards. However, there is little information about what these conditions mean for prisoners, how conditions are experienced, and how these conditions affect prisoners' adaptation to prison life, including well-being and antisocial behavior. Systematic research is needed on prisoners' embodied experiences in restrictive housing, which must be generated with in-depth approaches filling in the qualitative story of what it is like to live in restrictive housing. For example, the present literature notes that the cells are small. However, it is not known how a small cell with a view of a concrete wall, or no windows, or a steel door combine to affect those who live in them. Prisons help ameliorate the constraints of small, general-population cells with out-of-cell time, recreation, and other programming (National Research Council, 2014). These mitigating factors, or coping resources, are generally not available in restrictive housing, where, for example, out-of-cell time is greatly limited. A key recommendation for future research is that prisoners who have experienced restrictive housing should be asked directly and systematically about their experiences of these physical conditions. Although the descriptive data on the physical conditions in administrative segregation show similarities among men and women, little is known about their respective experiences of these conditions.

Totality Versus Separate Strains

Each of these conditions alone may induce deprivation strain, but considering the totality of physical deprivations that inmates encounter in restrictive housing may be especially important in making an overall assessment. The National Research Council report describes some of the conditions in restrictive housing under the title, "extreme conditions of confinement" (p. 178). However, how the totality of these conditions is experienced by inmates and how they may together constitute extreme conditions is lost when research focuses on each specific dimension separately. New surveys of inmates are needed to systematically measure these deprivations to provide an overall index of the deprivation strains that inmates encounter. This effort would be similar to the research conducted on "cumulative burden," the total stress load faced in general community population samples (Turner, Wheaton, & Lloyd, 1994). Such a research direction will yield comparative, empirical assessments of how stressful various conditions of restrictive housing are for prisoners. Comparisons could then be made across prisoner groups, such as comparing men's and women's experiences.

Control of the Body and Coping Resources

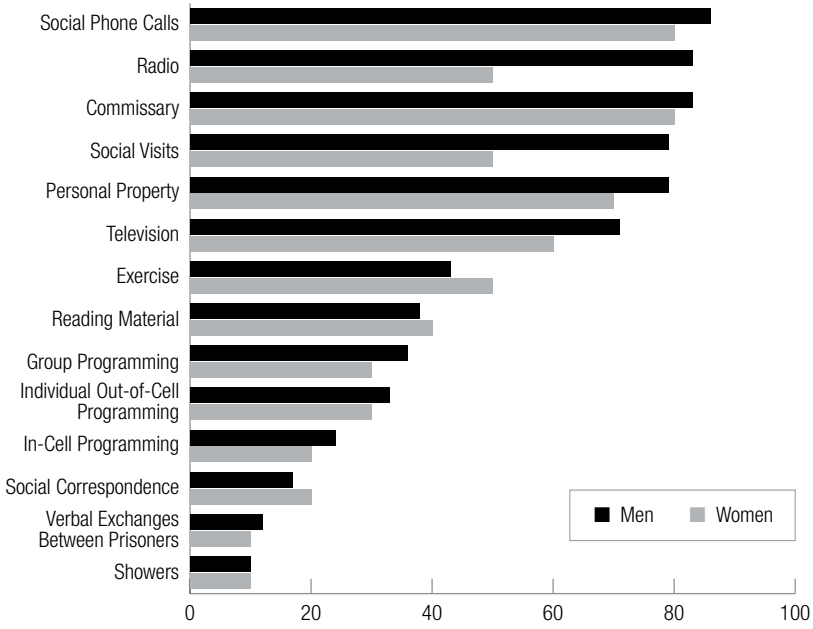
Sociological theory is informative in underlining that the body is, ultimately, the site at which the physical conditions of restrictive housing are experienced (Foucault, 1977; Wacquant, 2004). As Haney observes, "in most of these units in the United States prisoners cannot come out of their cells without being cinched up in elaborate ways — handcuffs, leg irons, restraint chains and the like" (2009, p. 19). This perspective draws attention to the aspects of restrictive housing that control prisoners' bodies through the cell conditions imposed and use of restraints. Coates' (2015) recent work on being a black male in America, *Between the World and Me,* sensitizes audiences to pay attention to race and the body. His work, along with reports on demographic trends in restrictive housing (Beck, 2015), suggests that it is especially important to acknowledge that the restrictive physical conditions of confinement are disproportionately experienced by black bodies. Inequities are seen not only in the demographic patterns of restrictive housing but also through inquiry into prisoners' embodied experience. The lack of qualitative research on this topic obscures this key point, as well as what it means for the well-being of racial and ethnic minority groups.

According to GST, coping resources can offset strains and stressors — which have been described as the pains of imprisonment in restrictive housing (Agnew, 2001; 2006; Pearlin et al., 1981; Sykes, 1958/2007). While touring a men's prison, the author of this paper observed a prisoner in restrictive housing shadow boxing in his cell through a small window in its steel door. He was creatively passing his time in restrictive housing with extremely limited resources at his disposal. This boxing example and the throwing of bodily substances (Rhodes, 2004) demonstrate that prisoners may also use their bodies to act out some degree of resistance. More information is needed on institutional efforts that try to help prisoners cope with restrictive housing conditions and how prisoners themselves cope with these conditions — if at all.

Routines, Sanctions, and Incentives

Regarding the sanctions used in restrictive housing, NYCLU describes a "culture of deprivation," where deprivation orders may be imposed for seven days, but there is no cap on the amount on the total time such orders can span (2015, p. 37). However, the Liman Program/ASCA's (2015) systematic overview of the use of both sanctions and incentives in administrative segregation provides more specific information and also includes some data about women (Figure 1). The most common sanctions include limiting inmates' social telephone calls, time spent listening to the radio, commissary privileges, social visits, possession of personal property, and exercise time. Sanctions are also imposed that limit reading material, group programming, individual out-of-cell programming, in-cell programming, social correspondence, verbal exchanges between prisoners, and showers. Taken together, the data most often show that the sanctions used

Figure 1. Percentage of Jurisdictions Reporting Activities as Disciplinary Sanctions Among Men and Women.

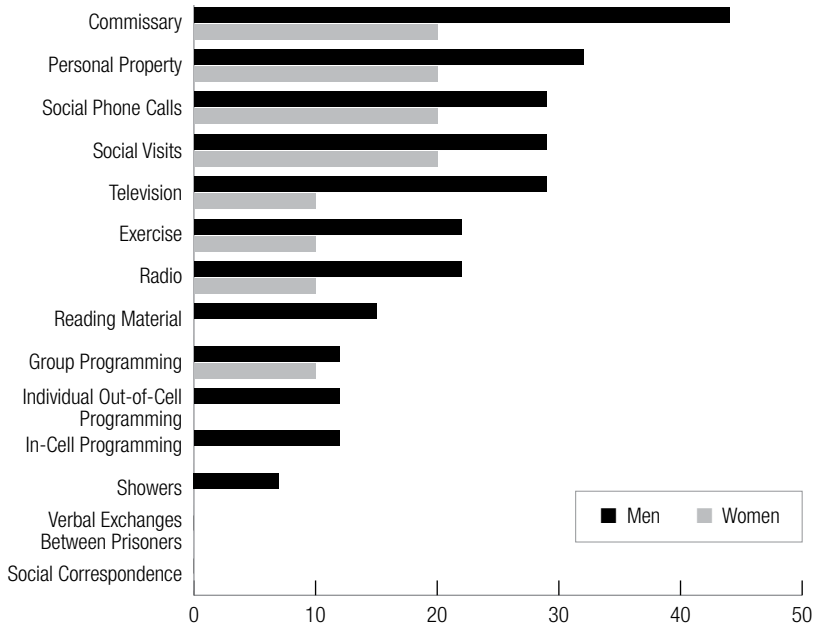


Sources: Data on men ($n = 43$) from Liman Program/ASCA (2015, p. 50); data on women ($n = 10$) made available by Liman Program/ASCA.

are similar across gender. However, data also indicate that some sanctions (e.g., regarding social visits) are experienced more often by men than women in administrative segregation.

More details about how sanctions are implemented are embedded in the literature, including those that affect recreation and food. In New York state, when prisoners first arrive in secure housing units, they must wear handcuffs secured to a waist chain during recreation (NYCLU, 2015, p. 38). Prisoners find that these restraints severely limit exercise options within the already confined conditions of a recreational cage. After 30 days, if they do not have a disciplinary infraction, prisoners may go to the recreation cage without the restraints. Of course, this privilege can be revoked if the inmate incurs a disciplinary infraction. Food restrictions also constitute sanctions for disciplinary infractions in restrictive housing (NYCLU, 2015). In New York, there is a recent recommendation to eliminate "nutraloaf," a dry, flavorless, 1,100 calorie product sometimes given to inmates as a sanction in place of the standard meal (McKinley, 2015; *The Economist*, 2015). Prisoners also report mealtime "drive-bys," during which a correctional officer passes their cells without delivering food. Other

Figure 2. Percentage of Jurisdictions Reporting Activities as Incentives Among Men and Women.



Sources: Data on men ($n = 41$) from Liman Program/ASCA (2015, p. 50); data on women ($n = 10$) made available by Liman Program.

descriptive information from prisoners reveals that a tray may be delivered with a cover, as is shown on security cameras, but with no food under the cover (NYCLU, 2015, p. 39).

The Liman Program/ASCA data (2015) also provide an overview of the incentives that are available in administrative segregation across jurisdictions (Figure 2). The most common incentives are access to the commissary, personal property allowed in cell, and social telephone calls and visits. A comparative assessment by gender on the use of incentives in administrative segregation shows that fewer programs offer incentives to female inmates than do programs for men.

Limitations and Recommendations

Some of the descriptive information about sanctions is derived from convenience samples; more systematic data are available on administrative segregation. However, more systematic data are still needed pertaining to sanctions and

incentives used across the various living conditions in restrictive housing and gender similarities and differences in their use. The quantitative, descriptive results tend to show similarities in the provision of sanctions and incentives to women and men. This finding is in keeping with the qualitative data reported by the responding administrators in jurisdictions involved in the Liman Program/ASCA report. However, the quantitative data also support other findings that there are some differences. Specifically, this report finds that more sanctions are used with men than with women in administrative segregation, and fewer incentives to illicit good behavior are provided to women. Further comparative inquiry would increase the knowledge base regarding how gender, as one example of social location, shapes inmates' experiences with the conditions of confinement in restrictive housing. More information on this topic is needed to better understand and address prisoners' embodied experiences of restrictive housing.

Social Conditions of Confinement

Social relationships in prison include those with family members, staff, and other inmates, but restrictive housing precludes most of these social contacts. For example, Browne and colleagues (2011) reported that family visits are reduced, or may be completely prohibited, for a year or more. They further note that when family visits are allowed, they are conducted by speaker or telephone through a thick glass window, with no opportunity for human touch (Browne et al., 2011, p. 47). In some facilities, visits even occur over closed-circuit television (Arrigo & Bullock, 2008, p. 625).

The Liman Program/ASCA report and data (2015) indicate that all reporting jurisdictions permit social visits for both men and women. The jurisdictions also reported that 20 percent of women's visits are contact visits, but no jurisdictions reported contact visits for men. The research indicates that, for prisoners in restrictive housing units, approximately 5 percent of visits to male prisoners occur only via video. No facilities reported restricting female inmates to video-only visits; however, a combination of contact, non-contact, and video are used for women (10 percent) and men (7 percent). Whether these patterns have differential meanings to inmates by gender is unknown.

Both male and female inmates in administrative segregation are allowed social telephone calls (in addition to calls for legal or religious purposes) (Liman Program/ASCA, 2015). The vast majority of these telephone calls are monitored, as are calls by general population prisoners. However, it may be important to consider the influence of such monitoring as part of the totality of other circumstances and restraints that inmates face in restrictive housing.

Limitations and Recommendations

Research is needed on the social effects of solitary confinement on families in the community. Prisoners' perceptions that their families are also affected by

their incarceration may add to the pains of imprisonment they experience. The issue is relevant to practitioners, in that it may be a heretofore unacknowledged form of strain for prisoners in restrictive housing. Investigating this area would contribute to research on the collateral consequences of incarceration or "spillover effects" (Comfort, 2007). Literature pertaining to incarcerated men indicates that female spouses and partners are deeply affected by their loved ones' circumstances (Comfort, 2007; Wildeman, Schnittker, & Turney, 2012). There is a notable lack of information about how a family fares while a family member is in restrictive housing (Smith, 2006, p. 497). The recent NYCLU report (2015, p. 28) indicates that families also suffer when prisoners are sent to restrictive confinement. More systematic research designs would yield further insight. Drawing on GST (Agnew, 2006), given the severity of conditions in restrictive housing, it would seem that the effects of having a loved one in these conditions may be even more acute for families on the outside; however, only comparative research would shed light on that issue.

Social conditions in restrictive housing also include contacts with other prisoners and staff. Those in restrictive housing tend to be excluded from normal prison programming, routines, and collective activities, greatly reducing social interaction (Haney, 2003). Although prisoners can yell to those in the next cell or pass notes, and must interact with guards, Haney argues that these personal exchanges do not constitute normal social interaction. Smith (2006) goes on to pinpoint harm in solitary confinement: "The central harmful feature is that it reduces meaningful social contact to an absolute minimum: a level of social and psychological stimulus that many individuals will experience as insufficient to remain reasonably healthy and well-functioning" (p. 503). More information about how prisoners experience the social conditions of restrictive housing — or the lack of them — would illuminate whether the conditions of confinement used in supermax facilities today are serving society's best interests over the long term.

Furthermore, little information on staff-inmate interactions has been gathered in a systematic fashion. Given the constraints of restrictive housing, some inmate-to-staff communication in restrictive housing occurs through their bodies, in the form of cutting, suicide attempts, and throwing bodily substances (Rhodes, 2004). Inmate contact with prison staff also occurs in the course of routine activities in restrictive housing, such as being escorted to the exercise yard or the toilet, or through brief encounters when meals are delivered to the cell door (Smith, 2006, p. 448). Ethnographies that expand on staff-inmate interactions are extremely rare in the literature. However, they are needed given that staff-inmate interactions constitute part of the social conditions of confinement.

Gender Similarities or Differences?

The Liman Program/ASCA data provide further survey-based information on gender and the degree of communication among prisoners. All jurisdictions

report that male and female prisoners can talk with one another, but the quality of those contacts is not revealed by the findings. The data show that more men than women are allowed to talk via group programming, but it is not clear whether that is due to more restrictions on women or less group programming for women. The data also indicate that more women than men talk during recreation-yard activities; therefore, qualitative differences may exist by gender in how social contacts occur in prison.

Some insight about women in restrictive conditions, and their social contacts, is embedded in a broader view of Owen's (1998) work in California. Her research includes conditions in the prison's general population and shows that women form "play families" as part of their social relations. A family member's stay in restrictive housing conditions affects her prison family. Owen's descriptive research suggests that women find it painful to be cut off from play-family relationships in the prison, wondering, for example, if partners on the inside will wait for them while they are in restrictive housing (Owen, 1998, pp.134-137). This research then suggests that perceived impact on within-prison ties is a pain of imprisonment for women in restrictive housing. These play- or pseudo-family ties can also lead to time in secure housing (e.g., as punishment for violence against a partner). This insight raises new questions about how women experience restrictive housing when it separates them from their in-prison partner or other in-prison family members. However, more updated research is needed on both men's and women's social relationships in prison.

Although Owen's (1998) qualitative research on women includes only a few cases of those in restrictive housing, it also raises some questions about staff-prisoner relationships. As part of her overall study, Owen interviewed some staff and prisoners in restrictive housing. One striking finding comes from the comments of a prison guard about the degree of perceived physical threat from the prisoners. The guard reports that "[t]here is no danger for staff in here, not even in the Seg unit. The danger in here is getting manipulated" (Owen, 1998, p. 165). This perception contrasts with the extremes of supermax conditions that focus on constraining "dangerous men" (Simon, 2014). However, in a visit to a restrictive housing component in a women's prison, the author found that staff were highly concerned about perceived threats to their safety and that of visitors. Visitors were given protective vests to wear and instructed to not walk too close to the cells (which had steel bars) to prevent being spit upon. The message conveyed throughout the visit was that these were "dangerous women." This message conflicts with the prison guard's perception in Owen's research. Therefore, more research is needed to clarify how both women and men are perceived as threats to prison functioning and the reasons they are placed in restrictive housing.

Psychological Conditions

Even with variations in the conditions of confinement, Smith states that "the overall conclusion must be that solitary confinement — regardless of specific conditions and regardless of time and place — causes serious health problems for a number of inmates" (2006, p. 503). It is estimated that about 45 percent of supermax prisoners suffer from psychosocial impairments (Lovell, 2008). Another study shows that two-thirds or more of those in supermax conditions suffer from psychological and emotional trauma, and the psychopathological effects of isolation (Haney, 2003). Furthermore, a recent review of extant literature by the National Research Council (2014) states that "the overwhelming majority of studies document the painful and potentially damaging nature of long-term prison isolation. Occasional studies have found little or no harm … [h]owever numerous methodological concerns have been expressed that limit any straightforward interpretation of these counterintuitive results" (pp.186-187).

Haney and Lynch's review from 1997 discusses some studies that found no adverse psychological effects of restricted housing and suggest that this is a problematic conclusion of some early literature. Smith (2006) reviews this research as well, mentioning, in particular, some studies on sensory deprivation that found no negative effects. His review notes that this research was based on a voluntary sample of college students in an experimental setting for 10 days or less (Kurki and Morris, 2001, p. 431), which is not comparable to the involuntary conditions of confinement. However, a more recent longitudinal study in Colorado examined 270 male inmates with and without mental illness in administrative segregation and in the general prison population. They found no adverse mental health effects from exposure to administrative segregation during a one-year period (O'Keefe, Klebe, Metzner, Dvoskin, Fellner, & Stucker, 2013). As the authors themselves note, more research is needed on these findings because they are from one state and conditions of confinement vary across jurisdictions. In addition, mental health effects may emerge after the one-year interval in which they were studied.

Limitations and Recommendations

On the whole, studies tend to show adverse psychological conditions for inmates living in restrictive housing (Mears, 2008, p. 691), although evidence is mixed. More research is needed to clarify the psychological conditions that may arise in restrictive housing and to evaluate how variations in these conditions of confinement (e.g., level and types of deprivation strains) are associated with mental health outcomes. This research would be further enhanced by considering the potentially offsetting role of coping resources, when available. The GST framework provides a rationale for future research on processes that may explain how strains and coping resources in these circumstances work to affect the mental health of inmates in restrictive housing. This type of empirical research may suggest policy-relevant points of prevention and intervention.

Service Provision in Restrictive Housing

Some information on the services provided to prisoners in restrictive housing is embedded in the recent Liman Program/ASCA report (2015) and in studies of supermax prisons (Shalev, 2009). Concerns about service provision in restrictive housing have emerged from the court case in California regarding the quality of health care and therapeutic programming in *Madrid v. Gomez* at the Pelican Bay Secure Housing Unit (Arrigo & Bullock, 2008, p. 625). The consensus in the limited extant literature is that mental health and medical services are very limited for those in restrictive housing (Browne et al., 2011).

Supermax facilities such as Pelican Bay often can provide more in-depth information about service provision in restrictive housing. Programming for inmates in supermax conditions is provided within cells due to safety concerns (Pizarro & Narag, 2008). Educational services may be provided, as they are at Pelican Bay, by placing inmates in a row of educational cells that face computer monitors, through which the instructors teach the lesson (Shalev, 2009). Other information on supermax conditions suggests that when education is provided, it is by teachers talking to inmates through openings in the cell doors (Pizarro and Narag, 2008). In some cases, prisoners may sign up for in-cell study packets (e.g., for GED, substance use, aggression management) (NYCLU, 2015, p. 32). However, extant literature generally points to an absence of programming.

The literature pertaining to services also indicates that mental health and medical services are extremely limited for prisoners in restrictive housing conditions (Browne et al., 2011), where visits with mental health counselors and staff are conducted through the cell door. However, cell-front therapy allows other inmates to hear the prisoner-therapist discussion. If out-of-cell treatment is provided, the inmate is led to treatment in shackles and remains shackled throughout the session. Shalev (2009) provides some information on other medical services in supermax conditions. For example, the Pelican Bay Secure Housing Unit has on-site medical and dental clinics, but more systematic information on medical services across jurisdictions is needed. Telemedicine is also used in supermax facilities, with medical examinations performed via video conferencing links between the prison and medical centers. One 10-minute telemedicine conference requires roughly two hours of preparation, which involves a strip search of the prisoner, an escort to and from the telemedicine clinic, and two guards who remain with the prisoner during the examination (Shalev, 2009).

Prisoners in secure housing units in New York state explain that medical staff come to a cell when the inmate submits a sick-call slip; the inmate talks with staff through a locked cell door and the food slots, affording no privacy (NYCLU, 2015, p. 40). Visits with a psychiatrist are sometimes conducted via teleconferencing (p. 41). Over all, prisoners report difficulty in receiving attention from medical personnel and social workers; when they do receive medical services, issues of privacy remain a concern.

Finally, the literature shows an overall dearth of programming for prisoners in supermax conditions, drawing attention to the idleness often observed among these inmates (NYCLU, 2015; Haney, 2009) — who live a deeply monotonous existence with pronounced deprivations (Haney, 2009). Restrictions on programming and services also likely amplify the overall pains of imprisonment experienced by prisoners.

Limitations and Recommendations

Information in extant literature on the availability of legal, medical, educational, and mental health services in restrictive housing is sparse. However, service provision is potentially very pertinent in terms of the GST framework, as services represent a programmatically modifiable form of coping resources for prisoners. More information is needed, as well, about the effectiveness of the services provided, including, for example, different modes for providing medical services in these circumstances.

Gender Similarities or Differences?

Data on women made available by the Liman Program and the Liman Program/ASCA report (2015) were synthesized to provide insight into gender similarities and differences in service provision for those in administrative segregation. This information indicates that in-cell programming is the most common for both men and women, whereas out-of-cell programming is less common. In-cell programming includes mental health care, GED, and education services. Out-of-cell programming includes mental health groups, education, and visits with a counselor. Although important in understanding the parameters of service provision in restrictive housing, this information is limited — the data do not speak to the quality of the programming or how it is experienced by prisoners.

Information pertaining to legal visits is available for both men and women in administrative segregation. All jurisdictions permit legal visits for both, but these meetings are a mix of contact and non-contact visits that are monitored. Therefore, the information about legal visits by gender shows similarities, but more information is needed about the quality of these visits and how they are experienced by inmates. In addition, the monitoring of legal visits should be viewed within the totality of constraints that these prisoners face. Is it yet another form of deprivation strain that prisoners must endure?

Systematic Research on Step-Down Programs

Step-down programs allow inmates to alter the extreme conditions of confinement in restrictive housing and regain certain privileges or coping resources by reaching specific milestones. By establishing step-down programs, states "tie an inmate's departure from segregation to the completion of certain goals, such as behavioral plans and classes" (Liman Program, 2013, p. 18). Some

states — including Connecticut, Massachusetts, Mississippi, New Jersey, New York, and Virginia — have structured programs that target behavior in some way. Of the states listed above, Massachusetts, Mississippi, and Virginia — like Washington and Colorado — are working to find ways to hold prisoners in restrictive housing while allowing for more opportunities for group activities and therapy in those circumstances (Liman Program, 2013, p. 18). Without such measures, inmates serving the remainder of their sentences in restrictive housing cannot access the transitional programs for community re-entry that are available to the general prison population (e.g., assistance with acquiring letters of recommendation and in developing post-release plans, a resume, and cover letter) (NYCLU, 2015, p. 33). In fact, one survey found that 4,400 prisoners in 2013 were released directly from secure housing to the community (p. 29). In some of the jurisdictions listed above, transition release programs are part of the step-down programs offered in restrictive housing (Liman Program/ASCA, 2015, p. 30). Information on the effects and workings of step-down programs is not widely available; however, these programs should be the basis of research inquiry because they may reduce the deprivation strains that prisoners encounter and help prepare prisoners for re-entry.

Finally, changes in the confinement conditions in some restrictive housing circumstances are either in place or are being recommended. In California, for example, prisoners will no longer be held in isolation indefinitely (Ford, 2015; Lovett, 2015; Schwirtz & Winerip, 2015). The implementation of these changes should be monitored and studied for the benefit of practitioners and prisoners throughout the nation.

Considering Conditions for Subgroups

Much of what is known about the conditions of confinement in restrictive housing practices pertains to adult male prisoners. To further consider diversity in prisoner experiences of the conditions of confinement, this report features women as a group of inmates that tend to be overlooked when considering restrictive housing. To move toward an even deeper understanding of embodied experience, other overlooked groups must also be included in research and policy considerations. In fact, information is needed on a range of subgroups, including racial and ethnic minorities, transgender inmates (Sylvia Rivera Law Project, 2007), juveniles (ACLU, 2012; Birckhead, 2015), and mentally ill prisoners (American Civil Liberties Union Colorado (ACLUC), 2013; Rodriguez, 2013).

Research shows that transgender women in men's prisons are 13 times more likely than non-transgender inmates to be sexually assaulted by other inmates (Jenness, Maxon, Sumner, & Matsuda, 2010; Jenness & Fenstermaker, 2014). Given high rates of sexual victimization, New York's Rikers Island Jail has created a special housing unit for transgender inmates (Mathias, 2014). Other responses

to the elevated threat of sexual victimization among transgender inmates involve placing those inmates in protective custody (Sylvia Rivera Law Project, 2007). Therefore, it is important to consider the degree to which transgender inmates are differentially exposed to these conditions compared to non-transgender (cisgender) inmates. The experiences of transgender women in restrictive housing also need further research (Sylvia Rivera Law Project, 2007). For example, as reported by a transgender female prisoner in a larger study in California, the likelihood of being moved to restrictive housing serves as a deterrent to reporting sexual assault (Jenness, personal communication, January 12, 2016).

Discussion and Conclusions

This report brings together information on the conditions of confinement in restrictive housing. Although some details pertaining to physical conditions, sanctions and incentives, social conditions, psychological conditions, and service provision are synthesized in this report, there is an overwhelming lack of systematic information on the topic. This lack of information stems from a gap in the research — prisoners' personal experiences of the conditions of confinement. The Liman Program/ASCA data provide some of the most informative, nationally representative data on these conditions across jurisdictions in the United States and are used extensively in this report. However, many issues raised by the current synthesis and critique point to areas that require further empirical inquiry.

The majority of the information available describes the basic physical conditions in some forms of restrictive housing, but systematic information about restrictive housing is lacking. The most comprehensive information available tends to come from descriptions of supermax facilities, but very little is known about the social conditions and services provided in restrictive housing. Even when these elements are present in the literature, their coverage is sometimes inconsistent (e.g., total isolation or whether family contact is permitted), which may reflect the myriad conditions encompassed by the term "restrictive housing." As is shown in this report, there are also some differences in conditions labeled "administrative segregation" for men and women (e.g., regarding sanctions and incentives), although there are also similarities. Furthermore, details are also lacking about the effects of restrictive housing conditions over an extended period of time. Nationally representative, descriptive information is available on the demographic and criminal justice history patterns of groups of inmates who experience restrictive housing (Beck, 2015). Most important, however, is that very little is known about their experiences in these conditions of confinement. Research also must move beyond trace mentions of the conditions of restrictive housing embedded in other studies and further address the nuances and workings of these conditions. Such efforts may be of considerable benefit to practitioners; they may help them to better monitor prisoners' behavior and provide effective conditions when and if restrictive housing is absolutely necessary.

Quantitative Story of Restrictive Housing

The quantitative story of restrictive housing addresses the trends and patterns surrounding who experiences it and descriptive information on the prevalence of particular conditions of confinement. Given recently available information on the criminal justice histories of those in restrictive housing (Beck, 2015), it is clear that prisoners often bring some importation strains (pre-prison stressors) with them to restrictive housing. However, a review of evidence covered in this report suggests that inmates endure considerable deprivation strains (stressors experienced while living in these conditions). More research on these deprivation strains is needed to better flesh out the quantitative story of restrictive housing.

General strain theory (Agnew, 2001; 2006) and the pains of imprisonment concept (Sykes, 1958/2007) offer theoretical tools to better systematically detail the deprivation strains involved in restrictive housing. This framework points not only to detailing the types and levels of strains that prisoners face in restrictive housing but also leads to a consideration of the totality of strains that they endure in these conditions (Turner, Wheaton, & Lloyd, 1994). Developing the quantitative story of restrictive housing would entail creating questionnaires requiring inmate feedback, which would systematically measure strains in prisons and different conditions within them. Furthermore, using a comprehensive theoretical framework will help to move research from description to empirical analyses of how these conditions affect prisoner outcomes, including health. Inquiry along these lines may also offer theoretically guided and empirically based recommendations for ways to reduce the deprivation strains that prisoners endure in restrictive housing. General strain theory may be further used to consider instituting programming to modify the coping resources available to incarcerated individuals living in these conditions. It predicts that mitigating those strains should reduce antisocial behavior in keeping with rehabilitative goals, and in considering the future re-entry of these inmates to the general population of prisoners and, eventually, to society. The development of coping resources, according to GST, should also foster order within restrictive housing conditions in keeping with the managerial goals of correctional institutions. Investment in coping resources, therefore, may be particularly justified when restrictive housing conditions are imposed. More information is particularly needed on programs that are effective in reducing deprivation strains and on the potential of step-down programs.

Furthermore, a number of questions remain about the conditions of confinement considered to be deprivation strains. For example, if deprivation strain is experienced in restrictive housing, as suggested by the conditions described, how does it spill over to inmates' families? How does that affect prisoners? What are the long-term effects of exposure to restrictive housing conditions for inmates and their families? For practitioners, further inquiry along these lines may lead to the development of effective policies and programs when and if restricted housing is needed.

Qualitative Story on Restrictive Housing

The qualitative story of restrictive housing points to the body as a site of deprivation. In line with critical sociological theories (Foucault, 1979; Wacquant, 2004), a focus on embodied experience may illuminate why different social locations may matter in restrictive housing conditions. As an example of moving toward embodied experience, this report has touched on gender similarities and differences in restrictive housing. Most of the research (although sparse) has been conducted with men; even less information is available about female inmates living under these circumstances. Although the data show that men and women face fairly similar conditions in solitary confinement (e.g., types of physical conditions and a lack of services), there are differences that must be understood. For example, fewer incentives are provided to women in administrative segregation, and more sanctions are provided to men in these circumstances. Such differences may have implications for inmates' adjustment to living in restrictive housing. This limited inquiry into gender and restrictive housing suggests a need for more systematic research on embodied experience. Further development of this concept will yield insight into how different subgroups experience strains in restrictive housing and may inform better policy and practice.

Conclusions

This report begins to synthesize what is known about the conditions of confinement in restrictive housing. It offers some initial insights based on extant research. Due to a lack of information, both the quantitative and qualitative stories of restrictive housing presented here are limited — and are in dire need of more research. Taken as a whole, the conditions of confinement present for inmates living in restrictive housing are extremely challenging across all the dimensions considered (physical, sanctions and incentives, social, psychological, and service provision). These conditions suggest that the use of restrictive housing needs to be avoided as much as possible. Fleshing out these qualitative and quantitative stories will lead to ways to make the conditions of confinement as humane as possible, and to use restrictive housing only when absolutely unavoidable.

Further empirical information is needed to systematically understand how the conditions and processes of restrictive housing affect the inmates who live there. One pressing area of research involves the systematic investigation of the conditions that constitute the pains of imprisonment; their types and levels; and how they work together, separately, and as a totality in affecting prisoner experiences. The GST and pains of imprisonment frameworks may be used to illuminate the types of strains that inmates endure in restrictive housing and the role of coping resources in these conditions. Research is urgently needed

on services, programs, and opportunities for social interaction (e.g., visits from inmates' family members). Such areas may be clear points at which programming can be modified to be more responsive to prisoner needs. Another area that is amenable to change through policy may informed by more empirical research on the promise of step-down programs for reintegrating those held in restrictive housing into both the general population of prisoners and society at large. Research with implications for programming will be useful to practitioners in shaping safer and more humane practices as they conduct their vital work.

Finally, future research may consider the promise of mixed research methods, which involve using both qualitative and quantitative approaches to understand a social problem (Creswell & Plano-Clark, 2011). A systematic program of research may begin with qualitative studies that may fill in missing information on the meaning of myriad conditions that inmates face in restrictive housing and yield new insight into inmates' embodied experience in these circumstances. As a next step, a program of research could build on the qualitative information by generating systematic questionnaires to quantify the strains, coping resources, and psychological outcomes among a representative sample of inmates living in restrictive housing and in the general prison population. A mixed-methods program of research on restrictive housing would then yield comparative assessments of the conditions of confinement. By investigating the processes involved, this program of research would also inform practitioners about promising areas of intervention and prevention — grounded in experience and theory — for problems that arise among inmates when restrictive housing cannot be avoided.

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CHAPTER 4

Gang Affiliation and Restrictive Housing in U.S. Prisons

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Introduction

Prison gangs came to the forefront of issues faced by correctional authorities toward the end of the 20th century. Gang activity has been documented in U.S. prisons as early as the 1940s but was not linked in a major way to prison violence (Camp & Camp, 1985; Crouch & Marquart, 1989; DiIulio, 1990; Irwin, 1980). Emerging in the 1970s was a gang dynamic responsible for producing an unprecedented amount of disorder and violence in U.S. prisons. Between 1975 and 1979, there were 124 gang-related homicides in California prisons (Crouch & Marquart, 1989, p. 204; Porter, 1982). Texas prisons witnessed 52 homicides during the "war years" of 1984 and 1985, with 90 percent being gang-related (Ralph & Marquart, 1991). Gangs are also implicated in orchestrating prison riots (Goldstone & Useem, 1999; Useem & Reisig, 1999), such as the 1993 Lucasville riot in Ohio that left nine inmates and one correctional officer dead (Huff & Meyer, 1997). Although homicide and violence in contemporary prisons are at historically low levels (Mumola, 2005; Useem & Piehl, 2008), gangs remain disproportionate contributors to violence and misconduct in prisons (e.g., Griffin & Hepburn, 2006; Huebner, 2003; Shelden, 1991). They are one of the more challenging issues correctional officials face in managing prisons.

One response to combat the influence of gangs in U.S. prisons involves moving affiliates of gangs out of general population housing and into restrictive housing facilities or units. National surveys of correctional officials indicate that this response is not only practiced at a high rate (Knox, 2012) but also viewed as the most effective solution for countering the role of gangs in facilitating misconduct and prison disorder (Winterdyk & Ruddell, 2010). Indeed, the use of restrictive housing has been described as a "silver bullet" for addressing gang activity in prisons (Vigil, 2006, p. 33). From this standpoint, segregating the affiliates of gangs from the general population could reduce prison violence and disorder systemwide as well as reducing misconduct among individual gang members (Fischer, 2002; Ralph & Marquart, 1991).

Critics challenge the use of restrictive housing on gang affiliates on legal (Tachiki, 1995), humanitarian (Toch, 2007), and empirical (Mears & Reisig, 2006) grounds. One of the most vexing issues involves the wholesale placement of the members or associates of entire gangs into restrictive housing for indeterminate periods. Gang affiliates can be subjected to restrictive housing conditions based not on their *behavior*, but on their *status*, which runs contrary to traditional notions of restrictive housing (King, 1999; Kurki & Morris, 2001). It is not uncommon to learn of gang affiliates who spend more than a decade in isolated conditions that restrict them from the basic privileges provided to the general prison population (Reiter, 2012). The longer gang affiliates stay in restrictive housing, the more likely they are to misbehave when they return to general prison population (Labrecque, 2015a). Moreover, a recent review of the literature regarding restrictive housing concluded that it may have some potentially devastating psychological consequences (Frost & Monteiro, 2016). This raises serious questions about its use on gang populations, who already maintain elevated levels of depression and suicidal tendencies (Watkins & Melde, 2016). The conditions associated with this practice have led to unrest in states like California, where an uprising led to a hunger strike involving 30,000 inmates (Rodriguez, 2013) along with a class action lawsuit — *Ashker v. Governor of California*. The lawsuit was settled recently, leading to sweeping changes in how restrictive housing is used on those who affiliate with gangs (St. John, 2015). In light of these events, any short-term benefits to prison management may not be worth the long-term consequences (Griffin, 2007).

This white paper examines key issues related to gang affiliation and restrictive housing in U.S. prisons. It was commissioned by the National Institute of Justice of the U.S Department of Justice's Office of Justice Programs to synthesize what is known about these topics and to identify knowledge gaps that should be addressed in future research. It begins by addressing the wide range of terminology and definitions applied to restrictive housing, gangs, and gang members. Here, the focus is on how these topics are measured and how they are used in correctional practice. Next, a brief overview of the extent, magnitude, and nature of gangs, gang affiliation, and restrictive housing is provided to

document their emergence and trends as central issues in correctional policy and practice. The core of this white paper examines how gang affiliation is related to restrictive housing by focusing on five areas:

1. The logic behind segregating gangs and gang affiliates.
2. Gang affiliation as a correlate of restrictive housing.
3. Pathways into restrictive housing among gang affiliates.
4. Pathways out of restrictive housing among gang affiliates.
5. Gang affiliation, restrictive housing, and the reduction of misconduct and disorder.

This white paper makes several conclusions based on a synthesis of the literature in these focus areas. It also identifies aspects of these areas that need further attention from the practitioner, policymaking, and research communities. It offers recommendations for future research to advance the understanding of the relationship between gang affiliation and restrictive housing. It should be noted that much of what is known about the focus areas synthesized in this white paper is derived from a small number of states, particularly California and Texas, which might not represent common policies or practices in corrections generally.

Terminology and Definitions: Restrictive Housing, Gangs, and Gang Affiliation

Restrictive Housing

One of the challenges in surveying the current state of the evidence on the relationship between gang affiliation and restrictive housing is terminology. Fred Patrick, Director of the Vera Institute's Center on Sentencing and Corrections, noted that the practice of placing inmates in restrictive housing goes by many names, including "isolation, restricted housing, administrative segregation, protective custody, special housing, disciplinary segregation, etc." (Shames, Wilcox, & Subramanian, 2015, p. 2). A 2010 review of 42 state correctional policies revealed more than 20 variations in the terminology used for long-term segregated housing alone (Butler, Griffin, & Johnson, 2013); however, a consensus on terminology is unfolding. The executive committee of the American Correctional Association (ACA) (2014) recently passed a resolution to adopt "restrictive housing" as the terminology used to apply to the broad practice of separating inmates from the general prison population.

Additional factors are essential to characterizing restrictive housing, as outlined in the joint report of Yale University's Liman Program and the Association of

State Correctional Administrators (Baumgartel, Guilmette, Kalb, Li, Nuni, Porter, & Resnik, 2015, pp. 1-2), including —

1. *Discretion*: the latitude prison staff maintain for placing an inmate in restrictive housing.

2. *Duration*: short- versus long-term placement of inmates in restrictive housing.

3. *Isolation*: the amount of human contact and interaction, particularly with fellow inmates.

4. *Time-in-cell*: the daily length of time an inmate is confined to a cell.

Overall, it is generally agreed that restrictive housing constitutes the discretionary practice of housing inmates in cells separate from the general population with extended physical and social isolation over fixed or indeterminate sentences (Baumgartel et al., 2015; Frost & Monteiro, 2016; Shames et al., 2015; Smith, 2006).

This white paper follows the ACA standards and uses "restrictive housing" to refer broadly to these practices.[1] There are several "pathways" into restrictive housing, reflecting its various purposes, including "safety, punishment, or protection" (American Corrections Association, 2014). When the purpose is protecting inmates, restrictive housing is commonly known as "protective segregation." Examples of inmates found in this type of housing include celebrities, former law enforcement officers, gang dropouts, and inmates with other types of sensitive needs. Restrictive housing for the purpose of punishment is commonly termed "disciplinary segregation," and for many agencies, placement is based on custody levels that elevate with inmate misconduct. Finally, when restrictive housing is used to manage threats and safety, it is commonly known as "administrative segregation." In this context, safety generally refers to the safety of the institution — broadly construed — due to the threat or risk posed by the inmate. Administrative segregation is especially relevant when it comes to discussing the relationship between restrictive housing and gang affiliation. As described in a later section, administrative segregation is commonly used on gang affiliates. This use attracts the greatest concern from advocacy groups, such as Solitary Watch and the American Civil Liberties Union, because it often involves both independent and cumulative increases in staff discretion, isolation, time-in-cell, and indeterminate placement. Distinguishing these pathways into restrictive housing is critical to understanding the relationship between gang affiliation and restrictive housing.

[1] In reviewing the literature, terminology consistent with its original usage is reflected in this white paper if it more appropriately represents the work of the authors, particularly for research on long-term placement in administrative segregation or supermax housing.

Gangs

Unlike restrictive housing, the terminology applied to gangs in prison settings is much more universal across agencies. "Security threat group" (STG) is a term commonly applied to gangs, although it is not uncommon for agencies to use "street gangs," "prison gangs," "disruptive groups," "cliques," and "unauthorized organizations," among other terms. It is beyond the scope of this white paper to delve into the complexities of gang definitions. Drawing from the California Department of Corrections and Rehabilitation's (2014, p. 2) definition,[2] the essential features of STGs are —

1. *Group*: a formal or informal organization or association of three or more inmates.
2. *Collective identity:* a common name or identifying signs or symbols.
3. *Durability*: ongoing or durable across time.
4. *Criminal activity*: multiple acts of organization, threats, finance, soliciting, or misconduct are conducted by its affiliates, individually or collectively, on behalf of the group.

These factors distinguish STGs from fleeting associations as well other groups (e.g., religious) found in prison settings. It is worth noting that agencies have developed terminology and definitions for STGs that are not exclusive to gangs in theory but are in practice. Any cursory review of the names of STGs that agencies have recognized reveals that they are overwhelmingly street or prison gangs. Accordingly, this white paper will use "gangs" as the terminology applied to groups such as those described above unless referring to a specific policy where "STG" is used.

Many agencies identify two tiers of gangs (e.g., STG-I and STG-II). This is a critical distinction because it has implications for the potential placement of inmates into restrictive housing. Although this issue will be addressed in more detail in later sections, in some agencies the gang tier may dictate a specific set of restrictive housing policies and procedures, among other responses. Generally, three important, although interrelated, factors are used to distinguish between tiers of gangs, including —

[2] Because of recent reforms to gang management policies, finalized in 2014, the definition provided by the California Department of Corrections and Rehabilitation includes changes to the definition of STGs. The author is unaware of any comprehensive investigation into either academic or administrative gang definitions in prison settings. The works of Camp and Camp (1985), Lyman (1989), and the National Institute of Corrections (1991) are often referenced for providing the essential features of prison gangs, and Hill (2009) provided the only comparison in documentation practices across agencies.

1. Whether the *origins and activities* of the group are primarily in street or prison settings.

2. If a group maintains an organizational structure that involves established procedures, hierarchy, bylaws, and collective behavior.

3. Perhaps most importantly, the *level of threat* posed by the group to inmates, correctional officers and staff, and facilities, especially the propensity for violence and the disruption of institutional security.

Some states (e.g., the California Department of Corrections and Rehabilitation [CDCR]) refer to both tiers as STGs,[3] while other states (e.g., the Texas Department of Criminal Justice [TDCJ])[4] distinguish STGs from other collectives that are termed street gangs or disruptive groups. And, some agencies (e.g., the Federal Bureau of Prisons) use alternative language such as "disruptive groups" rather than STGs or gangs for the upper tier while recognizing that there are additional gangs and gang members present in their facilities. Agencies typically conduct threat assessments to determine the status of groups (appendix A identifies the criteria the CDCR uses to certify associations or groupings of inmates as STGs).

Gang affiliation

While corrections officials use threat assessments to certify when a grouping or association of inmates is a gang, the determination of gang affiliation for individual inmates is based on what is commonly termed "validation" (Camp & Camp, 1985, p. 132; Tachiki, 1995). Validation refers to a fact-finding process where knowledgeable prison employees — usually in a classification or STG unit

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[3] For example, the California Department of Corrections and Rehabilitation (2014, pp. 31-32) identifies STG-I as follows: "groups, gangs, and/or historically based prison gangs that the CDCR has determined to be the most severe threat to the security of the institutions and communities based on a history and propensity for violence and/or influence over other groups." Alternatively, STG-II is defined as: "other groups or gangs such as street gangs or disruptive groups comprised of members and associates who may be determined to be in a subservient role to the more dominant STG-I groups."

[4] The Texas Department of Criminal Justice recognizes 12 STGs and monitors numerous disruptive groups. The case of the Tangos may provide readers with a useful way to distinguish between gang tiers. The Tangos are a Latino "hometown" gang (e.g., Tangos of Houston, Tangos of El Paso) that has maintained a presence in Texas prisons for more than two decades, yet departs from the traditional Latino prison gang structure of groups like the Texas Syndicate and the Texas Mexican Mafia (Tapia, 2014). The Tangos also have the largest gang presence in Texas as well as the TDCJ prisons and "represent the greatest statewide gang threat" (Texas Department of Public Safety, 2015, p. 17). However, the TDCJ classifies the Tangos as a disruptive group and not an STG, given that the group — regardless of its size in numbers — lacks the strong organizational structure that is found in STGs such as the Texas Mexican Mafia or Aryan Brotherhood. For example, unlike top-tier STGs, gang member "rank" (e.g., status, shot-calling) among Tangos in TDCJ is localized to units or pods and does not transfer when a Tango gang member moves to a different facility. Overall, the TDCJ threat assessment deems that the threat associated with the Tangos is lesser than the more established STGs, which in turn, warrants a lower classification as a disruptive group.

— review evidence regarding an inmate's history and association with recognized gangs to make an official determination of gang affiliation.[5] Gang affiliation is determined based on criteria commonly used by law enforcement agencies to document and record street-gang members (Huff & Barrows, 2015). These criteria focus on gang signs and symbols in written documents or photographs, socializing with known gang members, activity on behalf of the gang, and other forms of gang intelligence. How inmates score on an explicit list of criteria, often termed "source items," are entered into what some agencies call a "validation packet" to determine gang affiliation (e.g., Arizona Department of Corrections; see Fischer, 2002). Some agencies apply equal weighting to all source items, while others apply smaller or larger weights depending on the source item (see appendix B for CDCR's 14 source items and their associated weights). There is a great deal of overlap across prison systems in how gang members are documented and recorded, but some variation remains (Hill, 2009, documents the similarities and differences in 43 prison systems).

Similar to how agencies recognize tiers for different gangs, they also recognize different levels in the status of *individual* gang members. These determinations are equally important in understanding the relationship between gang affiliation and restrictive housing because the level of gang affiliation may trigger specific restrictive housing policies and practices. Inmates with non-zero levels of involvement in gangs are considered "gang affiliates," which is the operational definition used in this white paper. A study of the patterns and correlates of violence and misconduct in the Federal Bureau of Prisons (Gaes, Wallace, Gilman, Klein-Saffran, & Suppa, 2002, pp. 362-363) compared a three-tier gang member classification system with the street gang literature on gang "embeddedness" (see Klein, 1971; Pyrooz, Sweeten, & Piquero, 2013) and reported the following tiers:

1. A *member* is a "full-fledged, core gang member."

2. A *suspect* is "thought to be a gang member whose credentials have not been fully established."

3. An *associate* refers to an inmate whose "actions indicate he is conducting business or looks out for the interests of a gang" but has not or cannot join for a variety of reasons (e.g., race or ethnicity, residence, or cultural background).

There is the fourth, or *non-embedded*, level that includes inmates who are unaffiliated or unassociated with gangs altogether (i.e., zero level). This bottom

[5] Although an inmate can be validated as a gang member at any point while incarcerated, the most active phase of intelligence gathering occurs at intake or reception (Goodman, 2008; Hatcher, 2006). This concerted focus on gang affiliation and status at intake is due to the need for finding appropriate housing for inmates. Wrongly housing gang dropouts or rival gang affiliates could have deadly consequences for inmates or staff.

level represents the largest group of inmates, as it is well known that most inmates are not embedded in gangs (Hill, 2009; Winterdyk & Ruddell, 2010).

The notion of gang embeddedness has been likened to a bulls-eye (Esbensen, Winfree, He, & Taylor, 2001), where members would be at the center of the target, suspects at the inner ring, associates at the outer ring, and the non-embedded would not be located on the target at all. These distinctions can be found in the validation process used to determine gang affiliation, where the number of points an inmate accumulates dictates whether he or she is considered a member, suspect, associate, or nonmember.

This section has provided an overview of the terminology and definitions of restrictive housing, gangs, and gang members. There are several types of restrictive housing, gangs, and gang affiliations, each of which is important to distinguish, and the associated terminology is used throughout this white paper. Understanding the distinctions across each of these concepts is critical to understanding their interrelationship. Some gangs and some gang affiliates are subject to some forms of restrictive housing. However, gangs are not monolithic to restrictive housing, nor is restrictive housing monolithic to gangs. It is important to understand the relationship between restrictive housing and gang affiliation, and to determine why, when, where, and how restrictive housing is used.

A Brief Overview of Restrictive Housing, Gangs, and Gang Affiliation in U.S. Prisons

The use of restrictive forms of housing has a long tradition in U.S. prisons (Haney & Lynch, 1997; Hinds & Butler, 2015; King, 1999). Recent events such as the Pelican Bay hunger strikes in 2011 and 2013 have propelled the practice of restrictive housing into a national spotlight (Lovett, 2015). Moreover, national leaders have expressed both interest and concern about the practice — recent high-publicity examples include President Obama's speech to the National Association for the Advancement of Colored People (Baker, 2015) and U.S. Supreme Court Justice Kennedy's concurring opinion in *Davis v. Ayala* (Ford, 2015). Several U.S. legislative bills have been proposed and hearings held on restrictive housing in the past couple of years. Although corrections issues occasionally spill outside of prisons and into the public discourse, rarely has there been such a concerted interest in restrictive forms of housing.

The practice of restrictive housing has grown considerably over the past several decades (Butler et al., 2013; King, 1999; Naday, Freilich, & Mellow, 2008). In 1984, only one state (Illinois) maintained a supermax prison facility (Kurki & Morris, 2001). In 1996, that figure increased to 32 states (National Institute of Corrections, 1997). By 2004, 44 states had supermax prison facilities (Mears, 2005). No single source of data has systematically tracked the number of inmates,

beds, or facilities using restrictive housing over an extended period, but several studies have produced estimates of the scope of restrictive housing.

Naday and colleagues (2008) reported the number of U.S. prison inmates housed in administrative segregation annually between 1997 and 2002. They examined data from *The Corrections Yearbook*, a report produced by the Criminal Justice Institute based on surveys of correctional agencies and 51 agencies with at least one valid data point during the six-year period (excluding the Bureau of Prisons). An average of 26,177 inmates were housed in administrative segregation each year. When paired with state-level figures of incarceration over the same six-year period (Harrison & Beck, 2003), this translates to a 2.2 percent rate of administrative segregation. These findings indicate that, on any given day, the vast majority of inmates are not segregated from the general population.

Baumgartel and colleagues (2015) and Beck (2015) report the most recent data on the scope of restrictive housing in U.S. prisons. The Baumgartel team's findings are based on the national survey conducted jointly by the Liman Program and the Association of State Correctional Administrators, in which 40 state and federal agencies reported on their custodial population in fall 2011 and fall 2014. They found that 6.4 percent of the custodial population in 34 jurisdictions was in restrictive housing in 2014. In terms of administrative segregation, where 40 agencies had valid data, Baumgartel and colleagues' findings reveal that 29,848 inmates were housed in administrative segregation, or 2.6 percent of the custodial population. There was a 19 percent reduction in the number of inmates in administrative segregation between 2011 and 2014. The majority of states (62 percent) reported a decline, with the Colorado Department of Corrections observing an 86 percent reduction. When comparing the findings with Naday and colleagues (2008), it is clear that there remains a continued — and an apparently increased — reliance on administrative segregation in U.S. prisons.

Beck (2015) examined restrictive housing using data from the 2011-12 National Inmate Survey, which consists of a sample of 38,251 inmates in 233 state and federal prisons. The survey had inmates self-report the time they spent in restrictive housing in the 12 months prior to the interview. This is a key distinction from the work of Naday and colleagues (2008) and the Baumgartel team (2015), both of whom relied on administrative data. Approximately 4.4 percent of inmates reported spending "last night" in restrictive housing, which would be equivalent to the "on hand" or daily snapshot of the population housed in restrictive housing. This number is twice that of the findings reported by Naday and colleagues (2008), but it is important to recognize that this figure includes restrictive housing broadly defined.[6] Beck also found that nearly 20 percent of inmates reported spending at least one day in restrictive housing in the past year, a figure that reveals a much greater exposure to restrictive housing than daily snapshots do.

[6] Baumgartel and colleagues (2015) did not report the 2011 estimates of restrictive housing, so a comparison to Beck (2015) is not possible.

The rise in the use of restrictive housing has coincided with the growth of prison gangs. This growth may be the reason for the increased use of restrictive housing in states like California and Texas (DiIulio, 1990; Mears, 2005, p. 33). There are reports of prison gangs as early as the 1940s (e.g., DiIulio, 1990, p. 132), although what is contemporarily viewed as prison gangs — large, racially and ethnically homogenous, organized and structured, and violent groups (see Pyrooz, Decker, & Fleisher, 2011) — did not emerge until the latter half of the 20th century. The U.S. prison population underwent large-scale demographic changes in the 1970s, including the incarceration of more youthful, violent, and racial or ethnic minority offenders, which has been identified as a source of the growth of prison gangs (Skarbek, 2014). Street gangs proliferated during this era as well (Klein & Maxson, 2006).

The state of the evidence on the landscape of prison gang activity is based on a collection of one-off studies. Camp and Camp (1985) documented the emergence of prison gangs in a survey of administrators from 49 prison systems in 1984. They found that two-thirds of prison administrators reported prison gangs in their institutions. Among the 29 agencies that reported information on gangs, there were a total of 114 gangs in the United States. The Camp and Camp study also provided the first national estimate of prison gang members. Although based only on 23 agencies, they found that the number of gang members totaled 12,634, with California (2,050), Illinois (5,300), and Pennsylvania (2,400) recording the largest numbers of gang members. Overall, states reported that an average of 3 percent of the prison population were gang members. The findings from Camp and Camp are important because they provided much-needed baseline information about the nature and extent of gang activity in prisons.

Several studies have been conducted to update the estimates found in Camp and Camp (1985), including Knox (2012), the National Gang Intelligence Center (2011), Wells, Minor, Angel, and Carter (2002), Hill (2009), and Winterdyk and Ruddell (2010). Since 1991, Knox has conducted several surveys of chief administrators of jails and prisons. Between 133 and 323 institutions and anywhere from 39 to 50 states were included in Knox's surveys. It is unclear if the sample of institutions in the studies were representative of the United States, and whether the institutions included in the sample were jails or prisons cannot be distinguished. The surveys covered a wide range of general issues, but also included several measures relevant to gangs. Knox found much higher rates of gang membership than Camp and Camp, and that the rate of gang membership rose steadily throughout the 1990s and the turn of the century. However, Knox found this dramatic increase only among the male prison population.[7] The remaining contemporary estimates of the rate of gang membership range from 12 to 15 percent, which stands in sharp contrast to the findings reported by

[7] For example, Knox's surveys revealed that the rates of gang membership for males increased from 9.3 percent in 1995 to 29.5 percent in 2012. Rates of gang membership for females hovered around 4 to 8 percent.

Knox. In particular, Winterdyk and Ruddell extrapolated their findings to the federal and state prison population and reported 189,000 validated and 208,000 affiliated gang members. Drawing together these estimates, it is safe to conclude that roughly one in seven U.S. prisoners are members of gangs in prison, and it is likely that an even larger number maintain an affiliation with gangs.

The aforementioned studies verify that gangs and gang affiliates have an established presence in U.S. prisons, although they constitute a minority of the population. The problems associated with gangs are greatly disproportional to their composition of the prison population, however. This is not a new observation. In Illinois, Jacobs (1974, p. 399) held that "the 'gang thing' is the most significant reality behind the walls." Gangs present serious challenges in managing prisons, including inmate and staff safety, programming, and institutional quality of life (Fleisher & Decker, 2001). And, in prison systems like California, DiIulio (1990, p. 130) noted that "the question of how to manage prisons has resolved itself into the question of how to manage prison gangs." While many correctional responses to gangs have been introduced,[8] the next section of this white paper focuses on one particular response: segregating gang members from the general population to counter the disruptive problems associated with gangs.

The Relationship Between Gang Affiliation and Restrictive Housing

This section reviews the research on the relationship between gang affiliation and restrictive housing. It examines the logic underlying restrictive housing and its application to gangs and gang affiliates, whether there are disparities in the use of restrictive housing among gang members, the unique policies and practices leading gang members into and out of restrictive housing, and the empirical evidence supporting or countering the use of this practice on gangs.

The Logic Behind Segregating Gangs and Gang Affiliates

Mears and colleagues (Mears & Reisig, 2006; Mears & Watson, 2006) have outlined the logic of placing inmates in restrictive housing. There are three different theories explaining why restrictive housing should result in greater systemwide safety, order, and control in prisons: deterrence, incapacitation, and normalization theories. Mears and colleagues called these theories "pathways" because they establish

[8] Strategies include (1) out-of-state transfers to dilute the gang population, (2) enhanced prosecution of criminal activities, (3) inmate informants, (4) interrupting communications, (5) facility lockdowns, (6) restricting privileges such as contact visits and programming, (7) gang renunciation and debriefing, and (8) gathering gang intelligence (Carlson, 2001; Fleisher & Decker, 2001; National Institute of Corrections, 1991; Winterdyk & Ruddell, 2010).

the ways in which placing an inmate into restrictive housing should lead to the intended beneficial outcome. These theories are important because they are often cited as justification for segregating gang affiliates.

Deterrence theory contains two distinct pathways: specific and general deterrence. The "specific deterrence" pathway refers to the sanctioning of individual offenders via placement in restrictive housing for violating rules and engaging in misconduct. Upon return to the general population, offenders who have experienced the restrictions and loss of privileges will therefore avoid repeating such behaviors in the future. The "general deterrence" pathway, alternatively, emphasizes the message that is communicated to the prison population at large when an offender is placed in restrictive housing. Greater systemwide compliance with prison rules should be achieved because offenders will refrain from disruptive behavior out of fear that they, too, could end up in restrictive housing.

Incapacitation theory also contains specific and general pathways. "Specific incapacitation" contends that removing disruptive inmates from the general population will lead to greater order in prisons by virtue of high-rate offenders being placed in restrictive housing. The key to specific incapacitation is identifying and placing the most disruptive inmates in restrictive housing, while also ensuring that these offenders are not replaced by equally disruptive inmates. "General incapacitation" also adheres to the principle of selecting specific inmates for restrictive housing, but the reason for this approach instead emphasizes the social aspects in removing disruptive inmates. Given that problematic inmates are likely to disrupt the everyday routines of prisons and instigate problems with other inmates that lead to conflict and misconduct, their removal may lead to a general improvement in prison order.

Normalization theory offers three pathways that overlap. Mears and colleagues labeled these pathways "opportunities," "prison staff," and "bad apples." The logic from these normalization pathways is as follows: once prisons are free from the "bad apples" who disproportionately cause problems, prisons will operate differently under a "new normal," which will create opportunities for better programming and allow prison staff to focus their energies elsewhere. Normalization theory bears some similarity to the general forms of deterrence and incapacitation theories but emphasizes a combination of programming, targeting the most disruptive inmates, and staff involvement in prison order.

The logic of these theories extends to gangs and gang members. Indeed, gang members have long been considered the "bad apples" in prisons. Just as law enforcement agencies focus their policing strategies on street gangs (e.g., specialized gang units, civil gang injunctions, focused deterrence), correctional agencies target the gang population operating in prisons (Trulson, Marquart, & Kawucha, 2006).

Shelden (1991) provided the first empirical study that established gang members as a problematic population in prison. Sixty gang members were demographically matched to 60 non-gang members in a medium-security institution in Nevada, and disciplinary records from their current term of incarceration were compared. Gang members committed more disciplinary offenses than other inmates, particularly drug and fighting offenses. Indeed, 90 percent of the gang members committed three or more disciplinary offenses, compared to 50 percent of the non-gang inmates. And, 80 percent of the gang members committed a fighting offense, compared to 42 percent of the non-gang members. Camp and Camp's (1985, p. 52) survey of prison systems revealed 20 gang-related homicides in 1983. These homicides were concentrated in nine of the 33 prison systems reporting that gangs were active in their facilities. These figures might appear small, but they translate into a gang-related homicide victimization rate of 71 per 100,000 persons — much higher than the overall homicide rates in state prisons (Noonan & Ginder, 2013) and in the U.S. generally (National Research Council, 2008). In a study of 298 state prisons, Reisig (2002) found that rates of inmate homicide increased with the percentage of inmates in a facility participating in prohibited groups such as gangs. Altogether, the findings from the above studies suggest an explicit connection between gangs and gang members and serious violence in U.S. prisons.

Numerous studies have since investigated the extent to which gang members disproportionately engage in prison misconduct, particularly assaults on inmates and staff. A recent meta-analysis (Pyrooz, Turanovic, Decker, & Wu, 2016) on the relationship between gang membership and offending included 179 empirical studies, with 42 of them focused on incarcerated samples. The results indicate that gang membership maintains a robust — moderately strong and stable — relationship with offending. They also reveal that the relationship between gang membership and offending is just as strong among incarcerated samples as it is among non-incarcerated samples.[9] This indicates that the consequences associated with gang members in prison settings extends beyond serious violence to other forms of institutional misconduct.

These findings are part of the justification for responding to gangs and gang members in prison through the use of restrictive housing. The theories outlined by Mears and colleagues (Mears & Reisig, 2006; Mears & Watson, 2006) explicitly call for targeting the right inmates when developing policies for restrictive housing. The disproportionate rates of institutional misconduct by gang members and the disorder associated with gangs make them prime targets of such practices. Correctional officials have overwhelmingly endorsed the use of segregation on gangs and gang members for the past 30 years (Camp & Camp, 1985, p. xvi). Knox's (2005, 2012) surveys of gangs and STGs in U.S. jails and

[9] Supplemental analysis of the data used in the meta-analysis was conducted for this white paper. The 42 studies based on incarcerated samples produced 151 effect sizes; that is, instances where the relationship between gang membership and misconduct was quantified. Nearly two-thirds of the effect sizes were statistically significant, or differed from zero, which means that gang affiliates were rather consistently involved in more misconduct than non-gang inmates.

prisons revealed that between 55 and 67 percent of correctional officials reported segregation as a strategy for controlling gangs.[10]

Restrictive housing is not only a common strategy that staff use to manage prison gangs; it is also viewed as an effective strategy by correctional leaders. Winterdyk and Ruddell's (2010) survey of officials in 37 prison systems overseeing 1.19 million prison inmates confirmed this viewpoint. The survey listed a series of gang and STG management strategies and asked respondents to rate their effectiveness. Respondents identified segregation and isolation as the most effective strategy: 75 percent reported segregation was "very effective" and another 19 percent reported that it was "somewhat effective." And, prison officials also reported additional privilege restrictions — such as access to community, communication, and visits — as effective ways to manage gangs. Finally, Mears (2005) found agreement among nearly 600 wardens on the use of supermax placement for gang members. Nearly half agreed or strongly agreed that gang members should be placed in supermax housing, while 83 percent of wardens endorsed its use for gang leaders.

The characteristics of gangs and gang affiliates are consistent with the logic underlying restrictive housing — removing part or all of this problem group from the general population could produce benefits consistent with deterrence, incapacitation, and normalization theories. The majority of correctional officials have endorsed the use of restrictive housing on gang affiliates and have viewed it as an effective tool for managing this challenging population. This *does not* guarantee that restrictive housing is used disproportionately or wantonly on gangs or gang affiliates. It is therefore necessary to take a closer look at how restrictive housing is used in prison systems to determine if gang affiliation operates as a correlate of restrictive housing, and, if so, whether the sources of any disparities are disciplinary, protective, or administrative. The latter practice, which often involves considerable discretion and indeterminate placement, is the source of much controversy that is inextricably linked with gangs.

Gang Affiliation as a Correlate of Restrictive Housing

What are the characteristics of inmates in restrictive housing? Are they different from the general prison population? Despite such intense interest in the practice, there remains a severe lack of knowledge about the demographic, psychological, behavioral, and social correlates of placement into restrictive housing, especially among social factors like gang affiliation. Indeed, a recent systematic

[10] Unfortunately, Knox did not distinguish between jails and prisons or report the prison systems that were represented in the study, which would be needed to determine the extent to which prison systems rely on restrictive housing.

review of the research contained 16 studies, and only three of them included information relevant to the relationship between gang affiliation and restrictive housing (Labrecque, 2015b). There remain no national-level, comprehensive investigations into the segregation practices used by correctional agencies on gang affiliates, which is a major shortcoming of this literature. Nonetheless, there are several streams of research that can shed light on this relationship.

It is also possible to examine the relationship between gang affiliation and restrictive housing by drawing on the official reports of correctional agencies, including California, Colorado, and Texas (California Department of Corrections and Rehabilitation, 2013; O'Keefe, 2005; Texas Department of Criminal Justice, 2014a, 2014b).[11] In all three states, gang affiliates constitute a minority of the prison population (table 1). Comparing the percentage of gang affiliates in restrictive housing to that of non-gang inmates in restrictive housing reveals a major disparity. The relative risk of placement in restrictive housing is much greater for gang affiliates in all three states: 5.5 times greater in Colorado, 16 times greater in Texas, and 71 times greater in California. O'Keefe provided further analysis of the relationship between gang affiliation and restrictive housing in Colorado. When other predictors of administrative segregation were accounted for — such as violent offender, ethnicity, mental health issues, prior punitive segregation — the risk associated with gang affiliation reduced to 4.5, although it remained the best predictor of placement in administrative segregation. However, the risk for placement in restrictive housing was not even across gangs or gang affiliates. O'Keefe's results indicated that STG associates were just as likely to be in administrative segregation as in the general population, while STG members were nearly eight times as likely as non-members (including STG associates, suspects, and non-STG inmates) to be in administrative segregation.

Caution should be exercised in interpreting these findings. First, the estimates are dated. The California Department of Corrections and Rehabilitation (2014) has changed its policy regarding the mandatory placement of gang associates in security housing units (SHUs), and the administrative segregation practices of the Colorado Department of Corrections have changed dramatically in recent years (Baumgartel et al., 2015), with Executive Director Raemisch calling for sweeping changes in its use (Mohr & Raemisch, 2015). Indeed, a recent report by the Colorado Department of Corrections (2016) shows that the total population in administrative segregation reduced from 1,505 in 2011 to 141 in 2015. Second, the number of gang affiliates is likely underestimated, especially in California

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[11] The author conducted supplemental analyses to produce these findings, including prevalence and relative risk statistics. Relative risk was computed as follows:

$$\text{Risk Ratio} = (RHgang/GPgang)/(RHnon\text{-}gang/GPnon\text{-}gang)$$

where *RH* represents the number of gang and non-gang inmates in restrictive housing and *GP* represents the number of gang and non-gang inmates in the general population.

Table 1. Gang Affiliation as a Correlate of Restrictive Housing in Three States

	California[1]	Colorado[2]	Texas[3]
Year	2013	2003	2014
Number of inmates	134,160	16,171	150,361
Percent of gang-affiliated inmates in prison system	3%	26%	6.6%
Percent of gang affiliates in restrictive housing	76%	15%	35%
Percent of non-gang inmates housed in segregation	1.1%	2.8%	2.2%
Relative risk of restrictive housing (gang vs. non-gang)	71	5.5	16

[1] Includes only inmates in security housing units (California Department of Corrections and Rehabilitation, 2013).

[2] Includes only inmates in administrative segregation (O'Keefe, 2005).

[3] Includes only inmates who are confirmed (not associated) members of the 12 recognized security threat groups (Texas Department of Criminal Justice, 2014a, 2014b).

and Texas. In California, as the prison system with the "dubious distinction of holding the largest group of gang-affiliated offenders" (Carlson, 2001, p. 16), more than 3 percent of the prison population is likely to be a gang affiliate. If this is the case, it would likely drive down the risk ratio. In Texas, the estimates are based only on members of the 12 STGs recognized in the prison system; the associates of these groups and affiliates of disruptive groups are not included, which, like California, would likely lower the risk ratio. Nonetheless, table 1 represents the current state of the evidence on the relationship between gang affiliation and restrictive housing using inmate-level administrative data, and together the three states represent more than one-fifth of the inmate population in the United States.

Facility-level data also shed light on this relationship, as illustrated in the findings reported in Beck (2015) and the Ohio Department of Rehabilitation and Correction (2014). Beck reported results based on the 2011-2012 National Inmate Survey. While the survey did not include a measure of gang membership, it did ask the 38,251 inmates included in the survey about the amount of gang activity in the 233 facilities where they were housed over the past 12 months. Approximately one in six inmates reported that there was "a lot" of gang activity in their facility. Beck was then able to conduct a facility-level analysis of the concentration of inmates who reported gang activity and the concentration of inmates who reported spending time in restrictive housing. He found that gang activity in facilities was strongly related to both the concentration of inmates

who have spent any time in restrictive housing as well as those who have spent prolonged periods (30 days or more) in restrictive housing. To be sure, if a facility has greater levels of gang activity, it is also expected to have higher concentrations of inmates in restrictive housing. These findings are important because they establish a link between gang activity and restrictive housing, and do so using research methods that are entirely independent of official data.

The Ohio Department of Rehabilitation and Correction (2014) reported that inmates with gang affiliations constitute 16.2 percent of its 50,000 prison inmates. Although it is not possible to compute risk ratios comparable to those of California, Colorado, and Texas, it is possible to compare the prevalence of gang affiliation across the custody levels of 21 institutions. In 13 low-security facilities (level 1 or 2), gang affiliates comprised no more than 15.8 percent of inmates. In six medium-security facilities (level 3), gang affiliates comprised between 21 and 42 percent of inmates. In two high-security facilities (level 4 or 5), gang affiliates comprised between 49 percent and 63 percent of inmates. Paralleling the findings reported by Beck (2015), the concentration of gang members in a facility increases with the custody or security level.

The last source of information on the relationship between gang affiliation and restrictive housing is found in more sophisticated analyses of inmate-level administrative data, which examine the characteristics of inmates in restrictive housing to those in the general population (Labrecque, 2015a, 2015b). The three studies included in Labrecque's meta-analysis reveal that gang affiliation constitutes a reliable predictor of administrative segregation, which is consistent with his conclusion that "difficult to manage" inmates are those who end up in segregation. Labrecque's study of the Ohio Department of Rehabilitation and Correction between 2007 and 2012, which was focused on the effects of solitary confinement on institutional misconduct, also shed light about gang affiliation as a correlate of restrictive housing. He found a modest relationship between maintaining any past or present affiliation with a gang and placement in restrictive housing, as well as a relationship with the duration an inmate remained in restrictive housing.[12]

Based on the research presented above, there is ample evidence to suggest a relationship between gang affiliation and restrictive housing and little evidence to the contrary. This conclusion is based on the following: (1) inmates who affiliate with gangs were clearly overrepresented in restrictive housing in California, Colorado, and Texas; (2) a facility-level relationship between gang affiliation and restrictive housing — as the concentration of gang affiliates and gang

[12] Much like the meta-analytic findings, these results are bivariate; they do not take into account alternative factors that could explain why gang affiliates might end up in restrictive housing (e.g., gang members are younger, have greater criminogenic risks and needs, more violent criminal histories, see: Davis & Flannery, 2001). It would be premature to draw firm conclusions based on this research, but it represents among the soundest analyses to date, especially when the evidence is combined with the aforementioned studies.

activity increased, so too did the custody levels and restrictive housing rates in facilities; and (3) studies that compare the characteristics of inmates in restrictive housing to inmates in the general population revealed that gang affiliation was a reliable predictor of placement in restrictive housing. These findings may not be representative of all U.S. prison systems, but they demonstrate rather consistently that gang affiliation is related to placement in restrictive housing. This evidence is important to those concerned with correctional policies and practices. What these findings conceal, however, is how and why gang affiliates end up in restrictive housing at disproportionately high rates. Accordingly, it is necessary to examine the pathways that could lead inmates who affiliate with gangs into restrictive housing.

Pathways Into Restrictive Housing Among Gang Affiliates

Inmates are generally placed in restrictive housing for protection, discipline, or the threat they pose. There is good reason to suspect that much of the overrepresentation of gang affiliates in restrictive housing is due to protective and disciplinary reasons. Numerous scenarios reveal why current and former gang members require placement in protective custody — being housed in a facility where they are outnumbered by gang rivals, gang dropouts with outstanding "debts" to the gang or who have violated gang codes of conduct, or gang affiliates who have a personal conflict with fellow or ally gang members in the same facility. In fact, it is not uncommon for gang members to request protective custody (Fong & Buentello, 1991) or to be placed in protective custody upon debriefing (Fischer, 2002). And, as discussed above, given the large disparity between gang and non-gang inmates in their rates of institutional misconduct, there is an obvious pathway into restrictive housing for disciplinary purposes. In both instances, there is a clear explanation for the segregation of gang members: they have either "earned" or "need" restrictive housing.

One of the most controversial issues surrounding the use of restrictive housing is the segregation of inmates from the general population based solely on the threat or safety risk they pose to prison staff, other inmates, or the institution at large. This pathway is especially controversial for gang affiliates for at least two reasons. First, placement into restrictive housing is usually indeterminate, that is, until the threat wanes or is eliminated. Because gang affiliation is the primary determinant of the threat, release to the prison's general population requires that gang members convince authorities that they are no longer affiliated with a gang. This is a risky or uncertain endeavor. Second, the decision to place an inmate into restrictive housing is made administratively, which often entails wide discretionary latitude. In cases of gang affiliation, the discretion that poses the greatest concern involves the validation of gang members (Toch, 2007). Both of these issues will be addressed in more detail in the following sections.

There is little evidence on these issues, which suggests that the extent to which the use of restrictive housing on gang members was "earned" (disciplinary), "needed" (protective), or based on "status" (administrative) remains unclear. In her review of the literature on this topic, Burman (2012) observed —

> *It is unknown, however, how many validated prison gang members are segregated as a result of convictions for violent and assaultive offenses — indicating a greater propensity for violence — as opposed to in-prison investigations that revealed only membership with the overt behavior* (p. 125).

Several reports have addressed this issue by reviewing prison system policies and practices, including Butler and colleagues (2013) and Jacobs and Lee (2012). These reports provide important information about the potential for the use of restrictive housing on gang affiliates based on an inmate's social status rather than the inmate's problem behavior.

Butler and colleagues (2013) reviewed the policies of 42 state prison systems in 2010 to determine the admission criteria for inmates to be eligible for "long-term administrative segregation" in supermax facilities or units.[13] They identified five primary factors that lead to administrative segregation, including (1) repeat violent behavior, (2) escape risk, (3) riotous behavior, (4) threat to institutional safety, and, most importantly, (5) STG. Affiliation with a gang or STG was an adequate reason for placement in supermax confinement in 15 of the 42 (36 percent) states (see table 2). Although gang affiliation constituted a key form of admission criteria for many states, it was the least identified category and under no circumstances was it the only category that states used to determine who is eligible for long-term segregation. Nonetheless, the findings from this study indicate that, as of 2010, membership in a gang or STG alone was sufficient to warrant placement in supermax facilities or units. Butler and colleagues concluded that the low rate of identifying STG affiliation as an admission criterion was unexpected, but they held that the conduct of gang members would likely soon qualify them for supermax placement. This is not a subtle distinction, as it emphasizes the "behavior" of gang affiliates over the "status" of gang affiliation.

As part of their investigative reporting for *Mother Jones* magazine, Jacobs and Lee (2012) obtained information about the gang validation and segregation practices of 44 state correctional agencies throughout the United States. Their approach differed from that of the Butler team (2013) in that, rather than review policies, they surveyed agencies about their practices. There can be wide divergence

[13] Eight states either declined to share their non-public policies related to this practice or indicated that they did not employ the practice.

Table 2. Gang Affiliation as a Segregation Determinant, 2010 and 2012

Authors:	Butler et al. (2013)	Jacobs and Lee (2012)
Year of data collection:	2010	2012
Question content:	Membership in a gang or STG was included as admission criterion for long-term segregation	Membership in a gang or STG was a possible determinant of placement in segregation
California	Yes	Yes
Indiana	Yes	Yes
Ohio	Yes	Yes
Pennsylvania	Yes	Yes
Tennessee	Yes	Yes
West Virginia	Yes	Yes
Hawaii	Missing	Yes
Texas	Missing	Yes
Connecticut	Yes	Missing
Illinois	Yes	Missing
New Mexico	Yes	Missing
Colorado	Yes	No
Kentucky	Yes	No
Mississippi	Yes	No
Nebraska	Yes	No
Washington	Yes	No
Florida	No	Yes
New Hampshire	No	Yes
New York	No	Yes
South Carolina	No	Yes
Wyoming	No	Yes
Alabama .	No	No

Alaska	No	No
Arkansas	No	No
Kansas	No	No
Maine	No	No
Massachusetts	No	No
Minnesota	No	No
Montana	No	No
New Jersey	No	No
North Carolina	No	No
Oklahoma	No	No
Oregon	No	No
Rhode Island	No	No
South Dakota	No	No
Vermont	No	No
Virginia	No	No
Arizona	No	Missing
Georgia	No	Missing
Idaho	No	Missing
Louisiana	No	Missing
Michigan	No	Missing
Missouri	No	Missing
Nevada	No	Missing
Delaware	Missing	No
Iowa	Missing	No
Maryland	Missing	No
North Dakota	Missing	No
Utah	Missing	No
Wisconsin	Missing	No

between policy and practice.[14] The Jacobs and Lee survey included a question that asked respondents: "Are validated gang/security threat group members or associates placed in segregation as a result of validation (or only, for example, as a result of rule violations)?" Among the 40 states that responded to this question, Jacobs and Lee found that gang affiliation was a determinant of segregation in 13 of them (see table 2). Similar to the results of Butler and colleagues (2013), this represents a minority of agencies.

Determining if the findings reported by Jacobs and Lee (2012) and the Butler team (2013) are consistent with one another is important because if the results show no overlap across the policies and practices of agencies, it would diminish confidence in these findings. Alternatively, if there were consistent findings using different methods among independent sources (journalists versus researchers), it would offer strong confidence in the results. Table 2 shows that there were convergent results 69 percent of the time, which reveals a good rate of agreement between the two studies. However, there were 10 discrepancies. In five states — Colorado, Kentucky, Mississippi, Nebraska, and Washington — gang membership *was not* a determinant of segregation in the Jacobs and Lee study, but it was in the Butler team's study. Likewise, in five other states — Florida, New Hampshire, New York, South Carolina, and Wyoming — gang membership was a determinant of segregation in the Jacobs and Lee study, but it was not in the Butler and colleagues' study. Some of the discrepancy may be the result of differences in the study methods and possible changes in restrictive housing policies that occurred over the two-year period (e.g., Colorado). But the Jacobs and Lee study also provided additional details about how respondents answered the question. In Colorado, for example, a respondent told Jacobs and Lee that inmates are placed in segregation "only for rule violations." Alternatively, in New Hampshire, inmates could be placed in segregation due to gang status "if the offender is deemed to be a threat to the institution based on our investigation." Another take on this issue is found in Wyoming, where the respondent indicated that "inmates are not automatically put in segregation due to gang/STG status" but "engaging in recruitment or participating in STG-related activities" could result in segregation.

Herein lies the complexity of correctional practices and policies as they apply to the placement of gang affiliates in restrictive housing:

1. There is a set of rules that apply only to gangs (e.g., recruitment, gang paraphernalia) and not to other types of inmate associations that, if violated, could result in restrictive housing; and

2. There is a set of contingencies, such as affiliation in certain types of gangs or leadership positions within a gang, for gang members to be placed in restrictive housing.

[14] A survey is limited to the institutional memory of the respondent, whereas a policy is systematic across the agency. Jacobs and Lee received information from public information officers, or in some cases, prison wardens (personal communication, November 17, 2015).

The remainder of this section will emphasize these contingencies, which are especially important in the context of indeterminate placement in restrictive housing.

States where gang status is used as a determinant for placing inmates into restrictive housing typically use this management strategy selectively. Not all gangs and gang members are equal security risks, as demonstrated by Gaes and colleagues (2002) in their study of the effect of gang affiliation status (inmates) and gang affiliation type (gangs as groups) on institutional misconduct. For example, the Texas Department of Criminal Justice automatically places certain affiliates of certain gangs in administrative segregation. Among the 12 STGs recognized and numerous disruptive groups monitored in the Texas system, only seven of the STGs are automatically placed in administrative segregation. Members of the remaining STGs may be placed in administrative segregation at the discretion of correctional officials, while members of disruptive groups are not automatically segregated.

The decision to segregate members of certain gangs highlights an important distinction: Prison systems generally reserve administratively based restrictive housing for inmates who are members of gangs that pose the greatest threat to the institution. This threat is inextricably linked to a group's level of organization and, by extension, the persistent threat the group poses to prison operations. Indeed, if the Texas Department of Criminal Justice were to segregate gangs based on their sheer volume of misconduct, they would target the Tangos, as discussed above (see footnote 5). The Tangos, however, are considered only a disruptive group and lack the organizational structure to warrant management beyond monitoring — for example, their leadership is localized to separate facilities rather than to the entire prison system. The downgrading of the Texas Mafia in the summer of 2015 from automatic segregation is also a telling example. The threat assessment determined that the organizational structure of the gang had weakened to the point of dysfunction, which in turn translated into a weaker threat to the prison system.

Not all gang affiliates are placed in restrictive housing. In Texas, for example, after a confirmation process, only members of STGs are automatically placed in administrative segregation. Suspected and associated affiliates of these groups — including the seven groups that are automatically segregated — are not placed in administrative segregation unless they engage in violent behavior. This speaks to the complexity of restrictive housing in the context of gangs across prison systems: Decisions are based on status in some cases, behavior in others, and sometimes a combination of the two.

A similar contingency existed previously for the California Department of Corrections and Rehabilitation (2014). In the wake of the *Ashker v. Governor of California* lawsuit in 2012, gang associates were no longer automatically placed in restrictive housing (i.e., SHUs). The *Ashker* settlement, however, included explicit language indicating that inmates are no longer placed "into a SHU,

Administrative Segregation, or Step Down Program solely on the basis of their validation status" (p. 4). Regardless of whether an inmate is a member or an associate of an STG-I or STG-II, behavior, not status, is the primary determinant of SHU placement. Concerns remain about the behavior-based, gang-related pathway into SHUs in California. For example, a review of the STG disciplinary matrix reveals that lower-level violations — particularly sections 6 "serious" and 7 "administrative" — could be argued as representing status more than behavior (California Department of Corrections and Rehabilitation, 2014).

There is little information about the duration of placement in restrictive housing among gang affiliates. Labrecque (2015a) found that gang affiliates remained in restrictive housing for longer periods in the Ohio Department of Rehabilitation and Correction. About half of the 1,100 inmates in the Pelican Bay SHU spent 10 or more years in restrictive housing, and 78 of them had spent 20 or more years (Rodriguez, 2015). Now, gang affiliates found guilty of SHU-eligible offenses are placed in step-down programs that aim to offer a pathway — separate from debriefing — out of gangs and SHUs. The Texas Department of Criminal Justice, and other correctional agencies, also offer segregation diversion and gang disengagement programs as well.

Pathways Out of Restrictive Housing Among Gang Affiliates

Historically, the only way out of long-term segregated housing for gang affiliates is to "snitch (or debrief), parole or die" (Tachiki, 1995, p. 1128; see also Reiter, 2012; Hinds & Butler, 2015). Gang members held in restrictive housing for disciplinary or protective purposes follow alternative routes to segregation — usually fixed sentences for the former, indeterminate placement (until the safety risk wanes) for the latter. One chief criticism of restrictive housing practices based on threat and safety risk is that it is almost impossible to exit. Gang members who want to exit restrictive housing find themselves in a challenging predicament: Inform on the gang or remain in segregation. Hunt and colleagues (1993) identified this among offenders recently released from a California prison:

> *[I]f for example a prisoner was in a high security unit, he often found himself unable to get out unless he "debriefed"; i.e., provided information on other gang members. Many respondents felt that this was an impossible situation because if they didn't snitch their chances of getting out were minimal. As one respondent remarked: "They [the guards] wanted some information on other people … [s]o I was put between a rock and a hard place. So I decided I would rather do extra time, than ending up saying something I would later regret"* (p. 402).

The issues associated with debriefing are especially sensitive because inmates who debrief earn the label of a "snitch" and become instant targets (see, e.g., Kurki & Morris, 2001, p. 42; Blatchford, 2008). These issues are especially magnified for

inmates incorrectly classified as gang members or those merely on the fringe of the gang, as detailed in *Madrid v. Gomez,* who are unable to provide convincing information about the inner workings of the gang (Tachiki, 1995).

The path out of restrictive housing has changed in recent years. A recent report by The Marshall Project revealed that more than 30 states have developed step-down programs leading inmates out of restrictive housing (Chammah, 2016), and Baumgartel and colleagues (2015) report 33 agencies with step-down programs. For example, the Michigan Department of Corrections' Incentives in Segregation step-down program has been in place since 2009 and outlines six stages that inmates pass through on their way from segregation to lower custody levels. With each step, inmates earn additional privileges, such as phone calls, visits, commissary access, and other previously banned activities or items. The department does not include gang affiliation as a segregation determinant (see table 2), but other states have created comparable programs tailored to their gang population.

Both Texas and California, the two states with the largest and arguably most violent gang populations, provide gang-affiliated inmates with pathways out of restrictive housing. In each state, there are two ways that inmates can either avoid or exit restrictive housing. Texas recently introduced its Administrative Segregation Diversion Program (ASDP), which gives members of STGs returning to prison the opportunity to avoid segregation by participating in a six-month program. The programming — cognitive intervention, substance abuse treatment, anger management, and treatment for criminal addictive behavior — is very similar to the Gang Renouncement and Disassociation (GRAD) program, which was introduced in 1999 and modeled after a program in the Connecticut Department of Corrections (Burman, 2012). One of the key differences between these two voluntary programs is that enrollment in ASDP is a one-time deal made available to gang affiliates at intake who would be placed automatically in administrative segregation, while GRAD is made available to all members of STGs post-intake.[15] Regardless of entrée, these programs offer viable alternatives to segregation. ASDP allows inmates to be housed in the general population after six months, although there is a three-month period of monitoring. The GRAD program allows inmates to be housed in the general population after six months, and allows for social interaction in less than half of that time, followed by three months of monitoring in the general population.

Nearly 200 inmates have completed the ASDP program and more than 4,600 have completed GRAD. However, there is little evidence for determining the effectiveness of these programs. Burman (2012) reported that "approximately 11-12 offenders who successfully completed the GRAD process since 2000 have

[15] Burman (2012, pp. 234-241) reported that release date, time in segregation, and position in a gang all factor into the decision to allow gang members into the GRAD program.

been reconfirmed as [STG] members" (p. 260). More recently, Texas reported that 19 program participants have been reconfirmed as STG members (Pinkerton, 2014). The short existence and small sample size associated with ASDP means that the program is at least a year away from a formal evaluation, but the GRAD program — now operating for 15 years — is ripe for determining its efficacy in leading inmates away from gangs. Although there are numerous outcomes in need of evaluation, a gang member reconfirmation rate of 0.004 percent would deem the GRAD program to be extremely successful, and, potentially, a national model for prison systems with complex gang problems.

The California Department of Corrections and Rehabilitation recently expanded the pathways out of restrictive housing. Previously, debriefing constituted the primary way out of SHUs. Gang affiliates also underwent six-year inactivity reviews by the Departmental Review Board. If found inactive (i.e., no STG-related activity for six years), the inmate was transferred to general population and then monitored for one year. In the aftermath of the *Ashker v. Governor of California* case, debriefing remains a viable pathway out of SHUs while a new pathway — the Step Down Program — replaces the inactivity review. Unlike debriefing, the Step Down Program does not require inmates to complete autobiographies or inform on their gang. Originally, it was proposed as a five-year, five-step process. After completing the first four steps — 12 months per step — inmates transition into a year of "monitored" status in general population, which is step 5. Due to the *Ashker* settlement, the duration of each step was cut in half and step 5 was eliminated. The program can now be completed in two years, or six months per step.

The Step Down Program shares some similarities with the Texas GRAD program. There is an initial 12-month period of monitoring — steps 1 and 2 — where inmates remain in standard SHU-like conditions. With each step, inmates earn increasing privileges — the number of photographs allowed, the portion of monthly canteen draw, the frequency of phone calls, receipt of personal packages, social contact, and programming. The latter two become very apparent in steps 3 and 4, where programming occurs in small groups and inmates may interact on the yard. California has not released much in the way of public statistics on its Step Down Program. A brief report from September 2013 indicated that there have been 543 case-by-case reviews of validated gang members in SHU or administrative segregation units; of those, 65 percent were approved for (at the time) step 5 or general population and another 28 percent placed in lower steps in the Step Down Program. In term of debriefing, there is little systematic information in the way of disengagement in California.[16] It is therefore difficult to determine how well California's Step Down Program and other routes out of restrictive housing have been implemented and whether they are successful.

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[16] In fact, only data from the Arizona Department of Corrections reveals information about disassociation from gangs via debriefing (Fischer, 2002). About 14 percent of the inmates validated as gang members were debriefed. Fischer found some positive results, but overall the findings were mixed in terms of whether renouncement led to changes in misbehavior.

Regardless of whether the behavior or status of gang affiliates leads them into restrictive housing, and whether programs are useful in getting them out, one of the most fundamental questions of this practice is whether it achieves its intended goals of reducing misconduct and disorder in prisons.

Gang Affiliation, Restrictive Housing, and the Reduction of Misconduct and Disorder

The practice of segregating gang affiliates is both highly endorsed by correctional authorities, who see it as a most effective solution to prison gang activity, and highly criticized by activists and scholars, who claim the practice is empirically, legally, or morally unsupported. Neither side has much in the way of evidence to back their claims. In fact, despite such intense interest in the topic, to the best of the author's knowledge there have been only three studies to assess the effectiveness of restrictive housing in reducing misconduct among inmates and disorder in prisons (Fischer, 2002; Labrecque, 2015a; Ralph & Marquart, 1991). It is curious that a practice as controversial and widespread as restrictive housing — particularly segregation based on threat and safety — has not been subject to more formal evaluations. Determining if restrictive housing is achieving its intended goals of reducing misconduct, disrupting gang activity, increasing staff and inmate safety, and decreasing prison disorder should be a high priority for correctional officials, advocacy groups, and researchers interested in correctional practice.

Ralph and Marquart (1991) examined system-level trends in inmate violence before, during, and after the "war years" in Texas prisons. In 1984 and 1985, there were more murders in Texas prisons than in the prior 20 years combined. The initial attempts of prison officials to regain control by targeting gang leadership through segregation and transfers were ineffective. Prison officials then made a drastic change: They moved all gang members into segregated housing in September 1985. The prison system then witnessed a large-scale, immediate decline in homicide along with a delayed, albeit substantively meaningful, decline in assault. Ralph and Marquart concluded, "Although this method of control seems to have eliminated many problems experienced by prison officials, it is unknown what impact this has on the inmate and the community" (p. 48). Others remained skeptical. Mears (2005) held that any firm conclusions about the role of segregation in reducing violence in Texas prisons is premature. The outcomes studied were narrow (limited to homicide and assault) when there needed to be a broader range of determinants of success, and the data were of "questionable utility" (Mears, 2005, p. 34). The findings of Ralph and Marquart are largely descriptive and do not account for alternative explanations for the decline of violence. It would require nonetheless a very convincing explanation to contend that factors other than segregation were responsible for triggering such a major decline in violence.

Table 3. Pathways Out of Restrictive Housing in California and Texas

	Texas		California	
	Administrative Segregation Diversion Program (ASDP)	Gang Renouncement and Disassociation (GRAD)	Step Down Program	Debriefing
Implementation year	2014	2000	2012	~1980s
Target population	Members of STGs returning to Texas facilities who want to exit gangs and avoid administrative segregation	Members of STGs who want to exit gangs and leave administrative segregation	STG affiliates (members and associates) sentenced to security housing unit terms	STG affiliates (members and associates) who want to exit gangs and leave the security housing unit
Early stage monitoring	Admission into the ASDP occurs at intake	Offenders undergo a disassociation monitoring period of 12 months prior to entry into the GRAD program	Steps 1 and 2: "primarily intended as periods of observation," restricted movement, in-cell programming; 12 months total (6 months per step)	None
Program phases/steps	Six months of classroom setting, group-based programming immediately after admission into Texas Department of Criminal Justice	Phase I: 3 months, single-celled, in-cell programming, recreation with other offenders Phase II: 3 months, double-celled, classroom programming, less restricted movement Phase III: general population, general programming, and work assignments	Step 3: 6 months, programming in small groups, movement in restraints Step 4: 6 months, programming in small groups, recreation with other offenders, less restricted movement	Interview phase: gathering information about STGs to determine if offender has dropped out, including autobiography Observation phase: 6 months, transitional housing unit with other debriefing offenders

Table 3. Pathways Out of Restrictive Housing in California and Texas (continued)

	Texas		California	
	Administrative Segregation Diversion Program (ASDP)	Gang Renouncement and Disassociation (GRAD)	Step Down Program	Debriefing
Implementation year	2014	2000	2012	~1980s
General population	Last 3 months in the program	Last 3 months in the program	Upon completion of Steps 1-4	Upon completion of observation phase
Total time	6 months of programming	12 months of monitoring, 9 months of programming	24 months	Varies
Participants	187	4,607	150	n/a
Sources of information	Burman (2012) Personal communication (December 3, 2015) Texas Department of Criminal Justice (2014)		*Ashker v. Governor of California* (2015) California Department of Corrections and Rehabilitation (2013, 2014) Tachiki (1995)	

Fischer (2002) conducted the most comprehensive study on gang affiliation, restrictive housing, and misconduct. His work was based on data gathered from Arizona Department of Corrections prisons and focused on two factors relevant to the question at hand. First, the study determined if there was an incapacitation effect for nine forms of violent and disruptive behavior associated with placing 431 validated gang members in a supermax unit. The results of the inmate-level analysis confirm such an incapacitation effect: Violations fell by 30 percent, and assault, drug, threat, fighting, and rioting violations fell anywhere from 53 to 97 percent. Other violations increased, however, including possessing weapons, destroying property, tampering with equipment, and "other" violence. These incapacitation findings from Fischer's study remain the most convincing results to date that segregation can reduce problematic behavior among members of gangs.

Second, Fischer also conducted a prison systemwide analysis of changes to Arizona's STG policies in 1995 and 1997. The gang policy initiative of July 1995 expanded the scope of the STG program (including documenting and validating gangs) and intensified the penalties for STG behavior. The gang policy of 1997 resulted in greater specification in the STG program (including monitoring processes) and expanded the sanctions for membership in such a group to include segregation for gang members who did not renounce their gang affiliation and debrief with intelligence officers. Fischer examined violations across three periods: (1) July 1994 to September 1995, (2) October 1995 to September 1997, and (3) October 1997 to December 2000. By isolating the periods in which the gang policies were implemented, Fischer was able to assess whether the intended changes were achieved.

With each successive STG policy change, the Arizona Department of Corrections observed an overall, systemwide 16 percent and 27 percent reduction in violations for gang inmates, and 15 percent and 29 percent reduction in violations for non-gang inmates in subsequent periods. These results are encouraging, but it is important to note that gang members were higher-rate offenders to begin with. Focusing on absolute violation rates shows that the effects of changes to STG policies were especially strong for validated gang members — the drop was four times greater for them than non-gang inmates (p. 63). Fischer held that the implementation of these policies resulted in 21,984 fewer total violations, including 5,716 fewer among gang members. He concluded that there was a systemwide benefit associated with the implementation of both gang policies, one that was strongest among gang members but carried over to non-gang members as well, which was predicted by the theories discussed above. Fischer tempered his conclusion, however, by noting that there were many security-related changes taking place in Arizona prisons, and those changes also could have explained some of the overall reductions in violations.

Finally, Labrecque (2015a) conducted an individual-level, longitudinal study of the effects of restrictive housing on subsequent misconduct in Ohio prisons between 2007 and 2012. He examined both the placement of inmates in restrictive

housing and the duration of time inmates spent there, then determined if the effects of restrictive housing were worse for gang affiliates (among other factors) than non-gang inmates. Labrecque's findings, while not uniform across the prevalence and incidence of violent, nonviolent, and drug misconduct, generally point in the same direction: Gang affiliates fared worse in terms of misconduct when returning to the general population. Spending any time and spending more time in restrictive housing corresponded with higher incidences of violent and nonviolent misconduct among gang affiliates than non-gang inmates. These findings are generally consistent with what is known about the effects of gang affiliation on misconduct, but they also refute the notion that restrictive housing may have specific deterrent effects for a problematic population such as gang affiliates. Alternative theories — incapacitation and normalization — might prove to be more defensible when subject to solid empirical investigations such as those provided by Labrecque.

Gang Affiliation and Restrictive Housing — A Look Toward the Future

The findings from the preceding sections constitute the empirical knowledge base on the relationship between gang affiliation and restrictive housing. This knowledge base remains meager in volume, with little empirical research to guide the dialogue, which is unfortunate given how amplified this debate has become. This section summarizes the key findings of this white paper, identifies critical gaps in the field's knowledge of gang affiliation and restrictive housing, and offers productive directions for future research.

What Do We Know About Gang Affiliation and Restrictive Housing?

Several conclusions are possible — some preliminary, others firm — from the available literature. First, as high-rate offenders and disproportionate contributors to violent misconduct in prison, gangs and gang members fit squarely into the logic — deterrence, incapacitation, and normalization theories — underlying the use of restrictive housing in prison systems. To the extent that the correlates of restrictive housing are based on discipline, protection, and safety and threat risks, it would be remarkable if the affiliates of gangs were not the targets of segregation policies and practices in prison systems.

Second, evidence suggests that inmates who affiliate with gangs are overrepresented in restrictive housing. The evidence base to support this assertion remains confined to select states, but there is also no evidence to the contrary indicating that gang affiliation is not a correlate of placement in restrictive housing, particularly for validated gang members.

Third, at least some of the overrepresentation of gang affiliates in restrictive housing can be attributed to correctional policies and practices that automatically

segregate certain types of gangs and gang members. Not all agencies employ these practices, and no formal analysis has been conducted to differentiate agencies that employ these practices from those that do not. It remains unclear how much of the overrepresentation of gang affiliates in restrictive housing is due to disciplinary, protective, or administrative segregation.

Fourth, the most controversial aspects of the relationship between gang affiliation and restrictive housing pertain to the purported arbitrariness and lack of due process in validating gang affiliates, the policies that automatically segregate gang affiliates based on status and not behavior, and the indeterminate placement of gang affiliates in restrictive housing.

Finally, the emergence of programs aiming to remove gang affiliates from restrictive housing and encourage disengagement from gangs — particularly in states such as California and Texas — reveals a shift from more punitive policies to those that encourage integration into the general prison population housing. However, there is very little evidence to determine if these programs are effective at achieving their intended goals.

What Do We Need to Know About Gang Affiliation and Restrictive Housing?

There are several aspects of the relationship between gang affiliation and restrictive housing that are in need of concerted attention from policymakers, practitioners, and researchers. This section identifies four key gaps in our knowledge. Some of them will require substantial and sustained investment in research infrastructure, while others may be accomplished more swiftly by using archival data. In both cases, researcher-practitioner partnerships are key for advancing this agenda.

Collect and analyze data that will establish an empirical foundation on the use of restrictive housing among gangs and gang affiliates

Does segregating the affiliates of gangs from the general inmate population reduce disorder in prisons and misconduct among inmates? This question is directed toward prison systems that segregate gang affiliates based on their status. It is equally important for prison systems that segregate gang affiliates based on their behavior, especially if the violations involve actions unique to gangs (e.g., possessing gang paraphernalia, participating in gang roll call). The recent changes that the California Department of Corrections and Rehabilitation made to its SHU-eligible offense policy illustrate the importance of the latter.

To date, there is scant evidence to support either status- or behavior-based arguments for segregating gang affiliates. In fact, only three studies have evaluated this line of inquiry — a macro, system-level study in Texas (Ralph

& Marquart, 1991); an individual- and system-level study in Arizona (Fischer, 2002); and an individual-level study in Ohio (Labrecque, 2015a). These studies indicated that segregating gang affiliates reduces homicide, assault, and other forms of violence, but that restrictive housing could introduce problems when gang affiliates return to the general population. These findings provide a strong foundation for future research. Archival data could be used to conduct between-inmate and within-inmate effects of segregation on misconduct among gang and non-gang groups.

Research on this topic should track a wide range of activities among inmates as they move into and out of restrictive housing to isolate the independent effects of this practice on inmates. This analytic logic can extend to facility-level analyses as well, although detecting and isolating effects at aggregate units of analysis might be difficult because of simultaneous changes that could undermine causal relationships, such as those observed by Ralph and Marquart in Texas and Fischer in Arizona. In addition to homicides and assaults, the research should be concerned with a broad spectrum of outcomes, including contraband use and seizures, yard disturbances, security incidents, and seemingly minor forms of gang-related activities. In addition, this research should be a priority for understanding how restrictive housing practices influence the gang affiliates themselves, particularly their criminogenic risks and needs, as it relates to institutional programming and re-entry success. This will provide the best picture of the effects of placing gang affiliates in restrictive housing. In an era when prison violence is at historically low levels, the push for policy changes should be based on sound, empirical evidence. Whether or not gang status- or behavior-based restrictive housing practices produce the intended effects, this research should offer a blueprint for future correctional decision-making on this highly charged issue.

Document national practices and trends on segregating gangs and gang affiliates to understand and explain its use

When interested parties seek information about gang activity in prisons, there are few places they can turn. Fleisher and Decker (2001, p. 2) described prison as the "final frontier" in research on gangs. Indeed, the volume of the literature on gangs in incarcerated settings pales in comparison to the street gang literature (Pyrooz & Mitchell, 2015). Unlike national data sources on issues pertaining to street gangs and gang membership, such as the National Youth Gang Survey among law enforcement agencies or a variety of national-level surveys among youth and young adults, "there is no centralized repository of data on prison gang membership" (Gaston & Huebner, 2015, p. 329). As this white paper has made clear, the literature on this topic is a collection of one-off studies rather than an organized and systematic effort to document gang activity and restrictive housing practices in U.S. prisons.

Against this backdrop, it is impossible to paint a national portrait of the relationship between gang affiliation and restrictive housing. Surveys such as those conducted independently on restrictive housing (e.g., Baumgartel et al., 2015) and those conducted on gangs (e.g., Winterdyk & Ruddell, 2010) are one pathway forward. This is a reluctant recommendation, as these studies are not easy to conduct. Well-developed surveys with methodologically sound research designs require substantial resources to both design and administer. They would also require negotiating the research policies of 51 prison systems, along with wide and often conflicting terminology and definitions of gangs and gang affiliates (Trulson et al., 2006).

An alternative pathway forward is to either develop or integrate repeated and standardized surveys of (1) the population of prison systems, (2) nationally representative samples of prison facilities, or (3) nationally representative samples of prison inmates. These surveys would include a range of measures related to restrictive housing, gangs, and gang affiliation. Rather than launching a project of this scope from the ground up, a more feasible solution would be to integrate measures of gangs and gang affiliation into the suite of existing Bureau of Justice Statistics projects. For example, a single item added to the 2011-12 National Inmate Survey asking inmates about gang affiliation could have provided the definitive evidence needed to reach conclusions about the relationship between gang affiliation and restrictive housing. Other projects could be used as well (e.g., National Prisoners Statistics). This approach would yield foundational information about the frequency and trends in the use of restrictive housing on gang affiliates. Such information would not only permit the explanation of different practices and policies across prisons and prison systems but would also allow these prisons and prison systems to learn from each other — both the successes and failures — in managing a very challenging population of inmates.

Subject gang and gang affiliate validation practices to independent scientific assessments to establish their reliability and validity

There are many controversial issues associated with restrictive housing in U.S. prisons, and the wholesale placement of gang affiliates in restrictive housing is among the most pressing. Indeed, this practice contributed to the uprising that led to the 2013 Pelican Bay hunger strike involving 30,000 inmates in California. Therefore, this issue shines a bright light on the policies and practices followed to validate gangs and gang affiliates in prison, which have been criticized by many because of their implications for housing, programming, and other consequences (Kassel, 1998; Shaiq, 2013; Sowa, 2012; Tachiki, 1995). Toch (2007) likened the validation process to a witch hunt, suggesting that —

> *… a striking parallel to traditional inquisitorial tribunals can be found in [gang] 'classification' systems (such as those used in Arizona and California and by the*

Federal Bureau of Prisons) deployed for gang members who are being considered for consignment to 'supermax' control units (p. 274).

The issues are magnified when the validation process involves evidence derived from gang debriefing — as illustrated in *Madrid v. Gomez*, debriefing is an imperfect process. Gang affiliates in restrictive housing may inaccurately name snitches, gang dropouts, rival gang members, or other vulnerable populations to facilitate their return to general population. Incorrectly classified gang affiliates then have no recourse through which to challenge the validation because the information is confidential, nor can they debrief because they lack gang intelligence. Validation can come across as arbitrary, yet it can have serious consequences, opening up correctional agencies to costly litigation (Austin & Irwin, 2011, pp. 134-135).

The practice of gang validation itself needs to be "validated." Are the various source items (see Hill, 2009) used to determine gang affiliation internally consistent? Are these items related to each other? Do independent raters of the source items similarly validate inmates as gang or non-gang affiliates? The source items clearly have face validity, but there are serious questions about the criterion-related validity of the gang affiliate validation. Do the source items predict other forms of gang-related activity or future gang-related activity? And, do the source items correlate with indicators that they should be related to theoretically? California's movement to a weighted validation system, where source items are assigned different weights, represents an important shift in policy. Nonetheless, it is unclear if there is an empirical basis for the weights linked to this new approach (or the approach where source items are weighted equally).

More accurate determinations of gang affiliation will not only improve the legitimacy of the practice but may also reduce institutional conflict. False positives (i.e., wrongly classifying an inmate as a gang affiliate) and false negatives (i.e., wrongly classifying an inmate as a non-gang affiliate) represent serious threats to the safety of institutions. This applies to determining not only who is a gang affiliate but also who has disengaged from gangs. A productive start would involve subjecting gang validation practices to independent scientific assessments of reliability and validity. Given just how great of an impact gang validation can have on inmates' lives, these practices must be open to rigorous scientific scrutiny, and a threshold must be established if these practices are to dictate placement in restrictive housing.

Evaluate the effectiveness of programs and policies that promote disengagement from gangs and exit from restrictive housing to establish best practices

Do programs designed to facilitate desistance from gangs and exits from restrictive housing actually work? With programs in as many as 30 states,

including gang-targeted programs in states like California and Texas, step-down processes and impacts must undergo rigorous scientific evaluation. Randomized control trials should be the standard used to determine a program's effectiveness. Practitioners often find themselves uncomfortable withholding needed programming from control groups. However, there are often more candidates than there is funding and space for programming (e.g., Burman, 2012). In instances where randomized control trials are impractical, quasi-experimental designs can be attractive alternatives. Program participants can be matched on a range of characteristics with inmates who are eligible for the program but, for one reason or another, decline to participate.

When possible, natural experiments should be exploited for their intellectual yields. California's shift in 2012 to no longer automatically segregate STG-I gang associates, and then in 2015 to no longer segregate STG-I gang members, represents a natural experiment ripe for scientific investigation. Following the logic of deterrence, incapacitation, and normalization theories, there are many ways to assess if this policy shift has had positive or negative impacts on inmates and institutions.

Researcher-practitioner partnerships are needed to foster knowledge on restrictive housing (Frost & Monteiro, 2016). This is especially true with gang research. Skarbek (2014, p. 10) noted that "the same walls that keep inmates locked in also keep researchers out," a point others have recognized for more than two decades (Fong & Buentello, 1991). Although archival data are often rich with information that could help evaluate programs, these data are inflexible regarding specific items that are essential for determining program efficacy. Especially for process evaluations, researchers need access to facilities to interview prison staff and inmates. All data have limitations, but the luxury of triangulating information on programs is not one to pass up. Researchers can sometimes conduct analyses that are tangential to the goals of correctional research departments overloaded with other tasks, thus revealing important information about agency practices and the inmate population.

A final point to be made about program evaluations is that not conducting them, or withholding their results, is a disservice to the correctional landscape. The results of scientifically rigorous research must be made public and disseminated widely. This is especially true for step-down and diversion programs designed for gang affiliates. Information must be shared if researchers and stakeholders are to learn what is and is not working in responding to gangs in prisons. Gang research reveals that most programs in street settings fail to find any positive effects, and some find programs backfire in unanticipated ways (Gravel, Bouchard, Descormiers, Wong, & Morselli, 2013; Klein & Maxson, 2006). When programs are successful, they have the potential to translate across contexts (e.g., Operation Ceasefire); when they are not, they have the potential to retool under more scientifically sound principles (e.g., Gang Resistance Education and Training). Either way, establishing the legitimacy of a program is important to the day-to-day activities of correctional staff and inmates in these programs.

Conclusions

Gangs are especially challenging populations to manage. The problems associated with gangs in prison have not abated, and restrictive housing is one of the few practices that correctional officials see as viable for managing the population. This solution, however, has come under heightened scrutiny in recent years, due in no small part to the vocal stand that gang affiliates have taken in places like California. Restrictive housing is an imperfect solution to a complex problem. Neither the wholesale placement of gang affiliates into restrictive housing based merely on their status, nor the wholesale removal of gang populations from restrictive housing, are practical solutions to this impasse. The limited empirical knowledge base, unless addressed, will only allow these issues to fester and grow. Much has been learned about the relationship between gang affiliation and restrictive housing over the past three decades. What is needed is a dialogue that is informed not by rhetoric or anecdote but by empirical evidence to guide decisions about the future of restrictive housing and gangs in U.S. prisons.

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Appendix A. California Department of Corrections and Rehabilitation criteria used to certify security threat groups (STGs)

1. Criteria used as part of an official threat assessment conducted by the Office of Correctional Safety to certify a group:

2. Information from any federal, state, county, or city correctional or law enforcement agency, identifying the propensity for violence or the disruptive nature of the potential STG being considered for certification.

3. Consideration with regard to whether the group meets the definition of an STG.

4. History of STG behavior in the community.

5. Evidence that the group presents a potential threat to the security of the institution and safety of staff and offenders.

6. History of threatening behavior to staff or offenders safety involving acts such as riots, group disturbances, possession or manufacture of weapons, assault/battery, trafficking of narcotics, extortion, and coercion of other individuals or groups.

7. Documentation of violent and illegal activities, which may also include planning, organizing, threatening, financing, soliciting, or committing unlawful acts.

8. Group evolution, structure, formalized procedures or bylaws, and membership characteristics.

9. Information concerning group meetings and membership criteria.

10. Chronology of events or other information evidencing a threat to institutional security or safety of staff and offenders through group activities, associations, and potential security alignments.

11. Tattoo, symbol, and graffiti documentation.

12. Group association evidence, including offender and staff interviews.

13. Information concerning the group's philosophy and affiliations.

Based on a review of the evidence available at intake of the overall severity of the threat that the group poses, groups are either "certified" as STG-Is or "recognized" as STG-IIs.

Appendix B. California Department of Corrections and Rehabilitation source items and weights for validating gang affiliates

The following, in descending order of significance, along with the points associated with the source item in parentheses, is used by the California Department of Corrections and Rehabilitation (CDCR, 2014) for security threat group (STG) validation:

1. Legal documents (7 points) evidencing STG conduct, including court transcripts, probation officer reports, or other legal documents.

2. Tattoos/body markings (6 points) related to STGs.

3. Offenses (6 points) committed for the "benefit or promotion of, at the direction of, or in association with an STG."

4. Self-admission (5 points), written or verbal, of STG involvement.

5. Communications (4 points), written or verbal, involving STG activity.

6. Visitors (4 points) with whom the offender engages in "promoting, furthering, or assisting" STG activities.

7. Information from non-CDCR agencies (4 points) indicating STG activity, such as police or crime reports.

8. Staff information (4 points) that reasonably indicates STG activity, including observations, rule infractions, and misconduct.

9. Photographs (4 points) with STG connotations, such as insignia, symbols, or gang members, taken in the past four years.

10. Written materials (4 points/2 points) "evidencing STG activity," such as membership or enemy lists, in personal possession or not in personal possession.

11. Debriefing reports (3 points) that include references to specific STG-related behavior.

12. Informants (3 points), whether or not confidential, that provide reliable and specific knowledge "evidencing STG affiliation."

13. Association (3 points) with validated STG members that constitutes a "pattern or history of encounters," not just by chance, involving STG behavior or business.

14. Symbols (2 points) with STG connotations, such as hand signs, clothing, graffiti.

All inmates with non-zero points are considered gang *affiliates*. To be documented as a *member*, an offender must meet three independent source items, the items must sum to a combined value of 10 or more, and there must be a direct link to an STG affiliate (current or former member, or associate). The same procedures apply to being documented as an associate, the only difference being that associates are involved "periodically or regularly" with members or other associates. An STG investigator makes this distinction. Finally, *suspects* have scored at least two points of validation but have not reached the combined total of points or necessary number of source items. There are also gang *dropouts*, a distinction that elicits a different gang classification status.

CHAPTER 5

The Relationship Between Inmate Misconduct, Institutional Violence, and Administrative Segregation: A Systematic Review of the Evidence

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Introduction

Maintaining safe and orderly institutions is a high priority for prison and jail administrators, but institutional misconduct and violence often threaten the safety and order of an institution (DiIulio, 1987; Gendreau, Goggin, & Law, 1997; Steiner & Wooldredge, 2009; Steiner, Butler, & Ellison, 2014; Toch, Adams, & Grant, 1989). Segregation — transferring an inmate from the general prison population to an isolation cell in a more secure area of the prison — is a common response to inmate misconduct or violence that corrections officials use to regulate inmate behavior and promote order and

safety within their institutions (Browne, Cambier, & Agha, 2011; DiIulio, 1987; Reassessing Solitary Confinement II, 2014). However, the practice has recently drawn the attention of civil rights advocates, the U.S. Congress, and President Obama, who want to ensure that it is used equitably and that it is effective as both a deterrent and a consequence of prisoner misconduct and violence (e.g., Amnesty International, 2014; Obama, 2015; U.S. Senate Committee on the Judiciary, Subcommittee on the Constitution, Civil Rights and Human Rights, 2014). Yet, despite the increased national attention on segregation and the frequency with which it is used (Reassessing Solitary Confinement II, 2014; Riveland, 1999), few researchers have examined the factors that influence who is placed in segregation (e.g., inmates with a history of violence) or whether it is effective in reducing subsequent problem behaviors.

This white paper reviews the evidence pertaining to the use of segregation and its effects on offenders' subsequent behavior, and provides critical information about the evidence for researchers and practitioners. It also identifies gaps in the extant research that should be useful for expanding the evidence base related to the use of segregation and its behavioral effects. The paper begins by discussing the extent of misconduct, violence, and the use of segregation in correctional facilities. Next, it reviews the leading theories about predictors that indicate when corrections officials use segregation and its effects on offender behavior. The study methodology and its results follow. The paper concludes with a discussion of the implications of the findings and identifies directions for future research related to the relationship between inmate misconduct, institutional violence, and segregation.

The Extent and Predictors of Inmate Misconduct and Violence in U.S. Correctional Facilities

Inmate misconduct includes deviations from the formal rules that govern and regulate an inmate's behavior in a correctional institution. Violence in a prison or jail can take several forms: intrapersonal (e.g., self-harm), interpersonal (e.g., offending, victimization), or collective violence (e.g., riots). The Bureau of Justice Statistics (BJS) routinely collects national-level data from inmates and correctional administrators to assess the extent of misconduct and violence in U.S. correctional facilities. Based on data from its most recent assessments — the 2005 Census of Adult State and Federal Correctional Facilities (BJS, 2010) and the 2014 Annual Survey of Jails (BJS, 2015a) — correctional facilities typically experience high rates of misconduct (about 949 incidents of misconduct per 1,000 prison inmates). Average rates of inmate-on-inmate assaults are also two to three times higher than arrest rates for assaults among adults in the U.S. general population (compare to Federal Bureau of Investigation, 2006, 2015).

Incidents of misconduct and assault are not distributed randomly across facilities, however. In most prisons and jails, rates of misconduct and assault are below the national average for these facilities. An assault against a staff member occurs in only 30 percent of prisons and 5 percent of jails. Less than 6 percent of prisons experience a major disturbance — an incident involving serious injury, property damage, or loss of control of a portion of the facility, requiring extraordinary measures to regain control.

Based on self-report data from the 2004 Survey of Inmates in State and Federal Correctional Facilities (BJS, 2007) and the 2002 Survey of Inmates in Local Jails (BJS, 2012a), about 50 percent of prison inmates and 16 percent of jail inmates engage in misconduct during their incarceration. Twelve percent of prison inmates and 3 percent of jail inmates physically assault another inmate, while 3 percent of prison inmates and less than 1 percent of jail inmates physically assault a staff member. These data also show that 15 percent of prison inmates and 7 percent of jail inmates are intentionally injured by another person during their incarceration. Other researchers have found that from 7 percent to 20 percent of prison inmates report that they were violently victimized in the past six months (Wolff, Blitz, Shi, & Bachman, 2007; Wooldredge, 1994, 1998; Wooldredge & Steiner, 2014). In addition, data collected during the 2011-2012 National Inmate Survey (BJS, 2015b) show that approximately 4 percent of prison inmates and 3 percent of jail inmates were sexually victimized in the past year (Beck, Berzofsky, Caspar, & Krebs, 2013). Although these estimates reflect the prevalence of events over different periods of time, it is worth noting that less than 2 percent of the U.S. population age 12 and older experienced a physical assault in the past year, and less than 1 percent were sexually assaulted (Catalano, 2005, 2006; Rand, 2009).

Despite the tenuous nature of some of the comparisons made above, the rate of violence and the likelihood of experiencing violent victimization appear to be higher in correctional facilities than in the U.S. population.[1] The data also suggest that rates of misconduct and institutional violence vary across facilities. Researchers have also found that the likelihood of engaging in misconduct, perpetrating violence, and experiencing violent victimization varies across inmates (e.g., Beck & Harrison, 2010; Camp, Gaes, Langan, & Saylor, 2003; Steiner, 2009; Steiner & Wooldredge, 2008a, 2008b; Wolff et al., 2007; Wooldredge, 1998; Wooldredge & Steiner, 2014). This finding suggests that misconduct and violence are not random processes. That is, differences between inmates and their facility environments contribute to variation in institutional misconduct and violence.

[1] An exception to this conclusion is the likelihood of being a homicide victim. The U.S. homicide rate was 5.6 homicides per 100,000 persons in 2002 (Federal Bureau of Investigation, 2003), while the homicide rate in state prisons was four homicides per 100,000 inmates (Mumola, 2005).

Considerable research has focused on understanding the various individual- and facility-level sources of institutional misconduct and violence. Findings from two recent systematic reviews show that the background characteristics of inmates, their institutional routines and experiences, and the characteristics of the facilities in which they are confined are each relevant to an explanation of misconduct and violence (Steiner et al., 2014; Steiner & Cain, in press). The factors associated with an increased risk of misconduct and violence perpetration are age (younger), a history of antisocial behavior (e.g., drug use, prior criminal justice involvement), antisocial peers or gang involvement, and mental health problems. Other factors include a history of victimization (except for sexual victimization) prior to incarceration, a higher security risk classification, and a sentence of five years or less. Inmates with low self-control and inmates from disadvantaged neighborhoods are at higher risk for misconduct, while inmates incarcerated for a sex offense are less at risk. An inmate's gender (male) and incarcerating offense (i.e., a property offense) also are risk factors for violence perpetration (Steiner et al., 2014; Steiner & Cain, in press).

The institutional routines and experiences linked to a higher risk of misconduct and violence perpetration include a history of misconduct and a greater amount of time served, whereas involvement in prison work is associated with less risk of misconduct and violence. Inmates involved in religion-based programs also are at lower risk for misconduct, but inmates involved in a prison program are at higher risk (Steiner et al., 2014; Steiner & Cain, in press).

Regarding the predictors that an inmate may become a victim of violence while incarcerated, pre-incarceration employment, a higher security risk classification, and a history of victimization prior to incarceration (both physical and sexual) are associated with increased risk for victimization in prison and jail. Some institutional routines and experiences can reduce an inmate's risk. Inmates involved in recreational activities and housed in the general population — and who perceive the institution to be safer and view the institutional staff more favorably — are at lower risk of becoming victims of violence. However, inmates with a history of misconduct are generally at greater risk of victimization (Steiner & Cain, in press).

Facilities that are at risk for higher rates of institutional misconduct and violence (both perpetration and victimization) among inmates include higher-security institutions, those with larger populations, and those with higher densities of black inmates or inmates younger than age 25. Minimum-security facilities typically have lower levels of misconduct and violence. Institutions with higher concentrations of inmates incarcerated for violent offenses have lower misconduct rates. In addition, facilities with a higher density of inmates classified as maximum security, a higher percentage of officers who perceive the facility's rules as underenforced, and facilities in the southern region of the U.S. typically have higher levels of institutional violence (Steiner et al., 2014; Steiner & Cain, in press).

Taken together, the findings from these two reviews of predictors of inmate misconduct and institutional violence highlight that there are numerous inmate background characteristics (e.g., age, criminal history), institutional routines and experiences (e.g., history of misconduct, time served), and facility characteristics (e.g., inmate population, higher security level) that explain variation in institutional misconduct and violence. The relevant background characteristics could be useful in risk- or needs-assessment instruments. Institutional routines and experiences reflect inmates' behavior after incarceration or interventions by correctional officials. Facility characteristics represent either structural characteristics or characteristics of the inmate or staff population (e.g., proportion of black inmates). Information regarding an institution's structural characteristics (e.g., facility security level) might be used by officials involved in facility planning and design. Officials could use information about the composition of inmate or staff populations to help them place particular types of inmates or staff appropriately within a facility.

The Extent of Segregation Use in U.S. Correctional Facilities

Segregation and solitary confinement are terms that describe different types of restrictive housing used in prisons and jails (Browne et al., 2011). Disciplinary segregation, for instance, is typically a short-term punishment for inmates who violate the institution's rules (misconduct). Inmates are sometimes housed in segregation prior to a hearing about a rule violation or while officials determine the best placement for an inmate who is new to the facility (temporary confinement). Inmates deemed a threat to an institution's security are often placed in long-term administrative segregation to remove them from the institution's general population. Protective custody is segregated housing used to keep inmates considered at risk for victimization or self-harm in the general population. Finally, supermax confinement is long-term, restrictive housing typically used for inmates who are deemed a threat to other inmates or staff (Browne et al., 2011). Conditions of confinement in segregated housing vary across states and across types of restrictive housing, but often include placement in cells that are more sterile than those of the general prison population. These conditions may include limited time outside the cell (e.g., one hour per day), restricted social contact with other inmates or staff, limited access to recreational or program opportunities, and restricted opportunities for visitation or telephone calls (Baumgartel, Guilmette, Kalb, Li, Nuni, Porter, & Resnik, 2015; Browne et al., 2011).

Results from a national survey of state departments of corrections conducted by the Liman Program at Yale Law School, in collaboration with the Association of State Correctional Administrators, revealed that 2.5 percent of the custodial population within each state (range = 0.1 percent-7.5 percent) is typically held in segregation for administrative reasons, not including protection or discipline, whereas 6.6 percent of the custodial population within each state is held in some

form of segregation (range = 2.1 percent-14.2 percent) (Baumgartel et al., 2015). Other studies have yielded estimates indicating that from 5 percent to 8 percent of the state prison population is held in some form of segregation (Shames, Wilcox, & Subramanian, 2015).

Data from the 2011-2012 National Inmate Survey (BJS, 2015b) show that nearly 20 percent of prison inmates and 18 percent of jail inmates have lived in some form of segregated housing in the past year (or since coming to their current facility, if less than one year ago). Approximately 10 percent of prison inmates and 5 percent of jail inmates spend 30 days or longer in segregation; however, there is significant variability in the use of segregation across facilities. Less than 10 percent of inmates spend time in segregation in 39.6 percent of prisons and 24.8 percent of jails, whereas more than 25 percent of inmates spend time in segregation in 28.1 percent of prisons and 24.2 percent of jails (Beck, 2015).

The evidence suggests that prison officials use segregation with some frequency, and that a notable percentage of all prison and jail inmates spend time in some form of segregation during their incarceration. Just as the extent of misconduct and institutional violence varies among facilities, the use of segregation also varies across facilities. Several theories, discussed below, reveal why prison and jail officials impose segregation more frequently in response to certain rule violations, for particular inmates, or in particular facilities. An understanding of these theories contributes to a more reasonable explanation of why particular incident, inmate, and facility characteristics may influence officials' use of segregation. Such understanding also may help to curb disparate treatment of inmate groups that may result from officials' decision-making regarding the use of segregation. In addition, two competing theories, described below, address the effects of segregation on inmates' subsequent behavior. They also highlight why particular behavioral consequences may result from placement in segregation.

Theories About How Corrections Officials Use Segregation

Violations of the rules of conduct (misconduct) in a correctional facility are subject to disciplinary procedures that determine guilt and impose punishment (Howard, Winfree, Mays, Stohr, & Clason, 1994; Flanagan, 1982). Disciplinary hearings are closed to the public. Inmates are afforded only minimal procedural protections during the adjudicatory stage of the disciplinary process (Crouch, 1985). Few inmates succeed in challenging the allegations against them (Flanagan, 1982; Thomas, Mika, Blakemore, & Aylward, 1991). The punishment phase within prisons and jails, however, is similar to criminal sentencing. Much like criminal court judges, prison and jail officials can impose a range of sanctions (including segregation) once an inmate has been found guilty of misconduct. The severity of the misconduct typically determines the range of sanctions that can be imposed (Metcalf, Morgan, Oliker-Friedland, Resnik,

Spiegel, Tae, Work, & Holbrook, 2013). Given the similarities between the punishment process within correctional facilities and criminal sentencing, it seems reasonable to discuss the use of disciplinary segregation by considering the theoretical and empirical literature on decision-making during the criminal sentencing process.

Researchers often use two theories to explain why certain factors affect judicial decision-making: causal attribution theory (e.g., Albonetti, 1991; Farrell & Holmes, 1991; Hawkins, 1987) and focal concerns theory (Steffensmeier, Ulmer, & Kramer, 1998). Both are also used to explain the sanctioning decisions of other justice system officials during administrative proceedings (e.g., parole revocation), where offenders have fewer rights than criminal defendants (e.g., Huebner & Bynum, 2006; Lin, Grattet, & Petersilia, 2010; Steiner, Travis, Makarios, & Meade, 2011).

Causal Attribution Theory

Some scholars theorize that justice system officials base sanctioning decisions on their beliefs regarding individuals' prospects for reform (e.g., Albonetti, 1991; Bridges & Steen, 1998). Yet, these officials rarely have all the necessary information regarding individuals' risk of future criminality. To reduce the uncertainty involved in these decisions, officials develop patterned responses shaped by their preconceptions of the personal and environmental causes of criminal behavior (Albonetti, 1991; Bridges & Steen, 1998; Hawkins, 1987), an approach known as causal attribution theory. They may sanction individuals more harshly if they perceive the individuals' actions as more the result of personal, rather than environmental, factors because officials consider these individuals more culpable and, therefore, at higher risk of reoffending (Bridges & Steen, 1998). For instance, the more misconduct — and sanctions received for misconduct — in inmates' pasts, the more culpable they seem because they have demonstrated an unwillingness to respond to previous sanctions. Similarly, the overrepresentation of minorities, men, and younger individuals in the incarcerated population may lead correctional officials to perceive these individuals as more culpable, leading to harsher sanctions for this population (see Wooldredge, Griffin, & Rauschenberg, 2005, for a parallel argument pertaining to judges).

Focal Concerns Theory

Butler and Steiner (in press) applied the focal concerns theory to disciplinary decision-making in prison; this perspective recognizes that, although justice system officials have an interest in controlling crime, they make sanctioning decisions with limited information about offenders' prospects for reform (Steffensmeier et al., 1998; Ulmer & Johnson, 2004; Wooldredge et al., 2005).

To reduce the uncertainty involved in these decisions, officials develop a perceptual shorthand based on stereotypes that they associate with specific individuals and cases (Johnson, 2006; Steffensmeier et al., 1998). However, the focal concerns perspective further theorizes that three domains of reference guide officials: (1) an offender's blameworthiness, (2) an offender's risk to the community, and (3) the practical consequences of the punishment imposed for both the individual and the justice system (Lin et al., 2010; Steffensmeier et al., 1998).

Blameworthiness is associated with the retributive philosophy of punishment, such that an offender's punishment corresponds directly to his or her culpability for the crime and the degree of injury inflicted (Johnson, 2006; Steffensmeier & Demuth, 2000; Steffensmeier et al., 1998). Blameworthiness might be reflected by the severity of the rule violation and the inmate's experience with the disciplinary process. Offenses designated as more severe, for example, generally involve a greater level of culpability and the potential for more significant harm to the victim or the institution (e.g., assault, possession, or manufacture of dangerous contraband) (Flanagan, 1982).

Justice system officials' concerns about an offender's risk to the community are linked to the incapacitation and deterrent functions of punishment, and involve predictions about future dangerousness based on attributions associated with characteristics of the case and the offender (Steffensmeier et al., 1998). The perceptions of prison and jail officials regarding which inmates are at risk for subsequent misbehavior could be shaped by case characteristics such as the nature of offense(s) for which inmates are convicted (e.g., violent versus nonviolent) and individual characteristics such as their violation history, criminal history, and social (e.g., gang involvement) and demographic (e.g., age) background. For instance, corrections officials might consider inmates involved in gangs to be at higher risk of reoffending (e.g., Bales & Miller, 2012; Griffin & Hepburn, 2006).

Practical consequences and constraints associated with the organization and individuals also influence officials' sanctioning decisions (e.g., Johnson, 2006; Steffensmeier et al., 1998; Ulmer & Johnson, 2004). Corrections officials must maintain working relationships in an interdependent justice system (e.g., Dixon, 1995; Eisenstein, Flemming, & Nardulli, 1988; Johnson, 2006; Ulmer & Johnson, 2004), and they also understand the consequences of imposing segregation on particular individuals (e.g., those with dependent children) (Daly, 1987; Griffin & Wooldredge, 2006; Koons-Witt, 2002). For example, they may be less likely to place inmates who are parents in segregation because its more restrictive visitation policies would further disrupt any remaining bond between an incarcerated parent and his or her children (see Cochran & Mears, 2013, for a discussion of the effect of incarceration on the parent-child bond).

Although the perspectives discussed above apply to disciplinary proceedings in prisons and jails, they may also be relevant to decision-making related to

long-term administrative segregation or supermax housing. Inmates are housed in segregation based on the threat they pose to the general prison population. However, these decisions are often made with limited information about the actual threat that an inmate poses to the facility. Prison and jail officials may manage their uncertainty by developing patterned responses — a perceptual shorthand — based on their preconceptions of higher-risk inmates. The practical consequences and constraints of a specific prison or jail bureaucracy may also affect placement decisions.

Theories About the Effects of Time in Segregation on Inmates' Subsequent Behavior

Two opposing theories frame discussions about segregated housing: deterrence theory and labeling/deviance amplification theory. Officials use punitive segregation to punish inmates by isolating them and restricting privileges, believing that time spent in segregation will deter inmates from engaging in misbehavior when they return to the general prison population. Officials expect administrative segregation to both incapacitate inmates and deter them from subsequent misbehavior (Mears, 2013). However, some theorists would predict that sanctions such as punitive or administrative segregation might amplify inmates' tendencies to misbehave (Lemert, 1951; Marx, 1981; Smith & Paternoster, 1990; Wilkins, 1964).

Deterrence Theory

Segregation is, essentially, a prison or jail within a correctional institution (Browne et al., 2011) where inmates are isolated in a single cell, unable to participate in programming, and offered limited social and recreational opportunities (Pizzaro & Stenius, 2004; Riveland, 1999). It is an unpleasant experience that should deter inmates from reoffending (see Nagin, Cullen, & Jonson, 2009, for a parallel discussion pertaining to imprisonment). Deterrence theorists emphasize the importance of the certainty, celerity, and severity of sanctions such as segregation. Individuals' estimates of the certainty of sanctions (such as segregation) and the severity of those sanctions form the basis for their calculation of the costs of offending (Becker, 1968; Grasmick & Bursik, 1990; Nagin & Paternoster, 1993). The celerity with which sanctions are applied affects individuals' associations of sanctions with related behavior (Taxman, Soule, & Gelb, 1999).

Formal policy in most prisons and jails mandates that sanctions be applied with similar certainty and celerity, regardless of the type of rule violated or sanction imposed (Metcalf et al., 2013). However, segregation is more severe than other sanctions, and longer sentences in segregated housing are more severe than shorter terms. Thus, imposing segregation and longer periods of segregation

are expected to deter inmates from misconduct after they return to the general prison population (see Nagin et al., 2009, for a parallel argument regarding imprisonment), and could also deter offenders from reoffending when they are released from prison and return to their home communities (Mears, 2013).

Labeling/Deviance Amplification Theory

In contrast to deterrence theory, proponents of the labeling/deviance amplification perspective (hereafter, deviance theory) would expect exposure to segregation to increase offenders' likelihood of future misbehavior. Inmates often cannot participate in prison programming such as self-help programs while in segregated housing and are often labeled troublesome or problematic (King, Steiner, & Breach, 2008; Riveland, 1999). In turn, inmates may begin to identify with this label, associate with other problematic inmates, and ultimately engage in subsequent misconduct (secondary deviance). The official response to inmates who have served time in segregation may also intensify, increasing the likelihood of subsequent misconduct (Lemert, 1951; Marx, 1981; Wilkins, 1964). Thus, sending an inmate to segregation could increase his or her subsequent misbehavior in prison or jail.

Long-term consequences also may result from the labeling and isolation experienced by inmates exposed to segregation (Haney, 2003; Haney, Weill, Bakhshay, & Lockett, 2016; Smith, 2006; Toch, 2001). In fact, prolonged isolation may result in increased anger, frustration, mental health problems, and an adaptive response to isolated conditions, each of which could amplify the likelihood that offenders will recidivate (Haney, 2003; Haney et al., 2016; Kupers, 2008; Smith, 2006). Such effects also may be particularly evident among offenders exposed to longer periods of segregation.

An Examination of Existing Studies

The preceding discussion underscores the finding that rates of violence are higher in correctional institutions than in the general U.S. population, and that corrections officials often use segregation to control violence and misconduct. Causal attribution theory and focal concerns theory provide explanations for why prison and jail officials may impose segregation for certain rule violations, for particular inmates, or in certain facilities. However, evidence about the applicability of these theories to disciplinary or administrative proceedings in prisons and jails is limited. Officials who use segregation assume that it deters inmates' subsequent misbehavior in prison and jails and may reduce recidivism, but labeling theory would suggest the opposite effects. Few studies have investigated which (if either) of these theories is empirically supported.

To synthesize the existing literature on these topics and identify gaps in the extant research into the use and behavioral effects of segregation, a systematic review of the scientific evidence follows, focusing on four areas:

- Predictors of officials' use of segregation in correctional institutions.
- Effects of segregation on offenders' subsequent behavior (e.g., misconduct).
- Gaps in the research pertaining to the relationship between inmate misconduct, institutional violence, and segregation.
- Directions for future research into the relationship between inmate misconduct, institutional violence, and segregation.

Research Design and Method

As discussed above, segregation describes several types of restrictive housing used in prisons and jails (Browne et al., 2011). This study focuses on the following types of segregation: disciplinary segregation, long-term and temporary administrative segregation, protective custody, and supermax confinement. Distinctions between the types of confinement are made when possible because their goals differ (Browne et al., 2011).

Keyword searches were used to find relevant studies in databases such as the National Criminal Justice Reference Service, PsychInfo/PsychLit, and Sociological Abstracts. The National Institute of Corrections and the National Institute of Justice libraries were searched for technical reports that have not been published in peer-reviewed journals or books. Finally, the references of the relevant articles and reports were examined to determine whether there were additional studies that should be included.

The review was restricted to studies of segregation administered in correctional institutions for adults. The literature review was further restricted to only those studies that focused on offenders' subsequent behavior as it related to the effects of segregation. The criteria excluded studies of segregation used in juvenile facilities and those that examined the effects of segregation on nonbehavioral outcomes, such as mental health. The review also excluded studies that provided only a description of the population sent to segregation or the extent of a particular behavior found among individuals exposed to segregation (e.g., McGinnis, Austin, Becker, Fields, Lane, et al., 2014). Finally, the review was restricted to studies published after 1974, when the U.S. Supreme Court's decision in *Wolff v. McDonnell* altered the disciplinary process in most state and federal correctional facilities (Babcock, 1981).

Findings

The review revealed 26 studies, 10 of which focused on the predictors of officials' use of segregation; the remaining 16 studies examined its behavioral effects. Among the studies of the predictors of officials' use of segregation, eight focused on the use of disciplinary segregation. Of the remaining two, one study examined the predictors of placement in long-term administrative segregation; the other focused on supermax confinement.

Three studies examined the effect of disciplinary segregation on subsequent inmate behavior, and three others assessed the relationship between the rate at which disciplinary segregation is used and rates of misconduct and violence. Seven studies focused on the effects of supermax confinement: four examined the effects of supermax confinement on offender behavior and three focused on the effects of supermax confinement on levels of violence. Finally, three studies assessed the effects of any type of administrative segregation on offender behavior.

Predictors of How Corrections Officials Use Segregation

Disciplinary segregation is used in correctional facilities to respond to inmates who commit a violent act or chronically violate the institutions' rules (misbehave), whereas long-term administrative segregation is for inmates who cannot live in the general prison population because they pose a threat to the safety of other inmates, staff, and the institution (Browne et al., 2011; Riveland, 1999). Ten studies focused on the predictors for placement in segregation, but many of these studies are dated, and their samples and analytical techniques vary considerably. Although the findings are discussed here, the literature base is not sufficient to determine whether the appropriate factors, such as violent misconduct, affect corrections officials' decisions to place inmates in segregation or whether these officials administer segregation equitably.

Most researchers discovered that inmates found guilty of more serious offenses and inmates with longer histories of misconduct are more likely to be placed in segregation (e.g., Butler & Steiner, in press; Crouch, 1985; Flanagan, 1982; Lindquist, 1980; Schafer, 1986), although Howard and colleagues (1994) did not find such effects. Some researchers found that younger inmates are placed in segregation more frequently than are older inmates (Butler & Steiner, in press; Flanagan, 1982; Lindquist, 1980), but Howard and colleagues (1994) found a nonsignificant age effect. Butler and Steiner (in press), Lindquist (1980), and Stephan (1989) found that women are less likely to be placed in segregation than are men, whereas McClellan (1994) found the opposite to be true — that women are more likely to be placed in segregation. Howard and colleagues (1994) found a nonsignificant gender effect. No studies of disciplinary segregation have uncovered significant race effects (Butler & Steiner, in press; Crouch, 1985; Flanagan, 1982; Howard et al., 1994; Lindquist, 1980; Stephan, 1989). No other

variables were examined frequently enough to draw meaningful conclusions. It is also worth reiterating that there was considerable variability in the samples and analytical techniques used across these studies. Howard and colleagues (1994), for instance, examined cases processed in a federally operated prison, whereas Butler and Steiner (in press) and others examined cases from state-operated prisons (Crouch, 1985; Flanagan, 1982; Lindquist, 1980; McClellan, 1994; Stephan, 1989. Some analyses involved only one control variable (Flanagan, 1982; Lindquist, 1980; McClellan, 1994), whereas Butler and Steiner (in press), Crouch (1985), and Howard and colleagues (1994) included at least 10 variables in their multivariate analyses.

O'Keefe (2007) examined the factors associated with placement in long-term administrative segregation in Colorado. She found that men, Hispanic inmates, those incarcerated for a violent offense, inmates with a mental illness, members of security threat groups, those with a higher number of disciplinary infractions, and those often placed in disciplinary segregation were more likely to be placed in administrative segregation. Neither inmates' risk/need scores nor their education levels predicted segregation placement.

When Mears and Bales (2010) assessed the predictors of placement in supermax confinement in Florida, they found that certain inmates were more likely to be confined: younger inmates, those incarcerated for a violent offense, those with a higher number of prior violent convictions or a higher number of prior escape convictions, those who had served more time, and those with a higher number of disciplinary infractions for violent behavior, defiant behavior, or contraband. Inmates' race, ethnicity, and number of prior convictions and disciplinary infractions for threat behavior had no effect on supermax placement.

Although it is difficult to draw substantive conclusions from the limited number of studies available, a few general patterns emerge. First, regardless of the type of segregation used, officials base their decisions on inmates' criminal histories and institutional misbehavior. Inmates convicted of more serious offenses (e.g., violent), those with more significant prior records, and those with a history of serious (e.g., violent) or chronic institutional rule violations are more likely to be placed in segregation. Second, most studies found that racial and ethnic minorities are no more likely to be placed in segregation than are white inmates. Taken together, these findings suggest that corrections officials use segregation for inmates with a history of serious or chronic institutional misbehavior, or for inmates who pose a risk to the safety of an institution. However, some extralegal factors (e.g., age, mental illness) also affect corrections officials' use of segregation.

Effects of Segregation on Offenders' Subsequent Behavior

The 16 studies of the effects of segregation on offenders' behavior differ significantly by research design and in the participants and outcomes examined.

Although a number of studies are methodologically strong, the paucity of research on this topic prevents any determination of whether segregation deters, amplifies, or has no effect on offenders' subsequent misbehavior (e.g., violence). Nonetheless, the relevant findings are reviewed here.

Wolff, Morgan, and Shi (2013) examined the effect of disciplinary segregation on aggression among men and women in prisons in a single state who would be released within the next 24 months. They found that the more days that men spent in segregation, the more their aggression increased; however, there was no significant effect on aggression in women. Labrecque (2015) assessed the effect of disciplinary segregation and its duration on different types of misconduct (e.g., violent, drug) among Ohio inmates who had spent at least one year in prison and served time in disciplinary segregation. He found that neither placement nor length of time in segregation affected inmates' subsequent misconduct. He also found that gang members and inmates with mental health problems who were placed in segregation — or spent more time there — were more likely to commit subsequent misconduct and to do so more frequently. Morris (2016) found that when Texas inmates who had served at least three years in prison were placed in disciplinary segregation for violent misconduct, the placement had no effect on subsequent violent misconduct or the amount of time to their next violent act. Other scholars have examined the effect of an institution's rate of disciplinary segregation use on its rates of misconduct and violence (Huebner, 2003; Steiner, 2009; Wooldredge & Steiner, 2015). For the most part, these studies show that using disciplinary segregation does not have a significant effect on inmates' rates of misconduct or violence.

Researchers who have examined the effect of supermax confinement on recidivism have found that placement in supermax confinement has no effect on recidivism (Lovell & Johnson, 2004; Lovell, Johnson, & Cain, 2007; Mears & Bales, 2009; Butler & Steiner, in press). However, Lovell and Johnson (2004) and Mears and Bales (2009) found that offenders placed in supermax confinement in Washington and Florida had higher rates of violent recidivism than did offenders who did not spend time in segregation. Offenders released from prison directly from supermax confinement in Washington were more likely to reoffend than were offenders not exposed to supermax confinement (Lovell et al., 2007), but offenders in Florida were not (Mears & Bales, 2009).

Briggs, Sundt, and Castellano (2003) examined the effect of opening supermax prisons in Arizona, Illinois, and Minnesota on rates of systemwide inmate-on-inmate and inmate-on-staff assaults. They found that opening the new facilities had no effect on rates of inmate assaults on other inmates. Briggs and colleagues (2003) found that the rate of inmate assaults on staff did not change in Minnesota, whereas Arizona experienced a temporary increase and Illinois experienced a permanent decrease. A subsequent study by Sundt, Castellano, and Briggs (2008) revealed no change in the rate of inmate-on-inmate assaults in Illinois, but the rate of inmate-on-staff assaults decreased. Dye (2010) examined

data collected from state and privately operated prisons via the 2000 Census of State and Federal Correctional Facilities. She found that supermax prisons had a greater number of suicides than did minimum-security prisons.

Motiuk and Blanchette (2001) assessed the effect of placement in any type of administrative segregation on recidivism among Canadian offenders. They found that those with time in administrative segregation were more likely to return to custody after they were released. They were also more likely than offenders not placed in segregation to return for a new offense. Lanes (2009) examined the effects of protective custody and long-term administrative segregation on self-injuring among Michigan inmates. He found that protective custody had no effect on inmates' self-injuring behavior, but that inmates housed in administrative segregation were more likely to self-harm. When Kaba and colleagues (2014) assessed self-harm among inmates in a New York jail, they found that the likelihood of self-harm, and potentially fatal self-harm, was higher among inmates exposed to solitary confinement.

In conclusion, the limited evidence suggests that exposure to any type of segregation does not affect offenders' misbehavior while in correctional facilities (e.g., misconduct), and has little to no effect on their behavior after release from prison (e.g., recidivism). A greater use of segregation (e.g., disciplinary housing, supermax housing) is not associated with reductions in facility or systemwide misconduct and violence. However, exposure to segregation increases the risk of self-harm among inmates, and supermax facilities experience more suicides than do minimum-security facilities.

Discussion

Institutional safety is a high priority for correctional administrators, but inmate misconduct and violence threaten the safety and order of an institution (DiIulio, 1987; Gendreau et al., 1997; Steiner & Wooldredge, 2009). Segregation is an intervention used by correctional administrators in response to inmate misconduct or violence. Administrators also use segregation to isolate violence-prone or problematic inmates from an institution's general population (Browne et al., 2011; Riveland, 1999). Yet, few studies have examined the factors that affect the use of segregation or whether it is effective in reducing offenders' subsequent problem behaviors (e.g., misconduct, violence). To synthesize the extant research pertaining to these topics and provide direction for future research, the reviewers systematically assessed the evidence pertaining to the use of segregation and to the effects of segregation on offenders' subsequent behavior.

The reviewers found 26 studies: 10 focused on the predictors of officials' use of segregation, and 16 examined segregation's effects on offender behavior. These studies reveal that, regardless of the type of segregation used (e.g., disciplinary, administrative), corrections officials place inmates convicted of more serious

offenses (e.g., violent), those with more significant criminal records, and those with more rule infractions in segregation more frequently than inmates with less significant criminal histories and fewer institutional infractions. The evidence also showed that inmates who are members of racial and ethnic minority groups are no more likely than white inmates to be placed in segregation. Thus, corrections officials are using segregation primarily for inmates with histories of serious or chronic institutional misbehavior and those who pose a risk to the safety or security of an institution.

It is important to reiterate that these conclusions are derived from only 10 studies that focused on different types of segregation. Moreover, many of the studies are dated (e.g., Crouch, 1985; Flanagan, 1982; Howard et al., 1994; Lindquist, 1980; McClellan, 1994; Schafer, 1986; Stephan, 1989) and are limited to relatively small samples of men or women processed in one or two facilities (e.g., Crouch, 1985; Lindquist, 1980; McClellan, 1994; Schafer, 1986). Prison and jail populations have increased dramatically over the past several decades, and the percentage of minority and female inmates is notably higher today than in the 1970s, 1980s, or 1990s (Blumstein & Beck, 2005). Therefore, it may no longer be appropriate to generalize results gleaned from earlier work to inmates processed in contemporary correctional environments. Examination of data collected from small samples from one or two facilities also limits the ability to generalize study results and has prevented researchers from including adequate control variables in their statistical models. Moreover, some of the samples examined were selected for other purposes (e.g., behavior patterns of long-term inmates); therefore, they are not representative of the inmates who violated prison rules in the respective facilities. Finally, no studies have examined the predictors of officials' use of segregation in jails; all 10 studies have focused on prison officials' decision-making.

The primary implication of the findings from this review of the research on the predictors of officials' use of segregation is that there simply have not been enough studies related to this topic to draw any meaningful conclusions. As noted above, only 10 studies of the predictors of officials' use of segregation have been conducted in the past 40 years. Many studies are outdated, lack scientific rigor, and have limited generalizability. An understanding of the relationship between institutional misconduct, violence, and segregation requires an evidence base of the factors that influence corrections officials' decisions to use segregation. Although segregation is designed for inmates who have a history of serious or chronic institutional misbehavior, or inmates who pose a risk to the safety or security of an institution (Browne et al., 2011; Riveland, 1999), it is unclear whether segregation is being used for only these inmates. The equitable use of segregation is of high importance to correctional administrators, civil rights advocates, the U.S. Congress, and President Obama, but it is unclear whether corrections officials use it equitably. If corrections officials use segregation inappropriately, or if disparate treatment of offender groups results from its use, some offender groups may endure a harsher confinement experience than others. This unfair treatment can also undermine the legitimacy

of a prison organization, which could influence inmates' willingness to defy prison rules and those of other legal authorities (Liebling, 2004; Sparks, Bottoms, & Hay, 1996; Useem & Kimball, 1989).

This review finds that, for the most part, placement in any type of segregation does not affect offenders' likelihood of institutional misconduct or their recidivism after their release from prison. In addition, using segregation at a higher rate or opening a supermax facility has little effect on rates of misconduct and violence across facilities or state prison systems. However, placement in segregation does increase inmates' risk for self-harm (e.g., mutilation), and supermax facilities tend to have more suicides than do minimum-security facilities.

It is also worth noting that the conclusions drawn here were based on only 16 studies. These studies focused on different types of segregation (e.g., disciplinary segregation versus supermax confinement), different outcomes (e.g., misconduct versus self-harm), and different levels of analysis (e.g., individual versus facility). In addition, some of the samples were collected for other purposes (e.g., offenders under post-release supervision), so they may not accurately represent the inmate populations needed for these studies. Moreover, only one study examined the effects of segregation on jail inmates' behavior.

Once again, 16 studies across 40 years is too small an evidence base to inform practice. In particular, these studies were conducted at different levels of analysis, focused on different types of segregation, and examined different outcomes. An understanding of the relationship between institutional misconduct, violence, and segregation requires an evidence base related to the behavioral effects of exposure to different types of segregation. Corrections officials use segregation to reduce inmates' problem behaviors (e.g., misconduct), but it is unclear whether it achieves this objective. The frequency with which segregation is used in prisons and jails — coupled with the desire of correctional administrators, civil rights advocates, the U.S. Congress, and President Obama for it to be used effectively — requires a knowledge base of the behavioral effects of the different types of segregation.

The limited research into the factors that affect corrections officials' use of segregation or the effects of segregation on offender behavior means that it is difficult to draw conclusions regarding the empirical support for the theories discussed above. Some study findings of corrections officials' decision-making regarding the use of segregation seem to support both causal attribution theory and the focal concerns perspective discussed in this paper. Offenders with more significant criminal and misconduct histories, for example, would be considered more blameworthy and a greater risk to institutional safety. On the other hand, the findings regarding the effect of an inmate's race and ethnicity would not support these perspectives. Findings pertaining to the nonsignificant effects of segregation on subsequent misbehavior also do not support deterrence theory or labeling/deviance amplification perspectives. There are simply too few studies of either the use or behavioral effects of segregation to draw any meaningful

conclusions about the applicability of these theories. However, these perspectives may be useful for guiding future research.

Several limitations of this study should be noted. Each potential limitation stems from differences between the studies reviewed herein. Some limitations of the studies included in the review are compounded by a synthesis of the findings from those studies. First, some researchers who examined the predictors of corrections officials' use of segregation included a large number (e.g., "more than 10") of variables in their final models, while others examined only the relative effects of a few variables. Differences in the number of variables included in models could contribute to study differences in scientific rigor (e.g., tenth-order partial correlation versus a third-order partial correlation). Second, some researchers who studied the effects of segregation on offender behavior used rigorous, quasi-experimental designs to match segregated inmates to inmates not exposed to segregation, while other researchers relied on multivariate regression analysis to control for observed differences between these two groups. Differences in the scientific rigor between these two types of studies may have influenced the findings. Finally, the findings were derived from the results of studies that involved different sample sizes and, occasionally, samples of different subpopulations (e.g., men) of the relevant inmate population (jail or prison). However, the findings from each study were evaluated equally in this review.

Setting aside the limitations discussed above, this white paper is the most comprehensive review to date of the evidence related to the use and behavioral effects of segregation. Although the review uncovered some consistent patterns across the results of the studies included here, the data are not sufficient to place much faith in the findings. To be sure, the most important finding is the dearth of rigorous scientific research on these topics. The gaps in the research pertaining to the use of segregation and its effects on offender behavior are clear; additional research should be devoted to each of these topics. An understanding of the link between institutional misconduct, violence, and segregation requires knowledge of the types of offenses (e.g., violent) and offenders (e.g., those with more significant criminal histories) that influence corrections officials' decisions regarding their use of segregation, and whether segregation affects inmates' likelihood of perpetrating subsequent misconduct or violence. Once an evidence base related to the predictors of the use and behavioral effects of segregation is developed, future studies might pursue more nuanced topics related to the practice. Some avenues for future research are discussed below.

Conclusions and Directions for Future Research

Prison and jail officials are responsible for protecting society from the incarcerated population, but they are also legally responsible for protecting the individuals confined in their institutions (Park, 2000). Incarcerating people in prisons and jails, however, essentially gathers together people and property that

are potential targets and persons who are likely to offend (Wooldredge & Steiner, 2014). Indeed, rates of violence and violent victimization are higher in correctional facilities than in the general U.S. population, and corrections officials often respond to this violence and misconduct (or the threat of it) by using segregation to maintain order and safety. At any time, between 5 percent and 8 percent of the state prison population is held in some form of segregation (Baumgartel et al., 2015; Shames et al., 2015). At least 20 percent of prison inmates and 18 percent of jail inmates spend time in segregation during their incarceration (Beck, 2015), yet scholars know very little about the incidents, inmates, and facility characteristics that affect the use of segregation or whether segregation is effective in reducing problem behaviors (e.g., misconduct, recidivism).

This systematic review of the evidence found that, regardless of the type of segregation designated (e.g., disciplinary, administrative), corrections officials use segregation primarily for inmates with a history of serious (e.g., violent) or chronic institutional misconduct or those who pose a risk to the institutions' safety or security. The researchers also found evidence that placement in segregation has no effect on offenders' subsequent misbehavior (e.g., misconduct, recidivism), but that offenders placed in segregation are more at risk for self-harm. These findings should be interpreted with caution, however, given the relatively small number of studies conducted on these topics. The researchers also observed numerous limitations of these studies and between-study differences in the research methods used, which further lessens any confidence in the results. However, the review did uncover some important gaps in the evidence base from which the following questions were identified for future research.

1. What are the predictors of corrections officials' use of segregation?

Over the past 40 years, only 10 studies have examined the factors that influence corrections officials' decisions to use segregation; eight of those studies focused on disciplinary segregation. Most of this research is dated and has limited generalizability.[2] This review finds a clear need for research into the factors that influence corrections officials' decision-making related to the use of segregation.

The equitable use of segregation is of high importance to correctional administrators, civil rights advocates, the U.S. Congress, and President Obama,

[2] Prison and jail populations have increased dramatically over the past several decades (Blumstein & Beck, 2005; Western, 2006), so it may no longer be appropriate to generalize the results to inmates processed in contemporary prison and jail environments. Many of the studies also involved analysis of data collected from small samples drawn from one or two facilities, which limits the generalizability of study results and prevents researchers from including adequate control variables in their statistical models or from examining potential facility-level effects. Furthermore, some samples were selected for other purposes (e.g., the examination of behavior patterns of long-term inmates), so they do not represent the population of inmates who violated prison rules in the respective facilities.

but it is unclear whether corrections officials use segregation equitably. For instance, segregation is designed for inmates who have a history of serious or chronic institutional misbehavior or inmates who pose a risk to institutional safety (Browne et al., 2011; Riveland, 1999), but there is not enough evidence to determine whether segregation is being reserved for these inmates. If corrections officials use segregation improperly, or if disparate treatment of offender groups results from its use, then some inmate groups may endure a harsher confinement experience than will others. This unfair or disparate treatment can also undermine the legitimacy of a correctional organization, which could influence inmates' willingness to defy institutional rules and those of other legal authorities (Liebling, 2004; Sparks et al., 1996; Useem & Kimball, 1989).

Moving forward, researchers should focus on the factors that affect corrections officials' use of each type of segregation: disciplinary segregation, long-term administrative segregation, protective custody, temporary confinement, and supermax confinement. Researchers should also collect reasonably sized, representative samples of inmates who violate the rules of a corrections facility. Existing research should guide the selection of predictor variables to be considered in future studies, but given the parallels between the disciplinary process in correctional facilities and the criminal sentencing process, researchers might also draw on the theories discussed above, which have often been applied to criminal sentencing (e.g., focal concerns theory). Furthermore, these perspectives have already been used to explain sanctioning decisions made by other justice system officials during administrative proceedings (e.g., parole revocation) where offenders enjoy fewer rights than criminal defendants, including prison disciplinary proceedings (e.g., Butler & Steiner, in press; Huebner & Bynum, 2006; Lin et al., 2010; Steiner et al., 2011). Applying causal attribution theory or the focal concerns perspective to the punishment process in correctional institutions permits an assessment of whether these theories are general to decision-making related to criminal punishment. The theories also contribute to a more reasonable explanation of why particular incidents, inmates, and facility characteristics may influence officials' use of segregation. Such an understanding could lead to strategies designed to curb disparate treatment of inmate groups that may result from officials' decision-making regarding the use of segregation.

Finally, researchers might consider conducting multisite studies to increase the generalizability of their results and to permit analysis of facility-level effects, but only if inmates from enough facilities are included. Research on criminal courts has uncovered various sentencing outcomes across court organizations (Eisenstein et al., 1988; Ulmer, 2012; Ulmer & Johnson, 2004; Wang & Mears, 2010), and similar variation in case outcomes may exist across prisons (Butler & Steiner, in press).

2. Do an inmate's gender, race, or ethnicity moderate the effects of predictors of corrections officials' use of segregation?

Prison and jail populations have increased dramatically over the past several decades. The percentage of racial and ethnic minorities and female inmates is notably higher today than in the 1970s, 1980s, or 1990s (Blumstein & Beck, 2005; Western, 2006). Yet, no studies have examined the moderating effects of gender, race, and ethnicity on the influences of corrections officials' use of segregation, even though such examinations are relatively common in studies of judicial sentencing decisions (e.g., Baumer, 2013; Brennan, 2006; Brennan & Spohn, 2009; Griffin & Wooldredge, 2006; Steffensmeier & Demuth, 2006; Wooldredge et al., 2005). There may be race, ethnic, or gender group differences in the effects of particular case (e.g., violent offense) or individual characteristics (e.g., misconduct history) on officials' decisions to use segregation. Indeed, researchers of criminal sentencing outcomes have uncovered these hidden disparities (e.g., Griffin & Wooldredge, 2006; Steffensmeier & Demuth, 2006; Wooldredge et al., 2005). However, evidence that an inmate's gender, race, and ethnicity can have a moderating effect on corrections officials' use of segregation is nonexistent.

The equitable use of segregation is of high importance to correctional administrators, civil rights advocates, the U.S. Congress, and President Obama. An examination of whether an inmate's gender, race, or ethnicity moderates the effects of the predictors of segregation use would shed light on possible hidden disparities in corrections officials' use of segregation. Determining whether these disparities exist is important for understanding the relationship between institutional misconduct, violence, and segregation. For instance, if committing a violent misconduct is associated with placement in segregation, then this relationship should be similar in magnitude for men and women, and across different racial and ethnic groups. If the magnitude of the violent misconduct-segregation relationship differs across these groups, then there are unwanted disparities in the treatment of some inmate groups. Such unfair or disparate treatment of inmate groups can undermine the legitimacy of a correctional organization, which could influence inmates' willingness to defy institutional rules and those of other authorities (Sparks et al., 1996; Useem & Kimball 1989).

3. What are the effects of segregation on inmate behavior?

Over the past four decades, only 16 studies were conducted regarding the effects of segregation on inmate behavior. They examined the effects of different types of segregation (e.g., disciplinary, long-term administrative segregation), different outcomes (e.g., recidivism, self-harm), and different levels of analysis (e.g., individual, state). In some, the samples were collected for other purposes, so they do not accurately represent the inmate populations needed for these studies.

Institutional misconduct and violence threaten the safety and order of a correctional institution. Corrections officials frequently respond to these behaviors by placing inmates in segregation. A notable percentage of inmates are held in segregation at any given time, and a significant number of inmates spend some time in segregation during incarceration (Baumgartel et al., 2015; Beck, 2015; Shames et al., 2015); yet, few studies have assessed whether segregation is effective in reducing offenders' problem behaviors. There is a clear need for studies that examine the effects of different types of segregation (e.g., disciplinary segregation, long-term administrative segregation) on offender behavior.

An experimental design for such a study is not possible for ethical reasons — inmates cannot be randomly assigned to segregation (Mears, 2008, 2013; O'Keefe, 2008). Instead, researchers should examine large samples of inmates who are eligible for segregation, and should consider using rigorous quasi-experimental designs that involve matching techniques (e.g., propensity score matching) to estimate the effects of segregation on offender behavior. Researchers should also focus on different behavioral outcomes, including those that tap subsequent criminality (e.g., misconduct, recidivism), along with other measures of institutional violence (e.g., self-harm).

An understanding of the behavioral effects of segregation would help to determine whether the theories discussed above (e.g., deterrence) could be applied to its use in prisons and jails. Knowledge about whether segregation — or different lengths of segregation — will deter or amplify an offender's problem behaviors (e.g., misconduct, violence) would be immediately useful to corrections officials who rely on segregation to regulate inmate behavior in their facilities. If segregation is effective in curbing inmate misconduct, for example, then corrections officials might use it more often. Similarly, if five days in segregation has the same misconduct-reducing effect as 10 days, then corrections officials might reduce the time that inmates spend in segregation. These are critical questions for both theory and practice, but the current evidence base is insufficient for drawing conclusions.

4. Are there inmate and facility characteristics that moderate the effects of segregation on inmate behavior?

Labrecque (2015) observed that the effects of disciplinary segregation and length of time spent there were affected by inmate mental health and gang involvement. That is, inmates with mental health problems and inmates involved with gangs who were placed in segregation, or spent longer periods in segregation, were more likely to commit subsequent misconduct and to do so with greater frequency. Other studies of possible moderating effects are nonexistent, however. Researchers who have examined the effects of criminal justice sanctions (e.g., arrest, prosecution) on recidivism have discovered that sanctions are more effective with individuals who are good risks or those who have a greater stake in conforming (e.g., Berk, Campbell, Klap, & Western, 1992; Dejong, 1997;

Sherman, Smith, Schmidt, & Rogan, 1992; Thistlethwaite, Wooldredge, & Gibbs, 1998; Wooldredge & Thistlethwaite, 2002). It seems reasonable, therefore, that particular groups of inmates (in addition to those with mental health problems and gang involvement) may be at higher risk for subsequent misbehavior or maladjustment from being placed in segregation. However, inmates with other characteristics may have a lower risk of misbehavior or maladjustment after time in segregation. In addition, a multisite study could uncover facility characteristics that influence the effects of segregation on inmate behavior. All of these avenues are fruitful areas for future inquiry. Researchers might begin by examining the potential moderating effects of the causes and correlates of inmate misconduct and violence identified by the recent systematic reviews of the literature discussed above (Steiner et al., 2014; Steiner & Cain, in press).

Information pertaining to differential effects of segregation on inmate behavior could be important for informing both theory and practice. From a theoretical perspective, a finding that inmate or facility characteristics moderate the behavioral effects of segregation would align with researchers' findings related to conditional deterrent effects in the broader criminological literature (e.g., Berk et al., 1992; Dejong, 1997; Sherman et al., 1992; Thistlethwaite et al., 1998; Wooldredge & Thistlethwaite, 2002). Practitioners could use this information to determine which inmates might be more suitable for segregation, rather than an alternative sanction. The importance of institutional safety to corrections officials underscores the need for research that not only identifies whether sanctions such as segregation are effective in curbing misconduct and violence, but also whether these sanctions are more effective or less effective for particular inmates or in particular facility environments.

5. What are the predictors of officials' use of segregation in jails, and of the effects of jail segregation on individuals' subsequent behavior?

Although each of the questions for future research identified above applies to prisons, each also applies to jails, and the need for this research in jails merits additional discussion (see also Haney et al., 2016). This is not to say that research in jails should take priority over research in prisons. It is only to reiterate that the findings from this review suggest that research into segregation use in jails is considerably more scarce than similar research into its use in prisons. In fact, only one study included in this review focused on jail inmates.

Approximately one-third of the U.S. incarcerated population is confined in local jails. The volume of people who enter jails each year is far greater than the number who enter prisons (Glaze & Kaeble, 2014). Nearly one-fifth of jail inmates spend time in some form of restrictive housing during incarceration (Beck, 2015); yet, this review uncovered no studies of the predictors of officials' use of segregation in jails and only one study of the behavioral effects of jail segregation. To paraphrase Haney and colleagues (2016:131), segregated housing

in jails is among the least-studied components of the criminal justice system, even though jails affect more people per year than do prisons and segregation is experienced by a significant percentage of people incarcerated in jails. More research on this topic is clearly needed. Study findings pertaining to the use of segregation in jails and the effects of jail segregation on individuals' subsequent behavior (e.g., misconduct, violence) could provide useful insights for practitioners working within jails.

In conclusion, institutional misconduct and violence threaten the safety and order of a correctional facility, making both behaviors high priorities for correctional administrators (DiIulio, 1987; Gendreau et al., 1997; Steiner & Wooldredge, 2009; Steiner et al., 2014; Toch & Grant, 1989). Corrections officials often use segregation in response to inmate misconduct and violence, expecting the experience to regulate inmate behavior and promote order and safety within their institutions (Browne et al., 2011; DiIulio, 1987; Reassessing Solitary Confinement II, 2014). If segregation is used in response to serious (e.g., violent) or chronic institutional misconduct and is effective in curbing institutional misconduct and violence, then there is a logical relationship when an inmate's misconduct and violence (or a propensity to engage in these behaviors) initiates the use of segregation, which in turn reduces these problem behaviors. If other factors (e.g., age, mental health) initiate the use of segregation or exposure to segregation amplifies an inmate's risk for perpetrating misconduct or violence, then the relationship is less straightforward.

This systematic review of the literature finds that corrections officials use segregation primarily for inmates who have a history of serious (e.g., violent) or chronic institutional misconduct, or for those who pose a risk to the safety or security of an institution. It also reveals that exposure to segregation has no effect on offenders' subsequent misbehavior (e.g., misconduct, violence, recidivism), but does increase their risk for self-harm. It is also clear that very few studies have examined the factors that affect the use of segregation or its effectiveness in reducing inmates' problem behaviors (e.g., misconduct). These are clear gaps in the knowledge base related to the relationship between institutional misconduct, violence, and segregation. This review identifies important questions for future research in light of the emphasis that correctional administrators place on institutional safety (Gendreau et al., 1997; Steiner & Wooldredge, 2009; Steiner et al., 2014), how frequently segregation is used to promote safety (Beck, 2015), and how much additional cost is involved in housing inmates in segregation relative to housing the general prison population (e.g., American Civil Liberties Union of Texas, 2015; Briggs et al., 2003; Butler, Steiner, Makarios, & Travis, in press; Metcalf, Resnik, & Quattlebaum, 2015; Shames et al., 2015). The equitable and effective use of segregation is also a high priority for civil rights advocates, the U.S. Congress, and President Obama (e.g., Amnesty International, 2014; Reassessing Solitary Confinement II, 2014; Obama, 2015; U.S. Senate Committee on the Judiciary, Subcommittee on the Constitution, Civil Rights and Human Rights, 2014), and so the need for this research is great.

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CHAPTER 6

Mental Health Effects of Restrictive Housing

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Introduction

The practice of housing prisoners in solitary confinement — typically defined as 23 hours a day of in-cell restriction with minimal social contact — has come under increased scrutiny in recent years. Human rights advocates have described the practice as torture (United Nations, 2011), while corrections officials have historically asserted that the practice is necessary to maintain the safety and security of prisons. The debate has become so contentious that opponents cannot even agree about what term to use to describe the practice, with prison officials preferring "segregation" to the more emotionally charged term "solitary confinement." In practice, correctional systems throughout the U.S. use many terms to describe the same phenomenon: "administrative segregation," "enhanced supervision," "behavior modification," "secure housing," "special housing," "restrictive housing," "supermax," "intensive management," "close supervision," and several others (Liman & Association of State Correctional Administrators, 2015, p. 1). In this paper, "restrictive housing"

will be used to include all circumstances in which prisoners are removed from the general population of the institution and confined to their cells for more than 22 hours per day.

A recent report on administrative segregation practices estimates that 80,000 to 100,000 prisoners are in restrictive housing settings in the U.S. on any given day (Liman & ASCA, 2015). Prisoners are generally placed in restrictive housing for one of three reasons: (1) for their own protection (protective custody), (2) because they pose an ongoing security threat (*administrative segregation*), or (3) as a disciplinary sanction for violating prison rules (*disciplinary custody*). Each of these categories is theoretically distinct, but they are all used to enhance institutional safety, and the prisoners' conditions of confinement are often very similar. A typical restrictive housing cell is approximately 6 feet by 10 feet and includes a bed (or two), sink, toilet, and desk. The cell may or may not have a window, and prisoners may or may not be able to control conditions such as lighting, temperature, and noise. Outside recreation occurs in a small, fenced-in area. Prisoners have minimal face-to-face contact with each other but often communicate by yelling or passing notes under doors.

The debate about the effects of restrictive housing is wide-ranging, but a central focus in recent years has been on whether the practice is psychologically harmful to prisoners. Popular media sources have documented numerous biographical accounts of prisoners' harrowing experiences in solitary confinement (Gawande, 2009; Guenther, 2012). In addition, mental health professionals and historians have written several reviews about the psychological effects of solitary confinement, concluding that the practice causes psychological harm (Grassian, 2006; Haney, 2003; Shalev, 2008; Grassian & Friedman, 1986; Scharff-Smith, 2006). Some scholars and advocates have considered this body of evidence conclusive, stating that there is no longer any question that solitary confinement causes serious and long-lasting psychological damage (Arrigo & Bullock, 2008; Haney, 2003; Grassian, 2006; Human Rights Watch, 2015; ACLU, 2014). However, other scholars have been more circumspect (O'Keefe, 2007; Bonta & Gendreau, 1990; Gendreau & Labrecque, 2015), pointing to the dangers of drawing conclusions from studies with imperfect scientific methods (e.g., small sample sizes, lack of control groups), questionable applicability to modern prisons (e.g., sensory deprivation experiments in laboratories), and potential for bias (e.g., conducting studies in the context of litigation).

Indeed, restrictive housing is a notoriously difficult practice to study. Restrictive housing units all have some characteristics in common — social isolation, changes in sensory stimulation, and confinement beyond the experiences of the general prison population (Zubek, Bayer, & Shephard, 1969) — but the degree to which each of these characteristics is present in a given facility or housing unit varies greatly between institutions. Therefore, scientific studies conducted in different housing units around the country — let alone the world — may actually be studying very different conditions, and extrapolating the results from

one setting to another may be erroneous. These differences make it challenging for scholars, administrators, or legislators to draw broad-based conclusions with certainty. Currently, there is simply no way to standardize conditions in restrictive housing units and conduct the type of large-scale, randomized controlled studies that would be optimal from a scientific perspective. Thus, we are left with imperfect data from which to draw conclusions and make decisions about the appropriate management of prisoners.

This white paper will review the current state of scientific evidence about the psychological effects of restrictive housing. First, it describes the method by which the review was conducted. Second, it discusses critiques of the literature and the challenges that face researchers attempting to conduct rigorous scientific investigations of restrictive housing. It examines the evidence about several factors relevant to mental health in restrictive housing:

- The purpose, duration, and conditions of confinement.
- Access to mental health care.
- Development or exacerbation of psychiatric symptoms.
- The influence of age, gender, intellectual disability, and mental illness.
- Rates of self-injury, psychiatric hospitalization, and institutional misconduct.

It then reviews the consensus statements of major mental health professional organizations. Finally, it identifies gaps in the current knowledge and recommends future research and policy changes.

Method of Review

This review includes articles in English-language, peer-reviewed medical, legal, and social science journals; book chapters; and published dissertations that present empirical data related to mental health and restrictive housing. Studies were first identified using PubMed, the Social Science Research Network (SSRN), and Google using combinations of the search terms "solitary confinement," "administrative segregation," "supermax," "psychological effect," "psychiatric effect," and "mental health." Bibliographies of key articles (Haney, 2003; Grassian, 2006; Scharff-Smith, 2006; Shalev, 2008; Gendreau & Labrecque, 2015; Frost & Monteiro, 2016) were examined to identify additional relevant studies. Papers were excluded from the review if —

- No original data were presented.
- Only biographical or anecdotal evidence was presented.
- The research was not conducted in a prison setting.

- The research was not conducted on humans.
- The findings were published only in lay media or in advocacy group literature.

To examine evidence that applies to modern American prisons, this review includes studies conducted in prisons and published after 1980. However, older studies were included if no modern studies existed in a particular content area (e.g., a 1972 study that showed electroencephalogram (EEG) changes in the brains of subjects held in solitary confinement).

This type of narrative review has its limitations. Some have argued that meta-analysis of the scientific data is a more reliable method of interpreting the existing literature (Gendreau & Labrecque, 2015). However, only two such meta-analytic studies about the effects of administrative segregation have been performed (Gendreau & Labrecque, 2015; Morgan, 2016), and several areas of inquiry related to mental health and restrictive housing deserve consideration but have not been assessed using meta-analysis. Thus, this paper includes a descriptive review of some studies in addition to the results of meta-analyses.

Research and Data Limitations

Research about the psychological effects of restrictive housing follows a common pattern of scientific inquiry; that is, the quality of research studies improves over time. Early scholars in the 1950s and 1960s relied on clinical observations of prisoners and research in related areas (e.g., sensory deprivation or prisoners of war) to generate hypotheses about the effects of solitary confinement. To test these hypotheses, small-scale studies were conducted from the 1980s to 2000s, often generating conflicting results based on research design (Suedfeld, Ramirez, Deaton, & Baker-Brown, 1982; Grassian, 1983; Zinger, Wichmann, & Andrews, 2001; Andersen et al., 2000). Over the past five years, due in part to increased litigation and popular interest in solitary confinement, larger and more methodologically rigorous studies have been conducted (O'Keefe et al., 2013; Kaba et al., 2014; Gendreau & Labrecque, 2015). These more recent studies have not always clarified the specific effects of restrictive housing on mental health, but they have significantly increased the amount of information available about restrictive housing practices.

The limitations of the current scientific data have been well documented elsewhere (Gendreau & Labrecque, 2015; O'Keefe, 2007; Scharff-Smith 2006; Zinger et al., 2001; Metzner, 2015), so this paper states them only briefly here:

- ***Policies, procedures, and conditions of confinement vary widely between institutions.*** No two restrictive housing units are exactly alike, so scientific conclusions in one setting may not apply to other settings, even when both are called, for example, "administrative segregation." Further complicating

matters, many published studies of restrictive housing do not specifically describe the conditions of confinement, so it is impossible for a reader to know how the results of one study compare to another's.

- ***There are no standard definitions in the literature for terms such as mental illness, harm, benefit, short term, and long term.*** For example, when one study concludes there is no evidence of harm from short-term isolation to inmates with mental illness, another could conclude just the opposite, depending on the definitions used. Unfortunately, most of the published studies do not define the terms they use, leaving the reader to speculate on the authors' intended meaning. When the terms are defined, the definitions vary. For example, some studies base inclusion criteria on psychiatric symptoms or diagnosis, while others include any prisoner who receives mental health services in the correctional institution. Similarly, "short term" might refer to seven days, or it might refer to periods as long as three months. Finally, harm can be conceptualized broadly — the development of any new psychological symptoms — or narrowly, such as psychiatric hospitalization or serious suicide attempts.

- ***In many cases, study designs are limited.*** Many studies of restrictive housing have small sample sizes (Suedfeld & Roy, 1975; Brodsky & Scogin, 1988), high attrition rates (Zinger et al., 2001; Miller, 1994), and use volunteer prisoners (Gendreau, Freedman, Wilde, & Scott, 1972). Some studies do not include control groups (Jackson, 1983; Grassian, 1983), which prevents comparison to the potential effects of other relevant conditions of confinement. Other studies were conducted on prisoners involved in class-action litigation against the prison at the time of examination (Grassian, 1983), posing inevitable concerns about report bias. While none of these limitations render the studies' conclusions invalid, they do necessitate the use of caution when generalizing their results.

- ***Correlation can be confused with causation.*** Studies that use a cross-sectional design or do not include control groups have the potential to conflate correlation and causation. For example, if a study finds that individuals with lung cancer own cigarette lighters at a much higher rate than those without lung cancer, this does not mean that lighters cause lung cancer. In the case of restrictive housing, if individuals in restrictive settings exhibit higher rates of mental illness, this does not necessarily mean that the housing placement itself caused the symptoms. To reach that conclusion, symptom rates in control groups must be compared, and intervening factors must be considered.

- ***Prisons and mental health treatment have both changed substantially over the relevant period of study.*** Many of the relevant studies about restrictive housing were conducted from the 1980s to 2010s, a period when American prisons experienced massive growth (Bureau of Justice Statistics, 2014). At the

same time, psychiatry underwent two major revisions of its diagnostic criteria as presented in its *Diagnostic and Statistical Manual of Mental Disorders,* taking the manual from its third edition (*DSM-III*) (American Psychiatric Association, 1980) to its fifth edition (*DSM-V*) (American Psychiatric Association, 2013). These changes call into question the relevance of older studies conducted in prisons, particularly when the exact conditions of confinement or definitions of mental disorders were not delineated.

- ***The political and social context surrounding solitary confinement is highly charged.*** When considering important social and political questions, such as how our society treats prisoners, a fair and thorough examination of scientific evidence is both essential and difficult to achieve. Parties tend to be polarized, and scholars can be tempted to align with one side or the other, potentially introducing unintended bias into what should be an objective inquiry.

Literature Review

This review begins by examining the prevalence of mental illness in inmates who live in restrictive housing. Next, it considers the psychological effects of restrictive housing by examining data about the effect of specific characteristics of confinement, such as the length of confinement and single versus shared cells, and characteristics of the individual, such as age, gender, or pre-existing mental illness. It also examines behavioral outcomes in restrictive housing, such as suicide rates and institutional misconduct. Finally, it considers the long-term effects of isolation, including the persistence of psychological symptoms or the development of new disorders such as post-traumatic stress disorder (PTSD).

Prevalence of Persons With Mental Illness in Restrictive Housing

Research has consistently demonstrated that prisoners in restrictive housing settings have higher rates of diagnosed mental disorders, higher rates of psychiatric symptoms (as measured by symptom rating scales), and more severe psychiatric symptoms than inmates in the general prison population. In contrast to the 10 percent to 15 percent prevalence of mental illness in prisons generally (Bureau of Justice Statistics, 2002; Lamb & Weinberger, 1998), the prevalence of serious mental illness in restrictive housing has been estimated at approximately 30 percent in several different studies. Estimates range from 15 percent to 62 percent, depending on the definition of mental illness and the assessment method used (Hodgins & Côté, 1991; Lovell, Cloyes, Allen, & Rhodes, 2000; Andersen et al., 2000; Zinger et al., 2001; Wynn & Szatrowski, 2004; O'Keefe, 2007; Labrecque, 2015). Lower rates are associated with more restrictive definitions, such as serious mental illness, while higher rates are associated

with more inclusive definitions such as "on the mental health caseload." Some diagnoses are overrepresented in restrictive housing populations, such as schizophrenia and bipolar disorder (Hodgins & Côté, 1991), depression and adjustment disorders (Andersen et al., 2000), and attention-deficit hyperactivity disorder (O'Keefe, 2007). Lanes (2011) demonstrated that prisoners who engage in self-injury are likely to be placed in restrictive housing; the likelihood increased in tandem with the severity of the self-injury.

Studies also indicate that prisoners in restrictive housing demonstrate high rates of symptoms beyond just the diagnosis of serious mental illness. Grassian (1983) and Haney (2003) have both described prisoners in restrictive housing settings as having high levels of anxiety, anger, sleep problems, perceptual distortions, and somatic symptoms. Although these studies were qualitative and based on clinical interviews, other studies have found similar results using different methods. Lovell (2008) found that 20 percent of the restrictive housing prisoners had a serious mental illness, but an additional 25 percent had evidence of "marked psychological dysfunction, psychological breakdowns, or brain damage." Cloyes and colleagues (2006) administered a structured rating scale of psychiatric symptoms and concluded that prisoners in restrictive housing displayed evidence of "moderate psychosocial dysfunction," with a significant portion of the study sample displaying evidence of serious dysfunction. After administering structured rating scales, the O'Keefe team (2013) also found that prisoners in restrictive housing demonstrated higher rates of psychological symptoms than general population prisoners.

Several studies have also examined the personality characteristics of prisoners in restrictive housing. Comparing inmates in restrictive housing and the general prison population, Motiuk and Blanchette (1997) found those in restrictive housing had significantly more cognitive and personality problems. For example, compared to prisoners in general population settings, the restrictive housing prisoners were more impulsive, had difficulty solving interpersonal problems, set unrealistic goals, demonstrated low frustration tolerance and disregard for others, and had narrow and rigid thinking. Similarly, O'Keefe (2007) found that prisoners in administrative segregation displayed more thinking disorders and suspicious hostility than general population prisoners.

Taken together, the research clearly indicates that prisoners in restrictive housing are a disturbed group, with disproportionately high rates of diagnosed mental illness, psychological symptoms (whether diagnosed or not), and maladaptive personality traits. As described below, the degree to which these problems pre-existed the inmate's placement in restrictive housing is unclear, but the high prevalence of individuals with significant mental health concerns in restrictive housing has been amply demonstrated.

Effect of Particular Characteristics of Confinement

Purpose of Confinement

Does it matter why an individual is placed in restrictive housing? For example, are individuals who volunteer for protective custody healthier and less symptomatic than those who are placed in restrictive housing for disciplinary purposes? And does the prisoner's knowledge and attitude about the confinement, such as knowing how long it will last and perceiving the placement as legitimate, make a difference?

No published studies have directly addressed these questions, but a few provide relevant data for consideration. For example, the literature about sensory deprivation demonstrates that individuals' expectations about what they will experience in confinement can significantly alter the symptoms they report; individuals who are not told that confinement can cause distress will report fewer negative psychological experiences (Gendreau & Labrecque, 2015; Grassian & Friedman, 1986). Conversely, if individuals believe the experience is likely to be benign, one early study found evidence that they may enjoy it (Goldberger, 1966). Although far from conclusive, these studies indicate that a prisoner's perception of restrictive housing may significantly affect his or her psychological experience. Most prisoners have heard colloquial descriptions of "solitary," "the hole," and "the box," all of which have negative connotations and can possibly lead to more negative perceptions of the experience of restrictive housing.

A few studies have examined differences between voluntary (i.e., protective custody) and involuntary (i.e., disciplinary or administrative) prisoners in restrictive housing. No differences were found in the psychological functioning of voluntary and involuntary prisoners (Zinger et al., 2001). Motiuk and Blanchette (1997) found that prisoners in voluntary restrictive housing were more likely to report prior victimization, but their psychological characteristics were no different from involuntary prisoners in restrictive housing. Miller and Young (1997) compared prisoners in administrative custody, disciplinary custody, and general population, finding that those in disciplinary custody most frequently reported feelings of withdrawal, anger, and hostility. Brodsky and Scogin (1988) interviewed 69 men in two different protective custody units. They found that two-thirds of them had significant psychopathology, and the psychological symptoms were worse in the unit without adequate space, light, and programming. Although they did not compare their subjects with those in administrative or disciplinary segregation, their findings indicated that the conditions of confinement may be just as (or more) important than the purpose of confinement in determining psychological outcomes.

Duration of Confinement

There are two theories about how the duration of restrictive housing relates to mental health. In the first theory, individuals experience the greatest psychological discomfort — anxiety, fear, depression, anger — in the first few days of confinement. Over time, they adjust to the conditions and display fewer symptoms. In the second theory, individuals are "driven mad" by isolation, becoming more anxious, aggressive, and delirious the longer they are kept in restrictive housing. Although anecdotal reports tend to support the latter theory, the empirical evidence is much more mixed.

Most researchers have not found that individuals developed increased psychological symptoms or significant behavioral changes during short-term placement in restrictive housing. Prisoners who volunteered to spend seven days in solitary confinement showed EEG changes, but no behavioral differences (Gendreau et al., 1972). Another study found no changes in psychological testing results during five days of confinement (Weinberg, 1967, as reported in Suedfeld et al., 1982). Walters, Callagan, and Newman (1963) found no mental deterioration when volunteer prisoners spent four days in isolation. Ecclestone, Gendreau, and Knox (1974) studied physiological markers of stress, such as heart rate, blood pressure, and plasma cortisol levels, finding no significant changes in levels during 10 days of isolation. Zinger and colleagues (2001) studied prisoners in restrictive housing and general population for a longer period — 60 days — and found that psychological symptoms decreased in both groups, with no differences in suicidal ideation. Labrecque (2015) examined institutional misconduct rates, comparing those who spent less than 15 days in segregation with those who spent more than 15 days and found no differences between the groups. The Colorado study (O'Keefe et al., 2013) found that psychological symptoms decreased over the first 90 days of confinement in isolated prisoners with and without mental illness.

In contrast, data from well-designed studies on the long-term effects of restrictive housing are sparse and conflicting. Several researchers have each described compelling case studies of prisoners whose psychological functioning severely deteriorated over time (Grassian, 1983; Haney, 2003; Jackson, 1983). However, without control groups or standardized measures, their findings came under scrutiny (O'Keefe, 2007; Bonta & Gendreau, 1990). Andersen and colleagues (2000) did lend empirical support to the case reports, using a longitudinal study design and finding that prisoners developed more depression and adjustment disorders over the four-month study period. The O'Keefe team (2013) evaluated prisoners prospectively over one year and found an overall decrease in psychological symptoms. In their meta-analysis, Gendreau and Labrecque found a small but statistically significant increase in psychological symptoms over time, but the duration of the prisoners' stay in solitary confinement varied. Overall,

the data are mixed, and there is currently no clear answer to the question of whether any particular duration of restrictive housing is safe or harmful from a psychological standpoint.

Degree of Social Isolation

No modern studies have examined questions such as, "Does placing two inmates together in a double cell cause less psychological distress than isolating one inmate in a single cell?" Humans are undoubtedly social creatures, and historical accounts of 19th-century penitentiaries that routinely used solitary confinement (i.e., the Pennsylvania and Auburn models) provide a compelling narrative about prisoners driven insane by isolation (Scharff-Smith, 2006). However, modern restrictive housing units differ significantly from the conditions of 19th-century prisons and it is unclear to what extent historical findings are relevant to modern correctional practice.

It is clear, however, that the risk of suicide in single cells in restrictive housing is substantial. Reeves and Tamburello (2014) found that all but one of the suicides in the New Jersey Department of Corrections over a five-year period occurred in a single cell, concluding that placement in a single cell in restrictive housing carries 400 times greater risk of suicide than a general population double cell. A study of the California prison system found that 73 percent of the completed suicides in a six-year period occurred in a single cell, with 45 percent occurring in administrative segregation (Patterson & Hughes, 2008). The issue of suicide is discussed in more detail below (see "Rates of Self-Injury and Suicide"); the data are mentioned here merely to indicate that the degree of social isolation in restrictive housing units may be an important variable in predicting psychological outcomes. Further study is needed to assess this question.

Physical Plant Characteristics

Physical plant characteristics, such as cell size, recreation yard size, food quality, amount of natural light, and noise levels each have a potential impact on psychological functioning in restrictive housing settings. For example, despite being called "solitary," many restrictive housing units are actually very noisy because prisoners yell back and forth between cells to communicate with each other. Anecdotal reports indicate that this type of constant background noise has a detrimental effect on mental health (Childress, 2014). To date, no published studies have systematically examined the issue of how particular physical plant characteristics affect psychological functioning in restrictive housing settings. Brodsky and Scogin (1988) did find greater levels of psychological distress in a group of prisoners isolated in a unit without adequate light or space, providing preliminary data that these conditions may be important determinants of psychological health.

Degree of In-Cell Activity

Many prisoners in restrictive housing units are allowed to keep televisions, radios, books, and other sources of sensory stimulation in their cells (Metzner, 2002), presumably because such items are thought to keep prisoners occupied and decrease emotional distress. No systematic studies have been conducted to determine whether access to such items has an effect on psychological functioning in restrictive housing. Likewise, no studies have assessed the impact of physical stimulation (exercise in the recreation yard or in cell) on psychological functioning. One small study of a Kentucky prison did examine three groups of prisoners with varying degrees of restriction: general population, administrative segregation, and disciplinary segregation (Miller, 1994). The study found that psychiatric symptoms were proportional to the degree of restriction, with the most symptoms found in the disciplinary custody group housed in single cells, not allowed to smoke, and with the least access to commissary items.

Access to Mental Health or Other Programming

Correctional facilities vary widely in the amount of programming and mental health services provided to prisoners in restrictive housing, which likely reflects the divergent views of corrections professionals about the role of mental health problems in restricted prisoners' behavior. In a 2014 survey of state correctional systems, some jurisdictions reported that mental health concerns for segregated prisoners are "significant" or "100 percent," while others reported that mental health plays a "minimal" role in segregated prisoners' behavior (Liman & ASCA, 2015, p. 57). Similarly, the survey found that some systems divert prisoners who have a diagnosed mental illness out of administrative segregation, while others indicated that grouping such prisoners together in administrative segregation improves access to mental health staff (Liman & ASCA, 2015, p. 57).

Given the lack of consensus about the role of mental illness in problematic behavior that occurs during restrictive housing placement, it is not surprising that access to mental health care in that setting varies greatly, ranging from essentially none to more than 20 hours a week of structured or unstructured activity. Mental health involvement in restricted prisoners' care can include —

- Prescreening by a nurse or mental health professional to exclude prisoners with medical or mental health contraindications from placement in restrictive housing.
- Cell-side "wellness checks" by medical or mental health staff, conducted with varying frequency (daily to weekly, depending on correctional policies and degree of isolation).
- Cell-side administration of psychotropic medication by a nurse.

- In-cell mental health programming, typically consisting of workbook assignments, journals, or other reading materials.
- Out-of-cell individual evaluations by a mental health professional (ranging from several times per week to every two to three months), depending on the clinical status of the prisoner and institutional policies.
- Group activities with a social or nontherapeutic purpose (unstructured activity), such as watching movies or playing games.
- Group activities with a therapeutic purpose (structured activity), such as group psychotherapy or interacting with a therapy animal, typically conducted using either shackles or "therapeutic modules" (telephone booth-sized cages) to secure prisoners.

In some jurisdictions, prisoners with mental illness have access to these services but remain in the same physical location as other restricted prisoners. Their daily routines, including access to recreation, showers, commissary items, and phone calls, remain unchanged. However, some large correctional systems have developed specialized residential programs for prisoners with significant mental health concerns and repeated disciplinary infractions. These programs use principles of cognitive behavioral therapy or dialectical behavioral therapy to provide tangible, short-term incentives for prosocial behavior to improve outcomes for prisoners who have failed to progress through traditional disciplinary custody programs. One example is the Secure Residential Treatment Units in the Pennsylvania Department of Corrections (Commonwealth of Pennsylvania, 2015). Rather than relying solely on sanctions for bad behavior, the specialized programs provide positive reinforcement for good behavior, such as the ability to earn daily "points" that can be spent on rewards at the end of the week. Common rewards include snack foods, hygiene products, and extra phone time.

Although most mental health clinicians would recommend greater access to programming for prisoners in restrictive housing, no published studies have yet examined whether access to any particular type of mental health treatment has an impact on psychological health. Similarly, no studies have examined whether other types of programming — educational, religious, vocational, recreational — have any impact. Some scholars have raised concerns that, even when out-of-cell programming is offered in administrative segregation, in most jurisdictions less than 25 percent of inmates actually participate (Liman & ASCA, 2015, p. 48). These knowledge gaps leave us with two important areas for future study: (1) how best to design mental health programming for restricted prisoners, and (2) how the policies and programs are being implemented at the ground level.

Some preliminary data do indicate that improving mental health services for restricted prisoners has positive outcomes. Kupers and colleagues (2009) reported substantial reductions in the use of force and inmate assaults after the Mississippi Department of Corrections improved its mental health services and

revised its restrictive housing practices. These results are promising, but they must be interpreted with caution. The authors did not measure psychological functioning as an outcome, and the changes implemented were much more sweeping than simply providing access to mental health services for restricted prisoners.

Relationship Between Staff and Prisoners

Scholars have documented that correctional employees assigned to restrictive housing units often have negative attitudes toward segregated prisoners (Wormith, Tellier, & Gendreau, 1988; Carriere, 1989). Prisoners are aware of this. They complain just as much about staff attitudes, such as lack of respect and the humiliation it can lead to, as they do about sensory deprivation or social isolation in restrictive housing (Suedfeld et al., 1982). Although the issue has not been systematically studied, some scholars postulate that treating prisoners fairly and humanely, even in conditions of relative isolation, may have a significant mitigating effect on the psychological harms of restrictive housing (Gendreau & Bonta, 1984; Suedfeld et al., 1982; Gendreau & Labrecque, 2015).

Effect of Individual Characteristics

Individuals Without Pre-Existing Mental Illness

Many studies about the psychological effects of restrictive housing report their findings without distinguishing individuals with pre-existing psychiatric illness from those without. This, of course, makes it difficult to assess the question of whether psychologically healthy individuals respond differently to segregated confinement than those with mental illness. Common sense and clinical judgment would lead to the belief that differences in response could be significant, but the small amount of existing data do not allow definitive conclusions.

Early studies of restrictive housing excluded individuals with pre-existing mental or physical disorders, providing some information about how "normal" individuals respond to confinement. These studies (Suedfeld et al., 1982; Ecclestone et al., 1974; Gendreau & Bonta, 1984) found no adverse effect of solitary confinement for healthy individuals over relatively short periods. The Colorado study results (O'Keefe et al., 2013) were similar, finding that individuals without pre-existing mental illness who were placed in administrative segregation had higher initial rates of psychological symptoms than those in general population, but the symptoms decreased over time. When scholars interviewed men in the community who had spent time in restrictive housing during their incarcerations in New York, they found that 70 percent said they felt safer in confinement than in general population, though they still viewed the experience negatively (Valera & Kates-Benman, 2015).

By contrast, others who performed clinical assessments of prisoners described a distinct psychiatric syndrome, , secure housing unit (SHU) syndrome, that can affect individuals regardless of a pre-existing mental illness diagnosis (Grassian, 1983; Haney & Lynch, 1997). Individuals with this syndrome will become progressively more anxious, irritable, confused, aggressive, and self-injurious over time, but their symptoms will dissipate rapidly after release from segregated confinement. Andersen and colleagues (2000) studied a similar question, assessing prisoners without known psychiatric illness who were placed in restrictive housing immediately upon entering the correctional facility. Using repeated symptom assessments over four months, the study found that prisoners in solitary confinement were more likely to develop psychiatric disorders than those in general population (28 percent compared to 15 percent). A follow-up study (Andersen et al., 2003) found that psychiatric symptoms decreased over time in the control group but remained stable in the restrictive housing group. Kaba and colleagues (2014, 2015) examined rates of self-injury and suicide in isolated prisoners, finding that individuals without mental illness were more likely than those with serious mental illness to engage in non-lethal acts of self-injury. The authors hypothesized that inmates who did not have a diagnosed mental illness engaged in self-injury as a means to change housing conditions, not that the confinement caused new psychiatric problems.

Taken together, these conflicting results do not lead to a clear picture of how a "normal" person responds to restrictive housing. In 2015, scholars attempted to use rigorous scientific methods to shed light on the question, performing two meta-analyses of the effects of restrictive housing. After narrowing a sample of 150 studies to just 15 (Gendreau & Labrecque, 2015) or 14 (Morgan, 2016) that met inclusion criteria, both meta-analyses concluded that administrative segregation has a small but significant negative impact on psychological functioning, with the greatest changes being in the domains of anxiety and depression. The meta-analyses did not comment specifically on differences between populations with and without mental illness, but they do provide a useful baseline from which to compare outcomes in individuals with mental illness.

Individuals With Pre-Existing Mental Illness

As described in the "Prevalence of Mental Illness" section above, individuals with serious mental illness are overrepresented in restrictive housing populations, likely because they engage in disruptive behaviors and accrue institutional misconduct reports. In some correctional institutions, particularly those without well-developed systems of mental health care, individuals with mental illness may be viewed as unmanageable or particularly dangerous in general population. Additionally, some prisoners genuinely seem to prefer being in restrictive housing, finding general population too stimulating or threatening. These prisoners will sometimes deliberately commit infractions when they are nearing release from restrictive housing, seemingly for the sole purpose of remaining in confinement.

Given the widespread consensus among mental health professionals and human rights advocates that individuals with serious mental illness should be excluded from prolonged solitary confinement, there is surprisingly little empirical evidence that demonstrates an exacerbation of psychiatric symptoms in restrictive housing for individuals with a mental illness diagnosis. A few studies have concluded that most inmates displaying symptoms of mental illness in restrictive housing were diagnosed prior to entry. For example, Hodgins and Cote (1991) found that 86 percent and 64 percent of prisoners diagnosed with mental illness in two different restrictive housing units were diagnosed prior to placement. Andersen et al. (2000) also found high rates of psychiatric symptoms at the time of placement in solitary confinement. Inmates with mental illness diagnoses spend much longer in restrictive housing than those without such a diagnosis; one study found that prisoners with serious mental illness spent an average of 38 months in isolation, compared to 5 months for prisoners who did not have a diagnosed mental illness (Correctional Association of New York, 2004).

The data about how persons with mental illness respond after being placed in confinement are mixed. An early study found positive behavioral change in four inmates with schizophrenia who were placed in restrictive housing for seven to 10 days. The inmates displayed decreased aggression, violence, self-injury, and psychotic symptoms for two years after release from confinement (Suedfeld & Roy, 1975). Of course, a study with such a small sample size must be interpreted with caution. A much larger study was conducted in the New York City jails (Kaba et al., 2015). It examined the relationship between the timing of mental illness diagnosis and restrictive housing placement and hypothesized that more diagnoses would be made over time. However, the findings did not support this hypothesis; the diagnoses clustered in a normal distribution around "Day 0" of restrictive housing placement. Prisoners were most often diagnosed with adjustment disorders and antisocial personality disorders, suggesting that they came to mental health attention because they were distressed about being placed in restrictive housing, not because psychotic or mood symptoms were exacerbated by confinement. The findings of the Colorado study (O'Keefe et al., 2013) were similar, concluding that inmates with mental illness experienced the greatest severity of symptoms just after placement in administrative segregation, with a decrease in symptoms over 12 months.

The case studies of Grassian (1983) and Haney (2003) reach the opposite conclusion, stating that restrictive housing places prisoners with mental illness at great risk of decompensation over time. The empirical literature does lend some support to this theory. Kaba and colleagues (2014) determined that placement in solitary confinement increases the risk of suicide attempts and self-injury for all prisoners, even after release from confinement. Prisoners with serious mental illness are at particular risk of engaging in potentially lethal acts of self-injury while in solitary confinement (9.8 times the general prison risk). Despite finding that psychological symptoms decreased overall in prisoners with serious mental

illness, O'Keefe and colleagues (2013) noted that 7 percent of the group with serious mental illness experienced an increase in symptoms. Another study that examined institutional infractions committed by inmates in restrictive housing found that a smaller percentage of the inmates with serious mental illness committed infractions, but those who did, did so repeatedly (Smith, Labrecque, & Gendreau, 2015). Overall, these findings suggest that some prisoners with mental illness adapt well to restrictive housing, but a significant minority may experience catastrophic results, including additional disciplinary infractions and potentially lethal suicide attempts.

Age

Prisoners in restrictive housing settings average approximately 30 years of age, compared to 35 years for the general prison population (O'Keefe, 2007; Lovell, Cloyes, Allen, & Rhodes, 2000; Cloyes et al., 2006), suggesting that young age and psychological immaturity are risk factors for such placement. Kaba and colleagues (2015) support this theory, finding that prisoners under age 21 are five times as likely to be placed in solitary confinement as prisoners over age 21. Younger prisoners, particularly those 18 years and younger, have a significantly higher risk of suicide in prison, though it is not clear whether restrictive housing elevates this risk (Kaba et al., 2014).

Experts in child mental health agree with the prohibition on placing juveniles in solitary confinement endorsed by the United Nations (United Nations General Assembly, 1990), the U.S. Department of Justice (2016), and President Obama (2016), as set forth in the "United Nations Rules for the Protection of Juveniles Deprived of their Liberty, 1990, Section 67." The American Academy of Child and Adolescent Psychiatry (AACAP, 2012) recommends that, except in extraordinary circumstances, juveniles should not be placed in restrictive housing. Although the data are limited, they support the theory that, the younger the child, the greater the potential harm from placement in restrictive housing.

Gender

The majority of research on the effects of restrictive housing has been conducted on men. Qualitative reviews of women in restrictive housing (Korn, 1988; Martel, 1999) are similar to those documented by Grassian (1983), describing depression, anger, hallucinations, and withdrawal. Women placed in restrictive housing do share some traits in common with men, particularly their high rates of institutional maladjustment and criminogenic risk (Thompson & Rubenfeld, 2013). However, a small number of quantitative studies point to potentially significant differences in the way men and women experience restrictive housing. O'Keefe (2007) found that women make up a disproportionately small percentage of the prisoners in restrictive housing. Although women are more likely than men to have psychiatric diagnoses, they are less likely to be placed

in restrictive housing, indicating that women prisoners with mental illness may be offered treatment, while men are punished. Suedfeld and colleagues (1982) studied women in a quasi-restricted setting (they ate meals together and spent some time out of their cells) and concluded that women use different coping skills than men to tolerate the experience. They fantasize, daydream, and recall books they have read and movies they have seen. When examining outcomes for women in restrictive housing, Labrecque (2015) found that, in contrast to men, rates of institutional misconduct for women decreased by more than 20 percent after they were placed in confinement. These data are preliminary, and further investigation of women in restrictive housing is needed before conclusions can be drawn.

Intelligence and Cognitive Functioning

Some evidence suggests that individuals in restrictive housing have lower intelligence scores and more cognitive problems than prisoners in general population. One small study (Zinger et al., 2001) found that prisoners in restrictive housing had a mean IQ score (89.70) that was 8 points lower than the general prison population, though still within the normal range. Studies have also shown that prisoners in restrictive housing display less flexible thinking and are less able to solve problems than non-restricted prisoners (Motiuk & Blanchette, 1997; O'Keefe, 2007). A review of medical charts found that 30 percent of prisoners in restrictive housing had documented evidence of traumatic brain injuries (Lovell, 2008). These studies suggest that individuals with intellectual disabilities may be overrepresented in restrictive housing, and they may be less able to cope with the conditions of confinement than the average prisoner. However, no published studies have systematically examined this issue.

Prior Experience in Restrictive Housing

Studies have shown that, on any given day, many of the prisoners in restrictive housing settings have been there before, because the same individuals tend to commit rule violations repeatedly (Lovell, 2008; Zinger et al., 2001). One could hypothesize that experienced prisoners find restrictive housing less distressing, but one could also hypothesize that the effects of isolation are cumulative and cause more problems over time. No published studies have addressed this issue.

Behavioral Outcomes

Self-Injury and Suicide

Research clearly indicates that restrictive housing placement, particularly in a single cell, is significantly correlated with prisoner suicide. Studies from large correctional systems have shown that a disproportionate number of suicides occur in restrictive housing units (Way, Miraglia, Sawyer, Beer, &

Eddy, 2005; White, Schimmel, & Frickey, 2002; Patterson & Hughes, 2008; Reeves & Tamburello, 2014), with estimates ranging from 30 percent to 65 percent. Another study found that 14 percent of men who had been placed in restrictive housing reported attempting suicide while there (Valera & Kates-Benman, 2015), and a large-scale meta-analysis concluded that placement in administrative segregation has a moderate effect on self-injury (Morgan, 2016). Kaba and colleagues (2014) found that the risk of suicide while in restrictive housing is more than six times greater than in general population, but the risk was also increased after the prisoner had been released (two times greater than those who had never been placed in restrictive housing). Reeves and Tamburello (2014) concluded that placement in a single cell in restrictive housing carries a risk of suicide that is more than 400 times higher than that of the general prison population.

In another study conducted in New York, scholars reported that suicides in restrictive housing units occurred, on average, after 63 days of confinement (Way, Sawyer, Barboza, & Nash, 2007). The authors advocate for enhanced observation of prisoners during the first eight weeks of confinement in restrictive housing, when most suicides occurred. There is also some evidence that suicide rates increase incrementally as the degree of isolation increases. In Italy, suicide rates in short-term restrictive housing were 239 percent higher than in the general prison population and 439 percent higher in long-term restrictive housing (such as an American supermax facility) (Roma, Pompili, Lester, Girardi, & Ferracuti, 2013). Of course, risk factors other than restrictive housing placement per se can contribute to the elevated incidence of suicide in that setting. Mental illness, history of suicide attempts, and young age are all associated with increased risk of prison suicide (Fazel, Cartwright, Norman-Nott, & Hawton, 2008; Kaba et al., 2014), and they are also associated with increased risk of placement in restrictive housing. Some authors have attempted to disentangle these factors, finding that placement in restrictive housing does independently increase suicide risk (Kaba et al., 2014).

Psychiatric Hospitalization

Very little evidence about psychiatric hospitalization rates for prisoners placed in restrictive housing has been published. One Danish study (Sestoft, Andersen, Lilleback, & Gabrielsen, 1998) found that individuals who remained in restrictive housing longer than four weeks were 20 times more likely to be hospitalized for psychiatric reasons, compared with non-restricted prisoners. A study of prisoners in Marion, Illinois, found a much different result; only 3.1 percent of the prisoners in restrictive housing were transferred to a psychiatric hospital over a 10-year period (Ward & Werlich, 2003).

Institutional Misconduct

A comprehensive review of the relationship between restrictive housing and institutional misconduct has recently been published (Labrecque, 2015). It is mentioned briefly here because misconduct in prisoners can sometimes be a proxy for psychological health. When experiencing symptoms of mental illness, some prisoners turn inward, exhibiting withdrawal and self-injury. Others turn outward, becoming hostile, aggressive, or violent. If restrictive housing worsens prisoners' psychological health, one would expect rates of institutional misconduct after placement in restrictive housing to increase. Labrecque's study did not support this hypothesis, finding no increase in the rates of violent, nonviolent, or drug-related misconduct after placement in restrictive housing. Morris (2016) reached a similar conclusion using a different method, finding no difference in the rates of violent misconduct between prisoners who had been placed in short-term (15 days) restrictive housing and a control group.

Long-Term Psychological Effects

Most of the literature about the long-term psychological effects of restrictive housing is descriptive or biographical, painting compelling portraits of individuals who were fundamentally altered by solitary confinement and bear deep scars from the experience long after it has ended. Few published studies have systematically addressed this topic. Grassian's sample of 14 prisoners (1983) reported that their symptoms resolved rapidly after release from confinement, but Grassian has also described longer lasting effects from restrictive housing (2006). Valera and Kates-Benman (2015) performed a qualitative study of men in the community who had spent time in restrictive housing, finding that most of them described "getting used to it" over time. Presently, there are no published studies that answer such important questions as whether prisoners who spent time in restrictive housing develop PTSD as a result of the experience. Likewise, no studies address whether restrictive housing prisoners experience long-term changes in psychosocial functioning following release into the community (e.g., getting a job, reconnecting with friends and family, finding stable housing). However, some authors have examined criminal justice outcomes, finding preliminary evidence that prisoners who were placed in restrictive housing have higher rates of recidivism (Motiuk & Blanchette, 2001; Lovell, Johnson, & Cain, 2007; Smith, Gendreau, & Labrecque, 2015).

Consensus of Mental Health Professional Organizations

Several organizations of healthcare professionals have published position statements on the placement of prisoners with mental illness in restrictive housing. These include the American Psychiatric Association (APA, 2012), American Academy of Child & Adolescent Psychiatry (AACAP, 2012), American

College of Correctional Physicians (ACCP, 2013) (formerly the Society of Correctional Physicians), and American Public Health Association (APHA, 2013). In addition, the APA updated its guidelines, *Psychiatric Services in Correctional Facilities,* in 2015, and included a section on mental illness and segregation. The National Commission on Correctional Health Care (NCCHC) published a position statement on solitary confinement in April 2016 that expands on its *Standards for Mental Health Services in Correctional Facilities* (2015), the Commission's guidelines for managing segregated prisoners.

The position statements and guidelines address different aspects of restrictive housing, but they all agree that the practice places prisoners at risk, and care must be taken to protect their health and well-being. Notably, the statements do not call for abolishing restrictive housing altogether. They are fairly conservative in their approach, focusing on the exclusion of particularly vulnerable populations — juveniles and those with serious mental illness — and limiting the amount of time prisoners spend in isolation. The American Psychological Association and National Association of Social Workers (NASW), the professional organizations whose members perform the bulk of prison mental health care, have not published official positions on restrictive housing, though they have provided testimony before Congress and published articles raising concerns about its use (American Psychological Association, 2012; NASW, 2014). Some scholars have suggested that mental health professionals have not gone far enough (Appelbaum, 2015), and they should join the numerous advocacy groups involved in the movement to abolish solitary confinement. To date, no mental health organizations have done so, though the NCCHC comes close, stating that placement in isolation for more than 15 days is cruel, inhumane, and degrading (2016).

Current recommendations from mental health professional organizations' position statements and published guidelines include the following:

- ***Mental health professionals should have input into the prison disciplinary process.*** ACCP (2013) and APA (2016) agree that prisoners should not be placed in isolation as a punishment for behavior that is solely the result of mental illness. Mental health professionals can inform the disciplinary process about mitigating factors and, in some cases, divert prisoners from entering disciplinary segregation by referring them instead to mental health housing or other therapeutic settings.

- ***All prisoners being considered for restrictive housing placement should be screened for mental health conditions that contraindicate placement or require accommodation.*** The NCCHC takes somewhat contradictory positions on this issue. The mental health standards it published in 2015 recommend reviewing the prisoner's medical record prior to placement in restrictive housing. However, a more recent position statement from the organization indicates that "health staff must not be involved in determining whether adults or juveniles are physically or psychologically able to be placed

in isolation" (NCCHC, 2016). APA (2016), on the other hand, states that acutely suicidal or psychotic prisoners should not be placed in restrictive housing, and APHA (2013) recommends that isolating prisoners for therapeutic purposes should occur only when ordered by a health care professional.

- ***Individuals with serious mental illness should be excluded from prolonged confinement in restrictive housing.*** Of the mental health organizations, APHA and NCCHC take the most expansive position, with both calling for exclusion of individuals with a serious mental illness from solitary confinement. APA and ACCP are more restrained, allowing for some individuals with a serious mental illness to be placed in restrictive housing but stating that, except in rare cases, they should not be kept in that setting beyond four weeks. ACCP (2013) and APA (2016) define serious mental illness to include prisoners with all psychotic disorders (schizophrenia, schizoaffective disorder, delusional disorder, brief psychotic disorder, schizophreniform disorder, substance-induced psychotic disorder, and unspecified schizophrenia-spectrum disorder), bipolar disorders, and major depressive disorder. Other illnesses, such as PTSD, dementia, and personality disorders, may be considered serious if they cause significant functional impairment.

- ***Individuals with intellectual disabilities should be excluded from prolonged confinement in restrictive housing.*** ACCP (2013) includes intellectual disability (called by its older name, "mental retardation") in its list of conditions that should exclude an inmate from restrictive housing longer than four weeks. The other organizations do not specifically comment on this population.

- ***Juveniles should be categorically excluded from prolonged restrictive housing.*** NCCHC, APHA, and AACAP (2012) recommend that individuals younger than age 18 should not be placed in restrictive housing. The other organizations do not comment on this population.

- ***Individuals in restrictive housing should have access to necessary mental health treatment.*** APA and NCCHC make clear that correctional facilities remain responsible for meeting the serious medical and mental health needs of prisoners held in restrictive housing. This includes access to medication, psychiatric assessments, and counseling. NCCHC provides guidelines (2015) about how significant mental health findings should be documented and conveyed to custody officials (when necessary). If prisoners with a serious mental illness are kept in restrictive housing, APA (2016) recommends that they be provided with 10 hours a week of unstructured activity in addition to the necessary out-of-cell therapeutic activities. The NCCHC position statement (2016) indicates that inmates in isolation are entitled to health care that is consistent with community standards.

- ***All individuals in restrictive housing should be monitored closely by mental health professionals.*** APA (2016) recommends regular rounds by a qualified

mental health professional (generally defined as a psychologist, psychiatrist, psychiatric nurse, or social worker). NCCHC (2015) recommends that this monitoring should occur at a frequency based on the degree of isolation: daily for inmates in extreme isolation (those with little or no contact with other individuals), every three days for those with limited contact with other individuals, and weekly for those allowed routine social contact with other inmates while remaining separated from the general population (e.g., inmates in protective custody). NCCHC (2016) recommends monitoring at least on a daily basis.

- ***Restrictive housing policies and procedures should allow prisoners with acute mental health needs to be transferred to an appropriate treatment setting.*** NCCHC (2015, 2016) and APA (2016) recommend that, when mental health professionals identify signs of deteriorating mental health in prisoners, they should communicate these findings to custody officials promptly. They should also take steps to meet the prisoner's therapeutic needs, including transfer to a different setting if necessary.

- ***Correctional systems should develop alternatives to prolonged restrictive housing.*** APA (2016) recognizes that alternatives to restrictive housing are limited at this time, and the scientific data about its psychological effects are rapidly evolving. NCCHC (2015) recommends that mental health professionals should keep custody officials informed about the latest scientific information and work with them to develop and evaluate alternatives to restrictive housing, particularly for prisoners with a serious mental illness.

Knowledge Gaps

As noted in the "Literature Review" section above, the current literature about mental health and restrictive housing leaves many important questions unanswered. In fact, there are very few areas in which the data are clear and compelling. It is clear that prisoners in restrictive housing are more disturbed than the general prison population, with higher rates of diagnosed mental illness and more severe symptoms. It is also clear that suicides occur disproportionately in restrictive housing settings, both because higher-risk prisoners are placed there and because of additional risks conferred by the setting. Finally, there is no convincing evidence that restrictive housing provides any therapeutic benefit, with many studies finding psychological harm and the Colorado study (O'Keefe et al., 2013) concluding that prisoners with mental illness in that setting may recover less rapidly than their peers in general prison population.

The finer points of the harm-vs.-benefit debate about restrictive housing are still a gray area. For example, even if one accepts that restrictive housing has a small but significant negative psychological impact (as the recent meta-analyses suggest), it is not known which particular conditions of confinement are most

implicated: social isolation? noise and light levels? poor staff attitudes? The relationship between these individual factors and psychological outcomes simply has not been studied systematically, leaving a major gap in our understanding about restrictive housing.

Another significant area for future study is the effect that access to mental health programming has on psychological outcomes in restrictive housing. Some states, such as Mississippi, Michigan, and Maine (Kupers et al., 2009; Chammah, 2016), have created step-down programs for prisoners transitioning between restrictive housing and general population, but the psychological impact of these programs has not been systematically assessed. Likewise, some states are beginning to implement the American Psychiatric Association's recommendation to provide prisoners who have a serious mental illness with at least 10 hours a week of out-of-cell programming, but the effect has not yet been evaluated. This is a key component for future research, as data about outcomes will help guide future policy decisions.

Finally, further study of the long-term psychological effects of restrictive housing is necessary. There is essentially no data about how prisoners released from restrictive housing fare once they are released into the community. Do they have difficulty, as the anecdotal literature suggests, reintegrating with society? Do they develop higher rates of PTSD than prisoners who were not in restrictive housing? And does release from restrictive housing straight into the community — as one might hypothesize — cause greater psychological distress than a gradual transition from restrictive housing to general population and then to the community? All of these questions should be studied, as discussions about risks and benefits of restrictive housing should not be limited to its immediate effects.

Policy Implications: Reconciling Research With Real Life

The national debate about the psychological effects of solitary confinement is sometimes framed as a "chicken and egg" question: Are people with mental illness preferentially placed in solitary confinement, or does solitary confinement cause mental illness? This question does not necessarily have one answer; both statements can be true. Indeed, with more knowledge about restrictive housing, the corrections and mental health fields are beginning to see that both statements are true. Individuals with mental illness break institutional rules and engage in disruptive behaviors, causing them to be placed in isolation at greater rates than individuals without mental illness. Once in isolation, they may deteriorate further, developing increased symptoms of anxiety, aggression, and self-injury.

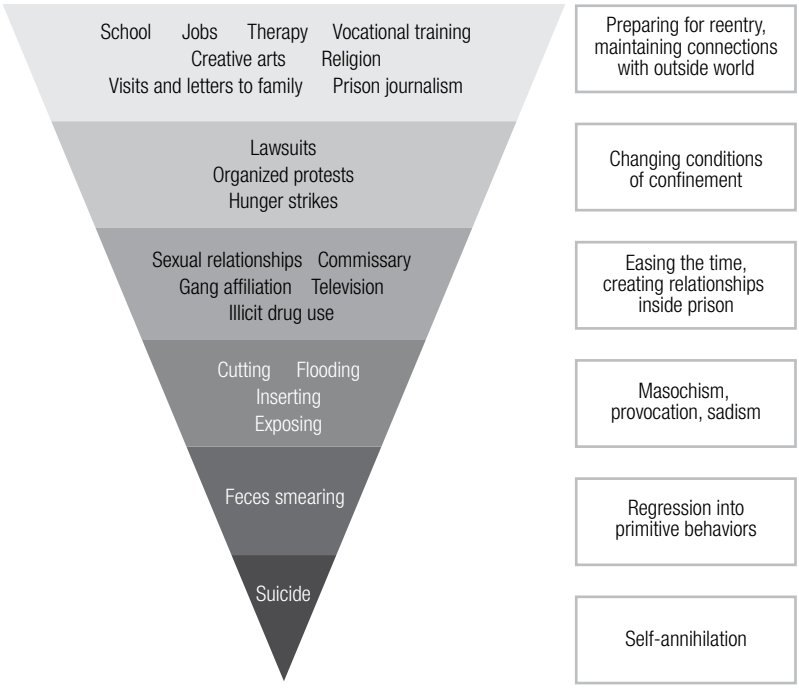
Of course, not all individuals react the same way to the conditions of restrictive housing. Human beings display great variation in their responses to any environmental stimulus, so why would restrictive housing be any different? Some prisoners may prefer to be in the less-stimulating conditions of confinement,

finding the decreased interpersonal contact comforting. Others will crave human contact and seek it out, sometimes in maladaptive ways such as self-injury or destruction of property. It should come as no surprise that researchers using different study groups and different methods have reached different conclusions about how prisoners respond to restrictive housing, as they may simply be accurately reporting about one small part of a complex whole.

When considering how individuals respond to restrictive housing, it is helpful to conceptualize prison coping skills in a hierarchical manner. **Figure 1** illustrates some examples of how inmates cope with being in prison, moving from healthy skills (top of figure) to unhealthy skills (bottom).

When prisoners are placed in restrictive housing, it is often because they are using coping strategies in the middle of the hierarchy: engaging in sexual relationships, maintaining gang affiliations, or using illicit drugs. They no longer have access to those coping mechanisms after being placed in restrictive housing. Under their new circumstances, some are able to move up in the hierarchy of coping by writing letters, drawing, or working on legal challenges to their conditions of confinement. Other prisoners are not able to muster

Figure 1. Hierarchy of Coping Skills in Prison



the psychological resources they need. Instead, they move downward in the hierarchy to much more regressed behaviors: cutting themselves, flooding their cells, inserting objects into body cavities, and making suicide attempts.

Unfortunately, neither mental health clinicians nor prison officials have a reliable method of determining in advance which prisoners will do well in isolation and which will not. The risk created by this limitation is substantial, and prisoners may be harmed. This risk of harm, combined with the lack of convincing evidence that restrictive housing achieves greater safety and security, requires serious consideration about whether solitary confinement (at least for the purpose of administrative segregation or punishment) serves any useful purpose. Changes to restrictive housing practices will not happen overnight, but substantial reform is encouraged.

Research Directions

As described in the "Knowledge Gaps" section above, further study of many aspects of restrictive housing is necessary. Several high-priority areas are suggested below:

- Future research about restrictive housing should be conducted in accordance with established scientific principles, with clearly delineated methods, variables, and outcome measures.
- Once outcome measures are defined, the characteristics of prisoners and characteristics of confinement that result in particular outcomes (both positive and negative) should be studied and delineated.
- The effect of mental health treatment and out-of-cell programming on the psychological symptoms and psychosocial functioning of prisoners in restrictive housing should be studied systematically.
- Prisoners placed in restrictive housing should be evaluated for any long-term psychological and functional outcomes of this housing.

Clinical Practice

The practice guidelines established by the American Psychiatric Association, American College of Correctional Physicians, National Commission on Correctional Health Care, American Academy of Child & Adolescent Psychiatry, and American Public Health Association should be supported. In addition, numerous factors not raised in the professional organization guidelines but supported by research are also important:

- Efforts should be made to ensure that interactions between staff and prisoners in restrictive housing settings are fair and respectful. Humiliation and degradation should not be part of the experience.
- Restrictive housing programs should include both positive and negative incentives for prisoners who change their behavior in positive ways; such programs should not rely solely on punishment and deprivation as management tools.

Systems Change

Restrictive housing units often serve as the "treatment setting" of last resort in correctional systems without adequately developed mental health systems. Therefore, the following changes to correctional systems are recommended:

- Alternatives to restrictive housing units should be developed, particularly for prisoners with mental illness. Adequate funding should be allocated for their design, implementation, and evaluation.
- Prison systems should implement evidence-based affirmative programming that develops prosocial skills in prisoners.
- Correctional staff should be trained in techniques for preventing or defusing critical situations that would otherwise lead to placing prisoners into restrictive housing.
- Access to mental health services should be expanded for all prisoners, as providing proactive treatment has the potential to decrease behaviors that result in restrictive housing placement.

Conclusion

The relationship between restrictive housing and mental health is complex, with many more nuances than are initially apparent to the casual reader of the solitary confinement literature. Many questions remain unanswered. However, this literature review has raised enough questions about the psychological effects of restrictive housing to warrant a large-scale reassessment of our current correctional practices. In particular, the disproportionate number of prisoners with mental illness who are placed in restrictive housing is troubling, and the setting itself confers significant risk of suicide and self-injury. Even if scholars disagree about how and why these poor outcomes occur, no one can deny that they do occur. To move forward, corrections officials and mental health professionals must work together to create systems of care that improve the health of prisoners while also maintaining institutional safety.

To their credit, a number of state correctional systems have begun the difficult process of developing and implementing alternatives to traditional restrictive housing practices, particularly for individuals with mental illness. Systematic assessment of these new programs is critical. Using established scientific methods to conduct the assessments is essential to minimize the potential for bias or error, particularly in an area as controversial as restrictive housing. Through this combination of clinical innovation and rigorous scientific investigation of outcomes, real progress in the field is possible.

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CHAPTER 7

Critical Research Gaps in Understanding the Effects of Prolonged Time in Restrictive Housing on Inmates and the Institutional Environment

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Introduction

This white paper reviews the state of research on the effects of prolonged time in restrictive housing on inmates and the institutional environment of prison systems. It then identifies prominent research gaps that warrant attention in efforts to guide future policy. The summary assessment is that there exists too little credible research to state with confidence the effectiveness of restrictive housing. The practice may produce benefits, such as improved inmate behavior and reduced recidivism. It also may produce harms, including worsened inmate behavior and mental health and higher rates of recidivism. Additional benefits and harms may exist, but extant research has not provided a consistent scientific basis for establishing them.

What is the context for evaluating the effects of restrictive housing? Prison systems seek to incapacitate and rehabilitate individuals who have committed crimes and to do so in a way that protects society, prison personnel, and inmates. Achieving these goals is challenging. Those who go to prison do not want to be there and may be prone to violence and violating rules. They also may act violently or break rules in response to prison conditions. How prisons are run may affect inmates as well. In addition, the prison system may implement rules, programs, services, vocational training, educational training, and other measures that may decrease or increase misconduct. When prison systems work well, inmates, officers, and other staff are safe; programming, services, and treatment are provided; and inmates returned to society are less likely to reoffend. When these systems do not work well, inmates and officers are harmed; programming, services, and treatment are minimal; and recidivism rates are high.

Corrections officials employ different strategies for promoting safety and order. One strategy is restrictive housing, which typically involves confining inmates who may pose a threat to prison safety and order alone in a single cell for varying periods of time. Various terms have been used to capture this idea — supermaximum ("supermax") housing, administrative segregation, extended isolation, restrictive housing, and so on. Inmates housed in this way may be confined to their cells for up to 23 hours per day and have few privileges. This housing is costly to build and operate, and yet may be critical to maintaining safety and order. Alternatively, it may be ineffective, harmful, or less cost-efficient than alternative strategies for managing inmates and prison systems.

The use of restrictive housing increased dramatically in recent decades. Its use was justified in part by the idea that it would help manage disruptive and violent inmates (King, 1999; Riveland, 1999; Briggs et al., 2003; Neal, 2003; Bruton, 2004; Browne et al., 2011; Mears, 2013; Ross, 2013; Baumgartel et al., 2015; Richards, 2015). In this time, concerns have been raised about the need, effectiveness, or appropriateness of this type of housing. These concerns have escalated in recent years, centering on its potential harms and overuse. A recent national estimate indicates that as many as one in five inmates in prison or jail spend time in restrictive housing (Beck, 2015:1). Members of the U.S. Supreme Court and Congress have called for reforms, as have the President and the Federal Bureau of Prisons. In response, state departments of corrections have begun reviewing their policies for placing inmates in restrictive housing (Durbin, 2012, 2013; Goode, 2012; Mears, 2013; U.S. Government Accountability Office, 2013; McGinnis et al., 2014; Baker & Goode, 2015; Baumgartel et al., 2015; Obama, 2016; U.S. Department of Justice Work Group, 2016). Central to discussions about this type of prison housing are questions about the conditions under which it is appropriate (leading to improved outcomes) and the conditions under which it is inappropriate (potentially leading to adverse outcomes).

Table 1. The State of Research on Restrictive Housing's Impact on Inmates, Prisons, and Society

Question	Answer
1. Definition?	Varied; no clear consensus.
2. Goals?	Varied; no clear consensus.
3. Need?	Unclear.
4. Theory?	Unclear and varied.
5. Implementation?	Largely unknown.
6. Impacts?	Largely unknown; adverse effects on inmate mental health seem likely.
7. Cost-efficiency?	Unknown relative to various other approaches for achieving system goals.
8. Critical research gaps?	Many.

The limited evidence of restrictive housing's effectiveness stems from the fact that few credible studies of impact exist. It also stems from more fundamental issues — a lack of consensus about the definition of such housing, ambiguity about its goals, a lack of coherent theory underlying its use, and limited assessment of how it is used. Clarity and information about each of these dimensions is essential for understanding and evaluating the impact of restrictive housing (e.g., goals dictate which outcomes matter). Accordingly, this paper discusses these topics before reviewing what is known about the impacts of restrictive housing and, in turn, the cost-efficiency of such housing relative to other strategies for managing prisons and inmates. It then identifies critical gaps in the present research and addresses questions that remain unanswered. Table 1 summarizes the state of research across all of these dimensions.

To arrive at this assessment, the paper discusses the following topics:

1. Definitional challenges associated with discussions of and research on restrictive housing and, by extension, with evaluations of its impacts.

2. The goals of restrictive housing and their importance for conducting and interpreting research on it.

3. The need for restrictive housing and the relevance of need for assessing impact.

4. The theory behind such housing and its relevance for anticipating and identifying its impact on inmates and their families, as well as on officers, prisons, and communities.

5. The implementation of restrictive housing and its relevance for creating beneficial or harmful impacts.

6. The impacts of restrictive housing on inmates and their families, as well as on officers, prisons, and communities.

7. The cost-efficiency of restrictive housing.

8. Critical research gaps and questions that ideally will be addressed to advance science, promote accountability, and place prison system management strategies on a more evidence-based foundation for achieving a variety of prison system goals.

The first five topics to be discussed dictate the outcomes that are relevant for evaluating the impact of restrictive housing. When research is limited or absent for any of these factors, there is a direct ripple effect for interpreting impact evaluation findings. For example, if a study shows that a prison system consistently employs restrictive housing for "nuisance" inmates, it would raise questions about how to interpret a finding that such housing reduces prison system violence. With the final three topics, the paper turns to discussing impacts, cost-efficiency, gaps in the research, and questions that remain unanswered.

The methodology for the literature review was guided by several considerations. First, given the broad scope, the paper focused on identifying general findings, patterns, and issues that have been identified in the empirical literature on restrictive housing. To this end, published empirical research, as well as reviews of research, on various aspects of restricted housing were reviewed (e.g., who is sent to such housing, its effects on recidivism). Second, primary emphasis was given to works published in peer-reviewed academic journals, though reports published by public and private research organizations were also reviewed. Third, works were consulted that may not have specifically used the term "restrictive housing" but nonetheless focused on what amounts to such housing. Fourth, the review primarily examined empirical research that emphasized the long-term effects of restrictive housing on inmates.

Definitions

Discussions of restrictive housing are plagued by inconsistencies in defining exactly what constitutes such housing. This issue is described here to establish the foundation on which any account of restrictive housing descriptions, estimates, uses, goals, or impacts rests.

What Is Restrictive Housing?

"Restrictive housing" does not refer to a single type of correctional housing design. Broadly, it involves the isolation of some inmates in single-cell confinement with little or no access to services, programming, privileges, or other people, regardless of the particular goal of such confinement. Additionally, a variety of terms are used to describe that situation. In some cases, one term appears to describe different types of housing and goals, while in other cases, different terms may describe similar housing and goals. In addition, there can be considerable variation in the precise conditions or experiences that constitute restrictive housing.

Accordingly, before discussing the state of empirical evidence on restrictive housing, this paper reviews the variation in terminology, goals, and the "nuts and bolts" of what counts as restrictive housing. The bottom-line assessment, though, is that differences in terminology make it difficult to arrive at clear or definitive statements about the state of empirical research on restrictive housing.

The Problem of Varying Terminology

One source of confusion in discussing restrictive housing is the varying terminology used by federal and state governments to describe what appears to be the same thing — extended isolation in single-cell confinement with limited access to programming, services, treatment, visitation, or the like, which has been a mainstay of prison systems for many decades (National Institute of Corrections, 1997; Henningsen et al., 1999; King, 1999; Naday et al., 2008; Mears, 2013; Ross, 2013; Frost & Monteiro, 2015; Richards, 2015). This variation in terminology may indicate important differences in the goals or design of specific housing. It may also mask similarities. For example, a study undertaken at the behest of the National Institute of Corrections found that states used the following terms to describe what appeared to be similar housing: "special housing unit, maxi-maxi, maximum control facility, secure housing unit, intensive management unit, and administrative maximum penitentiary" (Riveland, 1999:5). That report described all such housing as "supermax housing." In the past two decades, increased attention has turned to supermaximum (supermax) security housing, in large part because many states used this terminology (Mears, 2006).

More recently, however, attention has centered on the term "solitary confinement," in part because of calls by some legislators for reforms in the use of inmate isolation (Sen. Dick Durbin 2012, 2013; Shames et al., 2015). Despite this shift toward "solitary confinement" and "isolation" terminology, many policymaker, advocacy, and scholarly accounts appear to refer to the same underlying phenomenon of extended stays in single-cell confinement for up to 23 to 24 hours per day. At the same time, there continue to be widespread references to supermax housing and to various other terms, such as "administrative

segregation" and "segregated housing," that denote extended isolation in such confinement for months or years. The terms segregation, solitary confinement, and isolation all underscore that a central feature of this type of housing experience is that inmates typically reside alone in a cell, rarely leaving it except for an hour or two each day, depending on the inmate's behavior.

Most recently, another term — restrictive housing — has come into use (Kane et al., 2013; McGinnis et al., 2014; Baumgartel et al., 2015; Beck, 2015). It, too, is defined as an extended stay in, typically, single-cell confinement with limited access to programming, services, treatment, and so on. However, this term has the potential virtue of avoiding some ideological connotations that other terms, such as supermax housing, may convey. In addition, the Association of State Correctional Administrators (ASCA) uses this term and has emphasized that it covers a range of housing conditions captured by various prison classification systems, though it states that the term should not be used to include protective custody (Association of State Correctional Administrators, 2013:1). Other reports use restrictive housing to refer to administrative segregation but not to segregation that is used for punishment or protective custody (Baumgartel et al., 2015:11).

This definitional ambiguity is amplified by the lack of clear operational definitions and by state administrators and researchers who use the different terms interchangeably. It is amplified, too, by the fact that inmates may experience lengthy stays in single-cell housing regardless of whether they were placed there for protective custody, punishment, or management goals.

The Problem of Varying Goals

Another source of confusion is that the goals associated with restrictive housing (or analogous terms) vary. The following three-category typology, based on different goals, is frequently used to distinguish different types of restrictive housing (Mears & Watson, 2006; Shalev, 2009; McGinnis et al., 2014; Shames et al., 2015).

The first goal is restrictive housing to protect an inmate, which is known as protective custody housing. It provides temporary protection of an inmate. Typically, inmates would not be housed for an extended stay in isolation merely for their protection; however, inmates may well serve many months in such housing for this purpose.

The second goal is restrictive housing to punish an inmate, which is known as punishment or disciplinary custody. Here, again, lengthy stays in isolation should be unusual, but lengthy stays may occur. Prison system rules may prohibit stays of more than a set period of time (e.g., 30 days), but exceptions exist. Inmates, for example, might violate rules or act violently while in punitive segregation, thereby activating a new or extended stay. Alternatively, inmates' status might

change; they may transition from punitive segregation to segregation for the purpose of achieving some management goal. Once again, the frequency of such extended stays is largely unknown.

The third goal is restrictive housing to isolate inmates for some management reason. There is no specific naming convention for this sort of isolation beyond suggesting that it serves managerial purposes. Restrictive housing may be used, for example, to manage the "worst of the worst" inmates (Henningsen et al., 1999; King, 1999; Riveland, 1999; Mears, 2006, 2008b, 2013; Mears & Watson, 2006; Shalev, 2009; Butler et al., 2012; Richards, 2015). The meaning of "manage" frequently is not clear. The term might refer to any of a range of possible goals. One national study of supermax housing, for example, asked corrections officials and wardens for their views of the goals of such housing. The respondents reported that the goals included (Mears & Castro, 2006; Mears & Watson, 2006) —

- Increasing prison safety systemwide.
- Increasing prison order systemwide.
- Reducing the likelihood of prison riots.
- Incapacitating violent inmates.
- Improving the behavior of inmates who experience supermax confinement.
- Reducing the influence of gangs in prisons.
- Increasing public safety.

The Problem of Varying Designs

Yet another source of confusion in discussions about restrictive housing is variation in the nuts-and-bolts design of the housing (National Institute of Corrections, 1997; Riveland, 1999; King, 1999; Toch, 2003; Pizarro & Stenius, 2004; Naday et al., 2008; Shalev, 2009; Butler et al., 2012; Ross, 2013). The following questions illustrate this confusion. What building structures are considered restrictive housing — a separate housing unit, a wing of a building, a set of designated restrictive housing cells? Is technology of some type required? Does such housing always entail single-cell confinement or can it include housing two inmates in the same cell for extended periods? Does the duration of the stay matter? Does the inmate need to spend 23 hours per day in the cell, or would 16 or 22 hours per day suffice? Does an individual need to be held in such housing for a minimum number of days? Does the precise goal matter in identifying housing? For example, does confining an inmate in isolation for 36 hours to help him or her to "cool down" count as restrictive housing? Is it necessary that inmates have limited privileges, including limited access to

programming, services, treatment, visitation, and so on? Just how intense do the limitations need to be to create conditions that amount to restrictive housing?

No agreement exists about such issues. The reality is that restrictive housing refers to a highly heterogeneous set of conditions. In many cases, the heterogeneity may mask a core commonality: extended isolation with little or no access to programming, services, treatment, or visitation. In other cases, the heterogeneity may signal important nuances that differentiate the experience of restrictive housing from one facility or state to another.

The Relevance of Varying Definitions, Goals, and Design

These sources of confusion have compromised the ability of different parties — policymakers, practitioners, advocates, researchers, and so on — to talk meaningfully or accurately about restrictive housing. In some cases, these groups may be discussing the same phenomenon, but in others they may be discussing different phenomena. Conversely, it may appear that the same phenomenon is under discussion when in reality different phenomena are being compared. The situation is unfortunate because definitions, goals, and prison design matter.

First, definitions — If different housing types are being compared using similar terminology, then the risk is that incorrect inferences will be drawn about the effects of a given housing type. Similarly, if two types of housing share important similarities, then differing terminology may create the impression that the two types are fundamentally different from one another.

Second, goals — Goals matter greatly for evaluating the need, theory, use, impact, and efficiency of restrictive housing. If the goal is to punish inmates, then an assessment of the extent to which punishable behavior warrants restrictive housing should be undertaken. An assessment of the extent to which the punishment in fact constitutes punishment, on theoretical grounds, also should be undertaken. In addition, an assessment of impact is needed. (Some inmates may seek to be placed in restrictive housing, which highlights the fact that such housing is not intrinsically punishment (Lovell et al., 2000; Mears & Watson, 2006; Mears, 2013). Not least, the extent to which restrictive housing results in greater benefits than costs — ideally more so than some alternative strategy — should be assessed. Similar assessments are needed for each goal of restrictive housing.

Third, design — The conditions of restrictive housing also matter for evaluating its impact. Different combinations of restrictive housing features or experiences may result in varying effects on inmates or prisons. For example, a prison system in which restrictive housing involves stays of four to six months with as much programming, services, and treatment as can be provided may well result in different effects on inmate mental health, misconduct, or recidivism compared to

a system where restrictive housing involves much longer stays and limited or no programming, services, or treatment.

Restrictive Housing Defined

For this white paper, restrictive housing is defined as single-cell confinement for relatively extended periods with limited or no access to programming, services, treatment, visitation, and the like. Goals for its use are protective custody, punishment, or any of a range of specific management objectives. This definition recognizes that lengthy stays in restrictive housing may occur regardless of whether inmates are placed there for protective custody, punishment, or a managerial reason. It also recognizes that some restrictive housing may allow for two inmates per cell. The primary commonality in discussions about extended isolation is that inmates are isolated from others, so this paper defines restrictive housing as single-cell confinement.

An advantage of this definition is that it accords with many sorts of restrictive housing — administrative segregation, supermax prisons, extended isolation, and so on — as well as with the 2015 Bureau of Justice Statistics (BJS) national study of restrictive housing (see, generally, National Institute of Corrections, 1997; Beck, 2015; Riveland, 1999; King, 1999; Rhodes, 2004; Naday et al., 2008; Shalev, 2009; Association of State Correctional Administrators, 2013; Mears, 2006, 2013; U.S. Government Accountability Office, 2013; Kane et al., 2013; Ross, 2013; Gendreau & Labrecque, 2015; Labrecque, 2015a; Morris, 2015). In addition, it recognizes that restrictive housing may begin for one purpose (e.g., management) but continue to be used for another (e.g., punishment). Even so, a disadvantage of this definition is that it obscures the fact that extended isolation may vary greatly with respect to factors such as goals, design, and operations. The only alternative to consistently using "restrictive housing" or some other term is to standardize a typology of housing that all prison systems might agree to use and follow. Such a typology does not currently exist (Beck, 2015).

In the end, the general concern appears to center around extended isolation, regardless of the particular goals or characteristics of facilities, and the need to ensure that it is used only when necessary.

Restrictive Housing Inmate Estimates

Prior to the 2015 BJS study, estimates of the prevalence of inmates in restrictive housing varied considerably and did so based on less credible sources of information than the data obtained from the large survey sample of inmates who were interviewed for the study. Before discussing the BJS estimates, several previous sources of information warrant discussion.

In 1996, the National Institute of Corrections examined the prevalence of supermax housing. The Institute's definition of supermax housing was as follows:

> *In this survey, 'supermax' housing is defined as a free-standing facility, or a distinct unit within a facility that provides for the management and secure control of inmates who have been officially designated as exhibiting violent or serious and disruptive behavior while incarcerated. Such inmates have been determined to be a threat to safety and security in traditional high-security facilities, and their behavior can be controlled only by separation, restricted movement, and limited direct access to staff and other inmates* (National Institute of Corrections, 1997:2).

The Institute excluded from consideration protective custody and disciplinary segregation. Even so, it found that supermax housing is sometimes used for "routine segregation purposes (e.g., discipline, protective custody, and program segregation)" (National Institute of Corrections, 1997:3). The Institute provided no national estimate, though its report indicated that "there are at least 57 supermax facilities/units nationwide . . . providing a total of more than 13,500 beds" (National Institute of Corrections, 1997:3).

In 1999, Roy King used the Institute's information to estimate that in 1998 there were 20,000 inmates — approximately 2 percent of all state and federal inmates — serving time in supermax housing (King, 1999). Two-thirds of states had such housing and others had plans for building it (King, 1999; Riveland, 1999).

In 2006, drawing on a national survey of prison wardens, an Urban Institute study undertaken by Daniel P. Mears estimated that, in 2004, 44 states had supermax housing. The definition used was similar to that used in the National Institute of Corrections study:

> *For the purposes of this survey, a supermax is defined as 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* (Mears, 2005:49).

Using this information and that of the King estimate, the Mears study estimated that approximately 25,000 inmates served time in such housing, and emphasized both that the number was a rough approximation and that it likely underestimated the true prevalence of supermax incarceration (Mears, 2005:40).

In 2008, Alexandra Naday and colleagues estimated that the number of inmates in supermax housing nationally ranged from a low of 5,000 to a high of 100,000, with the most frequently cited estimate being around 20,000 (Naday et al., 2008:77). In recent years, the 2004 estimate of 25,000 from the Urban

Institute study has prevailed and, for example, surfaced in the *Davis v. Ayala* 2015 U.S. Supreme Court decision.[1] Naday and colleagues examined the basis for the counts of supermax housing provided in these sources and argued "that disagreements about definitions, changing policies and court decisions, reporting and recording errors, and different counting procedures have led to a lack of reliable and valid data on supermax" housing (Naday et al., 2008:69). They noted, for example, that the National Institute of Corrections study expressly excluded any segregation housing used for protective custody or disciplinary segregation (Naday et al., 2008:72). They also observed that the count estimates provided by the American Correctional Association and the Criminal Justice Institute stemmed from a definition that focused on the conditions of supermax housing and largely ignored the various uses for solitary confinement, thus creating a discrepancy between this definition and that of the National Institute of Corrections (Naday et al., 2008:72). The authors then identified marked inconsistencies in the security-level status of many facilities throughout the country, noting that various studies used operational capacity rather than actual utilization rates, thereby creating different estimates. The authors concluded that such variation, as well as inconsistent definitions across states and in studies, made it difficult to arrive at a valid estimate of the number of inmates who experienced supermax housing.

In 2014, Yale Law School, in conjunction with ASCA, conducted a survey of state and federal corrections administrators about the use of administrative segregation (Baumgartel et al., 2015). The results suggested that 66,000 prisoners in the 34 jurisdictions that provided counts were "in some form of restricted housing — whether termed 'administrative segregation,' 'disciplinary segregation,' or 'protective custody'" (Baumgartel et al., 2015:ii). The report then noted, "If that number is illustrative of the whole, some 80,000 to 100,000 people were, in 2014, in segregation." The numbers did not include individuals in restrictive housing in jails or juvenile custodial facilities (Baumgartel et al., 2015:ii). This estimate was based on self-reports from corrections administrators, so its accuracy is unknown (Baumgartel et al., 2015:12).

The BJS study was published in 2015. Based on a national survey sample of 91,177 inmates in state and federal prisons and jails, the study provides, arguably, the most accurate current estimate of restrictive housing prevalence nationally. It bears emphasizing, however, that prior studies used varying definitions and data sources. As a result, anyone comparing the estimates should be aware of

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[1] *Davis v. Ayala*, 135 S. Ct. 2187, decided on June 18, 2015, concerned a case involving peremptory challenges that were alleged by Ayala to have been race-based; the Court reversed the judgement of the Court of Appeals for the Ninth Circuit. The legal aspects of the case did not involve restrictive housing. However, Justice Kennedy, in a concurring opinion, took note of the fact that the respondent, Ayala, had spent the bulk of his term of incarceration, since receiving a death penalty sentence in 1989, in solitary confinement. Justice Kennedy then noted that 25,000 inmates were estimated to be serving their sentence in solitary confinement and criticized the use of such confinement, arguing that it was overused and caused harms to inmates.

those differences. The National Institute of Corrections study and the Mears/Urban Institute study, for example, used supermax terminology and thus focused primarily on the subset of inmates placed in restrictive housing for managerial purposes. Accordingly, the studies underestimated prevalence for all forms of restrictive housing. Conversely, the Yale/ASCA study focused on restrictive housing, defined as segregation that might include managerial purposes but also protective custody and punishment. The BJS survey asked inmates directly whether they were, or had spent time, in disciplinary or administrative segregation or solitary confinement (Beck, 2015:16).

According to the BJS study, the following prevalence estimates can be generated from its National Inmate Survey:

- An estimated **4.4 percent of state and federal inmates and 2.7 percent of jail inmates** were in restrictive housing on an average day in 2011-2012.
- An estimated **20 percent of prisoners and 18 percent of jail inmates** spent time in such housing in the prior year or since arriving at the facility where they were surveyed.
- An estimated **10 percent of prisoners and 5 percent of jail inmates** spent 30 days or longer in some form of restrictive housing (Beck, 2015:1).

BJS did not include counts of inmates. If the percentages above were applied to the year-end 2013 prison and jail population counts nationally, they would suggest the following:[2]

- An estimated **90,000 inmates** (70,000 prisoners and 20,000 jail inmates) reside in restrictive housing on an average day.
- An estimated **447,000 inmates** (315,000 prisoners and 132,000 jail inmates) spent time in restrictive housing in the past year or since arriving at their current facility.
- An estimated **195,000 inmates** (158,000 prisoners and 37,000 jail inmates) spent 30 days or longer in restrictive housing.

Several observations about these estimates warrant discussion. First, the percentages suggest that restrictive housing is used far more frequently than past estimates indicate. Given that prison populations have greatly increased in recent decades, restrictive housing is used for many more inmates than in prior years, and thereby may have greater effects on prisoners than previously thought.

Second, the fact that in one 10 inmates reports having spent at least 30 days in restrictive housing suggests that prior studies substantially undercounted inmates

[2] Glaze and Kaeble (2015:2) reported that, at year-end 2013, 1,574,700 individuals were incarcerated in state or federal prisons and that 731,200 individuals were incarcerated in jails.

in supermax housing. Inmates might well serve 30 days or more for protective custody or disciplinary confinement; however, this confinement may well be restricted primarily to situations in which an inmate is placed in isolation for a broader managerial purpose, which would fit more with the goal of supermax housing. If so, the estimate is, again, substantially greater than what has been suggested in prior studies of supermax incarceration.

Third, restrictive housing is common in jails. Accordingly, national discussions about restrictive housing should focus on both prisons and jails.

Fourth, if the percentages identified in 2011-2012 hold for current prison and jail populations, then prior counts of inmates in restrictive housing — including those held for protective custody, disciplinary segregation, and managerial segregation — are substantially underestimated. Upper-end estimates have indicated that 100,000 inmates are in solitary confinement. The estimates based on applying the BJS percentages to current (year-end 2013) prison and jail populations suggest that 195,000 inmates spent 30 days or more in restrictive housing, and that 447,000 inmates spent some time in such housing.

Fifth, restrictive housing exists in many other countries, but the United States appears to employ it more than other countries. However, little is known empirically about country-by-country differences in the design, uses, or effects of such housing (Ross, 2013; Richards, 2015).

Finally, it is unlikely that agreement about whether such housing is ever appropriate on moral grounds will occur (Mears & Castro, 2006; Mears & Watson, 2006; Mears et al., 2013). Regardless, it may be possible to garner agreement about its appropriateness based on whether its benefits exceed its costs and do so to a markedly greater degree than other approaches to achieving prison and jail goals.

Goals

Evaluation of a policy's impacts begins with clarity about its goals. There is, in fact, little clarity about the precise goals of restrictive housing. Instead, a range of goals for its use can be and have been articulated, which has greatly impeded progress in evaluating the impacts of restrictive housing. The lack of consistent, precise goals across studies is one reason that so little is known about its effectiveness. The different goals, and their implications for research on and discussions about restrictive housing, are discussed below.

Diverse Goals

Accounts of restrictive housing consistently identify that it can serve three goals: to protect some inmates, to punish others, or to achieve management goals, such

as incapacitating out-of-control inmates or creating more systemwide safety and order. Although protection and punishment appear to be straightforward goals, they are not. For example, it is not clear that isolation provides better protection than some other strategy or that it achieves some desired level of retribution. In addition, the management goals that might be achieved through segregation vary. The following goals associated with restrictive housing were identified by drawing on prior studies, particularly the Urban Institute study of supermax housing.[3]

Goal 1 — Increased systemwide prison safety, including fewer riots, murders, and assaults.

This requires improved conduct among inmates living in or released from restrictive housing and among general population inmates.

Goal 2 — Increased systemwide prison order.

Although safety and order are often viewed as a single concept, the two words represent distinct phenomena.[4] Whereas safety involves preventing violence or injury, order centers on the extent to which inmates adhere to rules, procedures, policies, and everyday routines. Disorder in a prison system might contribute to violence, but it need not do so. Conversely, an orderly prison system might experience violence. In any case, prison systems view order as a priority, one that they hope improves safety. Greater order may stem from inmates who experience restrictive housing, from all other inmates, or both.

Goal 3 — Increased control of prisoners.

Many accounts observe that restrictive housing serves to control certain prisoners. The meaning of control varies. For example, control can mean incapacitating an inmate who poses an immediate and pressing threat to safety, reducing an inmate's ability to instigate others, or providing an inmate with a setting in which to cool down before potentially harming themselves or others (Burt, 1981; DiIulio, 1987; Logan, 1993; Sparks et al., 1996).

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[3] Analysis indicates that restrictive housing serves many different goals in other countries as well (Ross, 2013; Richards, 2015).

[4] Full discussion of the results is provided in Mears (2005, 2006), Mears and Castro (2006), and Mears and Watson (2006). The identified goals are not necessarily prioritized by each state, and some states may prioritize one or more of them. They are ones that the Urban Institute study identified from interviews with state legislators and corrections officials and staff, a survey of state prison wardens, and from articles and reports on supermax housing (e.g., National Institute of Corrections, 1997; Stickrath & Bucholtz, 2003; Pizarro & Stenius, 2004; Shalev, 2009; Richards, 2015). Some states may prioritize one or more or all of the goals. In the Urban Institute study, supermax housing was defined in such a way as to include protective custody, punishment, and management goals. Analysis indicates that restrictive housing serves many different goals in other countries as well (Ross, 2013; Richards, 2015).

Goal 4 — Improved behavior of violent and disruptive prisoners (Stickrath & Bucholtz, 2003).

Improved behavior among this population should contribute to greater prison safety. With restrictive housing, however, the emphasis is on safety that results from rehabilitation or some other change in the inmate, as opposed to safety that results solely from incapacitating the inmate. Corrections officials in the Urban Institute study who emphasized this goal also emphasized the goal of successfully reintegrating inmates from restrictive housing back into the general prison population (Atherton, 2001). From this perspective, success includes not only incapacitating the inmate from engaging in or inciting violence or misconduct but also promoting successful reentry into general population facilities.

Goal 5 — Reduced gang influence.

Many accounts point to restrictive housing as a way to reduce gang influence in prisons (Mears & Watson, 2006; see also Ward & Werlich, 2003). This outcome can be viewed as a goal in and of itself or as a means to achieve other goals, such as improved systemwide prison safety or order.

Goal 6 — Protection of certain inmates.

Some inmates may be at risk of victimization and may warrant special housing to protect them. In such cases, such housing would not necessarily need to be restrictive (e.g., 23 hours per day in solitary confinement) unless a particular need for certain restrictions existed. Stays in such housing typically would not be extended, though it is possible that inmates placed in restrictive housing for protection may reside there for extended periods. Such circumstances may stem from the need for further protection, misconduct committed while in restrictive housing, or some other reason.

Goal 7 — Punishment.

Restrictive housing may be used to punish inmates. Punishment can be viewed as a goal in and of itself — in such cases, it constitutes retribution. How much retribution is appropriate within prisons for various infractions or crimes is not well-established. Since no clear consensus exists, prison systems institute sanctions, within legal limits, that become established practice. Punishment can also implicate several related goals. It can be viewed as a means to other ends, such as public safety. For example, it can serve to deter an inmate from engaging in problem behavior again. It can also serve as a general deterrent that reduces the likelihood that other inmates will engage in violent or disruptive behavior.

Goal 8 — Increased public safety.

Restrictive housing can be viewed as a strategy for increasing public safety. A legislator in one study commented, for example, that a low escape rate might serve to show a supermax prison's effectiveness (National Institute of Corrections, 1997; Austin et al., 1998; Grann, 2004; Pizarro & Stenius, 2004; Reiter, 2012). Recidivism is, in general, a metric that has been used to measure the effectiveness of corrections.

Goal 9 — Improved correctional system efficiency.

There are several strategies for achieving various prison system goals. Restrictive housing can be viewed as a cost-effective strategy for achieving these goals (Mears & Watson, 2006). For example, instead of dispersing violent or disruptive inmates throughout the prison system, concentrating them in one place creates potential economies of scale, including reduced transportation and staff training costs (Hershberger, 1998).

Evaluating Restrictive Housing — Need, Theory, Use, Impact, and Efficiency

Identification of relevant goals is essential for evaluating the need for restrictive housing, the theory that guides its use, whether its use is appropriate, its impacts, and its efficiency. These dimensions — need, theory, use, impact, and efficiency — collectively constitute what Peter Rossi and colleagues call "evaluation hierarchy," which provides a foundation on which to systematically assess a policy (Mears & Reisig, 2006; Mears & Watson, 2006).

Some examples might illustrate how evaluation hierarchy might work. If the goal is to punish certain inmates using restrictive housing, then information is needed about how many inmates engage in punishable behavior that warrants placement in such housing. Research is also needed on the theory underlying restrictive housing as punishment, the extent to which restrictive housing is used appropriately, and whether it in fact achieves a desired level of retribution.

By contrast, if the goal is to reduce prison riots, a parallel set of questions arises that center not on punishment but on riots. For example, to what extent do riots occur and to what extent are they caused by individual inmates? How many such inmates exist? By what logic will restrictive housing reduce their ability to cause riots? Are the inmates most at risk of inducing riots placed in restrictive housing, or are nuisance inmates placed in such housing instead? Does restrictive housing reduce riots? If so, does it do so more cost-efficiently than some other alternative?

These questions — those focused on need, theory, use, impact, and efficiency — are all specific to the particular goals associated with restrictive housing (Rossi

et al., 2004; Mears 2010). For example, if restrictive housing is used to improve systemwide prison safety and order, then evaluations that address each of these dimensions must be undertaken (Mears & Reisig, 2006). How much violence and disorder exists? What causes violence and disorder? Are a select few inmates the primary cause? How exactly will brief, intermediate, or long-term stays in restrictive housing improve safety and order? Are the inmates who contribute most to violence and disorder in fact in restrictive housing? How much systemwide safety and order result from the use of restrictive housing? What is the cost-benefit ratio? Is it greater than what might arise from other strategies for improving systemwide safety and order?

A Balanced Assessment of the Impact of Restrictive Housing

A balanced assessment of the impact of restrictive housing requires evaluation of the extent to which it contributes to its different goals. It also requires subjective assessments about which particular goals are most important. States may vary, for example, in the extent to which they use restrictive housing for one goal rather than another (Mears & Castro, 2006; Mears & Watson 2006). Accordingly, impact evaluations should assess how well restrictive housing achieves various goals and weight these goals against a state's stated goals for the housing.

In addition, even if restricted housing seeks to achieve only one goal, unintended impacts, whether positive or negative, should be considered in arriving at a balanced assessment of impact (Mears & Watson, 2006). For example, no state uses restrictive housing with the intended goal of worsening inmate mental health or recidivism outcomes, yet such housing may do so.

Need

Restrictive housing may be needed and may serve a critical role in achieving prison system goals. Alternatively, it may not be needed, and some other strategy may be more appropriate for achieving these goals or addressing specific problems. Accordingly, clarity about the need for restrictive housing is critical for understanding the extent to which it achieves various goals. The state of evidence to date provides little credible empirical basis for knowing whether or how much restrictive housing has been or is needed.

The Need for Restrictive Housing Depends on the Goal

Is restrictive housing needed? The answer depends on the goal. If restrictive housing serves to control especially dangerous, violent, or disruptive inmates, then there may be a need if such inmates exist. They assuredly do, and so need would be based on assessing how many such inmates warrant restrictive housing.

However, the situation is complicated by other goals that exist for restrictive housing. For each goal, a prison system will want to understand the prevalence of a particular problem that restrictive housing is intended to address. For example, if restrictive housing serves to punish inmates, how many individuals commit the kinds of acts that warrant placement in restrictive housing? How long can inmates be expected to reside in restrictive housing? By answering such questions, prison system officials might begin to determine how many restrictive housing beds it needs. Whatever the final answer may be, it will differ from the number arrived at if the focus is on a different goal, such as protecting inmates or reducing gang influence in prisons.

The Need for Restrictive Housing Depends on the Causes of Particular Problems

Whether restrictive housing is needed depends on the causes of the problems it is intended to address — perhaps an inmate cannot be protected through any other approach, perhaps an inmate committed an act that warrants punishment, or perhaps an inmate engaged in activities that somehow created problems that posed a risk to the prison system. In each instance, many facilities might determine that restrictive housing is needed. Typically, their focus would then shift to how many inmates fit these different profiles to determine how much restrictive housing should be built. However, this straightforward approach would be inappropriate for several reasons. Two examples illustrate why.

First, the need may not be for restrictive housing; rather, it may be for efforts that target the causes of the inmate behaviors. Poor staff professionalism or limited rehabilitative programming at a given facility, for example, might result in some inmates not receiving the protection they may need. These conditions also might contribute to other problems such as violence and infractions. Accordingly, in such situations, the need is not for restrictive housing. Instead, the facility may need to institute efforts that improve staff professionalism and increase rehabilitative programming opportunities (Sykes, 1958; DiIulio, 1987; Cooke, 1989; Sparks et al., 1996; Kassel, 1998; Reisig, 1998; Bottoms, 1999; Toch, 2003; Rhodes, 2004; French & Gendreau, 2006; Mears & Reisig, 2006; Mears, 2008a, 2013; Useem & Piehl, 2008; Browne et al., 2011; Cullen et al., 2014).

Second, the need may not be for restrictive housing; rather, it may be for first employing a continuum of alternative and less costly strategies. Restrictive housing has been described by corrections officials as a "last resort" option (Mears, 2013) — the equivalent of an emergency room in a hospital. Long before using this option, other, less costly options — such as promoting greater staff professionalism, ensuring fair and consistent enforcement of rules, improving officer and inmate culture, providing targeted programming that addresses each inmate's individual risks and needs, relying on evidence-based behavioral

interventions, and so on — should be considered (Sykes, 1958; DiIulio, 1987; French & Gendreau, 1996; Sparks et al., 1996; Reisig, 1998; Bottoms, 1999; Riveland, 1999; Gendreau & Keyes, 2001; Briggs et al., 2003; Mears & Watson, 2006; Shalev, 2009). In many instances, there may not be a need for restrictive housing but instead for more and better implementation of other options. If such options have been exhausted and behavior still falls short, then there may be a need for restrictive housing as another tool for addressing a particular problem.

In short, empirical assessment of the need for restrictive housing requires going well beyond identifying a certain number of inmates for protection, punishment, or some management goal. It requires explicit description of the precise problems that restrictive housing is intended to address and the goals that it is intended to achieve. It also requires empirical evaluation of the causes of these problems and the extent to which those causes can be addressed through less costly options. Not least, it requires evaluating the extent to which such options have been pursued in sufficient doses, or with sufficient fidelity, to reduce a particular problem. If they have not, then attention presumably should focus on improving the options, not in taking recourse in a more expensive one. With such analyses in place, the focus logically would turn to examining the need for restrictive housing.

Although there is little empirical evidence in the published literature that restrictive housing is needed, it appears likely that prisons do need some such housing. What is lacking, however, are empirically based evaluations that document the need for restrictive housing relative to the need for a range of other approaches that address the problems that restrictive housing is supposed to address. Instead, states by and large appear to have focused on forecasting based on current use. For example, if 500 inmates were in restrictive housing in a given year, a state might assume that the use was needed and would continue to incarcerate these inmates in restrictive housing. The state then might forecast a need to increase the number of restrictive housing beds based on an expected increase in the general inmate population. This approach largely sidesteps the issues of whether the actual use was needed in the first place or what the current need may be.[5]

The Need for and Impact of Restrictive Housing Depends on the Point of Comparison

Restrictive housing, especially when used for management purposes, may be viewed from at least two vantage points. The first is that such housing is rarely

[5] An illustration of the potential problems with this approach can be found in a National Public Radio (2012) interview with Walter Dickey, who was the director of the Wisconsin Division of Corrections from 1983-1987 and subsequently the Federal Monitor for the supermax prison at Boscobel, Wisconsin: "I think one of the things that's happened, at least in a lot of states, Wisconsin's one of them, is I think we grossly exaggerated the need for the supermax prison and overbuilt it, and I think, not surprisingly, when you've got empty cells in a crowded prison system, you tend to fill them up."

used. This characterized most state prison systems in the United States in the 1970s and early 1980s. When restrictive housing was rarely used, the question for many states would have been, "To what extent is restrictive housing needed in a context where it rarely is used?" Given the marked growth in restrictive housing in subsequent decades, states clearly viewed restrictive housing as greatly needed. However, there is little evidence that states systematically and empirically assessed the need for this growth.

The second vantage point is that such housing is used relatively frequently. This characterizes most states in contemporary America. The question for many such states is, "To what extent is the current level of restrictive housing needed?" Without a needs evaluation of the various problems that such housing is intended to address, as well as the options available to address them, it will remain difficult to answer that question.

Distinguishing between these scenarios is important, primarily to highlight that current use should not necessarily be viewed as appropriate or needed. Indeed, it may well be that past use consistently well exceeded the need or, in some states, fallen short of the need. In both scenarios, research would document the need empirically.

Theory

Theory, whether explicitly articulated or not, guides any policy or program.[6] Restrictive housing is no different (Mears & Watson, 2006; Mears, 2013.) It involves a causal logic: By changing some set of conditions or factors, restrictive housing creates improvement in outcome. Any policy or program that lacks a clear causal logic built on credible theory and research risks failure. A well-designed policy or program that builds on credible theory is more likely to provide clear guidance about implementation and to be effective. This axiom applies to all social policy arenas, including criminal justice and corrections (Rossi et al., 2004; Mears, 2010; Latessa et al., 2014). As discussed below, the theory guiding restrictive housing is unclear; ambiguity in the theory complicates evaluation of implementation and impact. It is a central reason why so little is known about the impacts of restrictive housing or what contributes, in extant studies, to any identified impact.

Ambiguity in the Theoretical Foundations of Restrictive Housing

Several ambiguities lie in the theoretical foundations of restrictive housing. The diverse goals associated with such housing create ambiguity because a single

[6] Theory guides research as well. Ideally, researchers and policymakers explicitly articulate the theory that guides their efforts. Doing so identifies potentially problematic assumptions as well as important information about how exactly a given phenomenon, or policy, contributes to a given outcome (Rossi et al., 2004; Mears, 2010).

treatment — restrictive housing — is unlikely to achieve each goal through the same causal pathways. Another source of ambiguity is the lack of clarity about how restrictive housing might achieve any particular goal. This paper describes prominent ambiguities in the theoretical or causal logic of restrictive housing.

First, with rare exception, the causal logic for restrictive housing has not been formally articulated. Exceptions exist, such as a theoretical analysis of supermax housing and how it might affect prison system safety and order (Mears & Reisig, 2006). However, states have not undertaken such analyses for particular housing goals that they seek to achieve through restrictive housing (e.g., increasing prison system safety or order, increasing control of prisoners, improving behavior of violent or disruptive inmates, reducing gang influence, protecting certain inmates, punishing certain inmates, increasing public safety, and improving correctional system efficiency) (Mears & Reisig, 2006).

Second, the theory by which restrictive housing might achieve certain goals rests on questionable assumptions. Several examples illustrate this issue.

Increasing systemwide safety and order. Restrictive housing has been viewed as a primary strategy for increasing systemwide safety and order. One theory is that inmates in restrictive housing, as well as those in the general population, will be deterred from misconduct. However, any such effect depends on restrictive housing meeting certain conditions required for deterrence to occur, including objective and perceived certainty, celerity, and severity of punishment (Paternoster, 2010). For example, inmates in restrictive housing must view it as punishment; the fact that inmates sometimes seek to be placed in restrictive housing suggests that it is not always viewed as punishment (Suedfeld, 1974; Suedfeld et al., 1982; Lovell et al., 2000; Singer, 2003; Mears & Watson, 2006; Richards, 2015). At the same time, inmates in the general prison population may take stock of precisely what behaviors must occur to be placed in restrictive housing and engage in only those that stop short of what is likely to result in such placement (Pizarro & Stenius, 2004). In addition, perceived prison system misuse or abuse of restrictive housing may engender ill will among inmates directly or indirectly exposed to it. From the perspective of defiance theory, restrictive housing may contribute to more rather than less violence and disorder (Sherman, 1993; see also Ward & Werlich, 2003, regarding the "rage hypothesis").

Decreasing prison riots. In a number of states, restrictive housing increased in response to prison riots; in turn, its use was justified on the grounds that it could prevent riots from occurring. Riots in fact may stem from many causes, only one of which is a set of violent or disruptive inmates (Martin & Zimmerman, 1990; Boin & Rattray, 2004; Mears, 2008a). Officer professionalism and interactions with inmates, consistent rule enforcement, provision of various types of programming, and so on, all may contribute to reducing riots, while their absence may contribute to increasing riots (Useem & Kimball 1991; Sparks et al., 1996; Reisig, 1998; Bottoms, 1999; Gendreau & Keyes, 2001; Mears, 2008a;

Useem & Piehl, 2008; Morris et al., 2012). Restrictive housing does little to address these root causes of riots. Instead, its use proceeds from the assumption — one not supported by research — that a certain group of inmates constitutes the primary if not exclusive cause of riots.

Punishment. When the goal of restrictive housing is retribution, the assumption is often that inmates experience placement in such housing as punishment. However, it is unclear precisely which theory of punishment suggests that isolation constitutes a sanction that individuals experience as punishment or that agrees with societal views about appropriate levels of punishment. This observation underscores a more general issue: Punishment can consist of any of a wide range of possibilities in prisons (e.g., restricted privileges, transfer to a less desirable work assignment, fines, transfer to another facility). The manner in which restrictive housing fits within this range of possibilities, or which theory guides these possibilities, typically has not been articulated by prison systems. More generally, systems tend not to address the following questions: How does restrictive housing result in a desired level of retribution? What level of retribution is desired? How much time in restrictive housing achieves that level of retribution? A theory might shed light on such questions. The absence of such a theory implies that restrictive housing does not achieve in any obvious way intended levels of retribution for society or correctional systems.

The theoretical logic for how restrictive housing might achieve these and any of its other intended goals remains uncertain. Also uncertain is the extent to which the different assumptions underlying the logic are correct. For example, to what extent does incarcerating security threat group (gang) leaders prevent them from communicating with other gang members? If they are able to communicate despite segregation, then a central theoretical argument for restrictive housing would be undermined (Grann, 2004; Preer, 2004; Mears & Watson, 2006). Conversely, if restrictive housing does inhibit communication, and if no members "step up" to replace a gang leader placed in such housing, then it may be reasonable to expect gang violence to decline. In a related vein, placing an inmate in protective custody might reduce opportunities for victimization, but doing so depends on at least two factors: credible information about the risk to inmates, and other inmates not viewing protective custody as a negative signal about that inmate's character. In addition, protective custody itself does not target the prison conditions that might contribute to victimization of certain inmates.

Third, credible theoretical arguments that restrictive housing worsens a range of outcomes can be and have been articulated. A theoretical argument that restrictive housing worsens outcomes is not necessarily accurate, any more than the argument that restrictive housing improves outcomes. An ideal scenario for any policy, however, is when the theoretical arguments for it rest on credible theory and research, while the arguments against it do not. That scenario does not characterize restrictive housing. For example, restrictive housing does little to address known causes of inmate misconduct, recidivism, riots, or the like.

It potentially diverts resources and attention away from approaches that may be more effective and may create conditions that worsen inmate behavior. It reduces opportunities for inmates in restrictive housing to receive effective drug or mental health treatment and to maintain ties with family or friends. Use of restrictive housing also largely precludes provision of cognitive-behavioral counseling and other interventions that can improve inmate behavior and reduce recidivism. In addition, the sensory deprivation and isolation from others that occurs with restrictive housing may contribute to mental illness. In these instances and in others, scholars have traced theoretical mechanisms through which restrictive housing may create adverse outcomes (Sykes, 1958; McCorkle et al., 1995; Bottoms, 1999; Kurki & Morris, 2001; Haney, 2003; Rhodes, 2004; Irwin, 2005; King, 2005; Cloyes et al., 2006; Mears & Watson, 2006; Smith, 2006, 2008; Kupers, 2008; Kupers et al., 2009; Gawande, 2009; Shalev, 2009; Haney et al., 2015).

Fourth, restrictive housing does not address a variety of potential causes of inmate violence, prison disorder, gang influence, victimization of certain inmates, and so on. Focusing in particular on systemwide safety and order, Richard Sparks and colleagues noted that "what [special prison units] cannot do is magically to unlock the problem of order for a prison system as a whole" (Sparks et al., 1996:313). Some accounts depict state prison wardens as enthusiastically embracing restrictive housing because of the control that it affords over some inmates.[7] Others, however, suggest that wardens' views about the appropriateness and effectiveness of restrictive housing vary (Mears, 2006; Mears & Castro, 2006; Mears & Watson, 2006). Support for and perceptions of restrictive housing as a solution to prison problems[8] may stem from the fact that wardens often confront and must manage extremely dangerous individuals. Yet, restrictive housing in and of itself does not directly address the causes of a particular individual's behavior or, more generally, the causes of systemwide operations, safety, and order. Accordingly, on theoretical grounds, it is unclear whether restrictive housing can achieve many of the goals associated with it (King, 1999, 2007; Mears & Reisig, 2006).

Theory and Its Relevance for Evaluating Implementation and Impact

Advances in the theory underlying restrictive housing are directly relevant to evaluating its implementation and impact. For example, if restrictive housing is expected to achieve systemwide safety and order through specific deterrence, it should be used in such a way that this goal is achieved. That might include using restrictive housing only for those inmates who in fact may be deterred from bad behavior by placement in it. Similarly, if restrictive housing is expected to reduce

[7] Ward and Werlich (2003:59) reported that state prison wardens who visited the federal supermax facility at Marion, Illinois, indicated that they "had died and gone to heaven" because of the extensive control that the staff had over inmates.

[8] Lorna Rhodes (2004:36) has noted, for example, that "the dream of the perfect prison has deep historical roots."

gang influence, then it is important that only the most influential gang members are placed in it. Theory identifies, too, the intermediate outcomes that may be relevant to evaluating impact. In these and other instances, appropriate implementation requires clarity about the goals of restrictive housing, the types of inmates for whom it is appropriate, the "dose" of restrictive housing that may be most efficacious, and the treatment and services that may achieve the intended goals.

Credible theory is also relevant for increasing intended benefits and reducing unintended harms. For example, general deterrence does not require specific lengths of stay. Accordingly, it may be that placing more inmates in restrictive housing for short durations may be more effective than segregating fewer inmates for longer durations. Crime theories suggest that severing inmates' social ties and failing to address their criminogenic needs may contribute to more offending rather than less (Latessa et al., 2014; Mears & Cochran, 2015). From this perspective, greater gains in reducing misconduct or recidivism may arise either from not using restrictive housing or from combining its use with a variety of rehabilitative interventions.

Similar illustrations exist for the other goals associated with restrictive housing. In each instance, theory is needed that can guide evaluation of implementation and impact. Such theory can be used to identify aspects of restrictive housing that might be modified to maximize its beneficial impacts and minimize its harms.

Implementation

A necessary condition for restrictive housing to achieve its intended goals is that it house appropriate inmates and be operated according to design. Typically, full and quality implementation should be established prior to evaluating policies and programs and estimating their impact. Otherwise, failure to achieve intended goals may be due to poor implementation rather than poor program design (Rossi et al., 2004; Mears, 2010). To date, however, there are no systematic empirical accounts, by year, that document the extent to which the housing is used according to design (King, 1999; Kurki & Morris, 2001; Shalev, 2009; Mears & Bales, 2010; Browne et al., 2011; Katel, 2012; Mushlin, 2012; Reiter, 2012; Mears, 2013; U.S. Government Accountability Office, 2013; McGinnis et al., 2014). It is therefore not possible at present to know how (if at all) restrictive housing has contributed to the benefits or harms that have been ascribed to it.

Appropriate Implementation Depends on Goals

Determining the appropriate inmate population and operations of restrictive housing depends entirely on the goals associated with it. The ambiguity about the precise goals of restrictive housing — or the weighting of multiple goals — makes such determinations difficult. In addition, many states lack clear restrictive

housing designs or blueprints that detail the theory or causal logic that guides its use. Such blueprints would include information about the following: specific goals, types of inmates who warrant placement in restrictive housing, the length of time in restrictive housing necessary to achieve the goals, and the precise operations, services, and treatment that are collectively expected to achieve these same goals. Ambiguity about the goals, theory, or design of restrictive housing creates ambiguity about assessing implementation. By extension, ambiguity in assessing the extent to which restrictive housing is used appropriately — that is, as intended — creates ambiguity in determining how to interpret its estimated or assumed impacts (Mears, 2006, 2008b, 2013).

Appropriate Implementation of Protocols, Rules, and Procedures

The federal government and states have protocols, rules, and procedures for restrictive housing (National Institute of Corrections, 1997; Austin et al., 1998; Riveland, 1999; Neal, 2003; Bruton, 2004; Collins, 2004; Mears, 2006; Shalev, 2009; Butler et al., 2012; Association of State Correctional Administrators, 2013; U.S. Government Accountability Office, 2013; McGinnis et al., 2014; Richards, 2015). A review by Kenneth McGinnis and colleagues, for example, provided an extensive description of the Federal Bureau of Prisons' special housing units (McGinnis et al., 2014). They found substantial gaps in documentation assessing whether the Bureau's housing is used appropriately and with fidelity to its design. The review also found that although the "general conditions of confinement in restricted housing units are consistent with national regulations and standards, the Bureau does not have adequate non-punitive protective custody housing units that have equivalent levels of programs and privileges as general population inmates." They also found that "backlogs in inmates awaiting transfer to the next program level negate the intent of the program design and decrease the motivation to change behavior." In addition, the team found that "mental health services in restrictive housing require improvement in three specific areas: (1) proper mental health diagnoses, (2) more effective treatment, and (3) providing sufficient psychiatric staffing." The team concluded that "the lack of time parameters for completion of disciplinary hearings results in substantial variation among facilities in the amount of time served in segregation for similar offenses, and can result in disproportionately long sanctions" (McGinnis et al., 2014). It is likely that comparable reviews of state prison systems would identify similar gaps between intended and actual operations of restrictive housing (Riveland, 1999; Briggs et al., 2003; Pizarro & Stenius, 2004; Mears, 2006, 2013; Mears & Watson, 2006; Reiter, 2012; Labrecque, 2015b; Richards, 2015).

Appropriate Dose of Restrictive Housing

The proper amount, or dose, of any intervention or policy requires an explicit articulation of the theory and research that justify a given level of treatment.

Too little intervention may result in no improvement, and too much may be unnecessary and harmful. What dose of restrictive housing is required to protect or punish an inmate? What dose is required to deter both inmates who experience restrictive housing (specific deterrence) and general population inmates (general deterrence)? Finally, what dose is required to improve systemwide safety and order, reduce gang influence, or improve correctional system efficiency or public safety?

To date, few studies have documented the precise lengths of stay that inmates in restrictive housing experience, the frequency of their placement in such housing, or the percentage of all prison system inmates placed in restrictive housing at some point or another. Those few studies suggest that terms of confinement in restrictive housing can range from days, weeks, or months to 10 or more years; that inmates can cycle into and out of restrictive housing repeatedly; and that prison systems devote widely varying percentages of bed space to restrictive housing (Barak-Glantz, 1983; National Institute of Corrections, 1997; King, 1999, 2007; Mears & Bales, 2010; Reiter, 2012; U.S. Government Accountability Office, 2013; Beck, 2015; Shames et al., 2015). However, no clearly articulated theory exists that establishes the precise durations needed in restrictive housing, or the number of inmates who need to be placed in it, to achieve its various intended goals.

Appropriate Inmates for Restrictive Housing

Whether an inmate is an appropriate candidate for restrictive housing depends first on the goals and design of the housing. For example, if it is used for protective custody, then inmates should be placed in restrictive housing when they meet a predefined set of criteria that indicate they need protection that cannot be provided through less costly or intrusive strategies. If punishment is the goal, then only those inmates who engage in acts that warrant punishment should be placed in restrictive housing. Not least, if restrictive housing serves any of a range of more general managerial goals, then these goals — and the types of inmates whose placement in restrictive housing could achieve these goals — must be explicitly articulated . As discussed above, the varying goals and the ambiguity in the theory or design of restrictive housing complicate any assessment of its implementation. Some studies have described random (representative) samples or non-random (nonrepresentative) samples of inmates in restrictive housing, as well as reports about the characteristics of individuals in such housing (Suedfeld, 1974; Suedfeld et al., 1982; Haney, 2003; Mears & Castro, 2006; Mears & Watson, 2006; Shalev, 2009; Mears & Bales, 2010; Reiter, 2012; O'Keefe et al., 2013; McGinnis et al., 2014; Baumgartel et al., 2014; Beck, 2015; Helmus, 2015; Labrecque, 2015; Richards, 2015). These studies do not, however, establish clearly whether appropriate inmates have been placed into restrictive housing.

Perhaps the only clear area of agreement in the literature is that nuisance inmates and the seriously mentally ill should not reside in restrictive housing. Yet, nuisance inmates clearly can and do get placed in restrictive housing (Riveland, 1999; Lovell et al., 2000; Kurki & Morris, 2001; Pizarro & Stenius, 2004; Mears, 2006, 2013; O'Keefe, 2008; Shalev, 2009; Browne et al., 2011; Richards, 2015), as do seemingly large numbers of inmates with serious mental disorders (Kurki & Morris, 2001; Haney, 2003; Cloyes et al., 2006; Mears, 2006; Smith, 2006, 2008; Kupers, 2008; Lovell, 2008; O'Keefe, 2008; Kupers et al., 2009; Shalev, 2009; O'Keefe et al., 2011; Beck, 2015; Richards, 2015). The precise prevalence of nuisance inmates or the seriously mentally ill in restrictive housing — by state and over time — is unknown. However, a large number of studies and reviews have found that many inmates who are not appropriate for restrictive housing reside in it and may do so for extended periods of time, suggesting that facilities may not be using restrictive housing as an option of last resort (Riveland, 1999; Lovell, et al., 2000; DeMaio, 2001; Kurki & Morris, 2001; Haney, 2003; Pizarro & Stenius, 2004; Cloyes et al., 2006; Mears, 2006, 2013; Smith, 2006; Kupers, 2008; Lovell, 2008; Kupers et al., 2009; Shalev. 2009; Mears & Bales, 2010; Browne et al., 2011; O'Keefe et al., 2011; Baumgartel et al., 2015; Beck, 2015; Labrecque, 2015a; Richards, 2015; Shames et al., 2015).

Implementation and Impact

Appropriate implementation can be viewed as an important goal in its own right. From this perspective, state and federal prison systems ideally can provide empirical research that documents fidelity to the protocols, rules, and procedures for restrictive housing. Full and appropriate implementation is important, too, for determining whether restrictive housing can or is likely to produce intended outcomes. Accordingly, the absence of systematic empirical research on the implementation of restrictive housing means, by extension, that it will remain difficult to determine whether restrictive housing can be credited with achieving the goals set forth for it.

Impacts

Research on restrictive housing impacts can be summarized briefly. First, extant research does not provide a credible foundation on which to assert with confidence the impacts of restrictive housing in general or in specific prison systems. Second, few empirical studies of restrictive housing impacts have been undertaken. Third, extant studies examine only a small number of relevant outcomes. Fourth, these studies typically have not relied on strong methodological designs — including the use of relevant comparison groups or conditions — which makes it difficult to know whether restrictive housing causes observed outcomes. Fifth, even if many credible evaluations of impacts across a

range of outcomes existed, questions would remain about how to interpret them because the need for and the theory and implementation of restrictive housing have not been well established empirically. For example, if an evaluation found that restrictive housing failed to improve systemwide safety and order, that failure might be due to faulty design (e.g., restrictive housing simply does not work) or poor implementation (e.g., the inmates most appropriate for such housing were not placed in it).

Collectively, these limitations underscore the considerable need for caution in drawing conclusions about the impacts of restrictive housing. The discussion below identifies potential impacts, intended or not, of restrictive housing (Mears & Watson, 2006). Because impact assessments hinge entirely on identifying the appropriate counterfactual — that is, what would have happened had restrictive housing not been used — this issue is discussed first. The discussion then turns to the potential impact of restrictive housing on prison safety and order, inmates during and after release (including re-entry to society), retribution, gang influence, society, and prison system operations. The discussion also describes potential impacts of not using restrictive housing when it may be needed and, conversely, of using it when it may not be needed.

Impacts and Counterfactuals

A valid evaluation of the impact of restrictive housing requires information about what a prison system would have done instead of using restrictive housing. Unfortunately, it frequently is not clear what the counterfactual condition entails. Would a prison system have continued to employ its typical array of strategies for addressing a particular problem? Invested more in one particular strategy, such as strategically dispersing inmates throughout the prison system? Built a new maximum security prison? Increased treatment and rehabilitative programming? Improved officer training? Promoted cultural change among officers and inmates?

In each instance, what the prison system would have done likely depends on which problem it sought to solve. There might have been a greater need for punishing inmates, protecting them, or reducing gang violence or prison riots. Each need entails different potential sets of responses.

To further complicate the situation, researchers typically do not know what would have happened had restrictive housing not been an option. Identifying the relevant counterfactual requires guidance from corrections officials about what they would have done. Consider a situation in which inmates released from restrictive housing are compared with inmates from a prior time period who seem to be similar in all respects but could not be placed in such housing. The assumption here is that the prison system would have continued in a business-as-usual mode had it not built restrictive housing. That assumption might be correct. However, officials might have invested in other strategies to address a

particular perceived problem if they could not rely on restrictive housing. Here, then, using "matched" inmates from a prior time period would be inappropriate.

The lack of clarity about the most appropriate or relevant counterfactual to use when estimating restrictive housing impacts undermines almost all extant empirical studies of the effects of restrictive housing. These studies still can and do offer insight into the impacts of restrictive housing, but the insight ultimately is about potential impacts as compared to a largely unknown counterfactual. This issue also confronts any attempt to estimate the impact of reducing restrictive housing. What is the impact of reducing the use of restrictive housing? The answer depends greatly on what the prison system otherwise would do.

Impacts on Prison System Safety and Order

Few studies have empirically examined the effects of restrictive housing on systemwide safety and order. A study by Howard Bidna in the 1970s found little evidence that a lockdown of many of California's maximum-security prisons affected stabbings in high-security units but some evidence that it reduced stabbings in other units (Bidna, 1975). Research by Ben Crouch and James Marquart suggested that Texas' use of supermax housing may have reduced prison system homicides in the 1980s (Crouch & Marquart, 1989). Neither study included comparison sites or examined a diverse range of measures of violence or disorder. In what remains the strongest evaluation of supermax prison effects to date, Chad Briggs and colleagues compared three experimental sites (Arizona, Illinois, and Minnesota) and one comparison site (Utah) and then sought to determine whether systemwide levels of inmate-on-inmate and inmate-on-staff assaults declined more in the experimental sites (Briggs et al., 2003; see also Sundt et al., 2008). Little evidence of a consistent or appreciable beneficial impact of supermaxes surfaced; most of the analyses identified null effects, some pointed to modest reductions in violence, and one pointed to an increase. Beyond such studies, there exist primarily anecdotal accounts (including interviews with non-random samples of staff or inmates) that suggest a range of possible benefits and possible harms (Kurki & Watson, 2001; Briggs et al., 2003; Haney, 2003; Bruton, 2004; Rhodes, 2004; Mears, 2006; Mears & Watson, 2006; Shalev, 2009; Mears, 2013; Richards, 2015; Valera & Kates-Benman, 2015).

In short, there remain almost no strong evaluations of the systemwide impacts of restrictive housing on inmate or staff safety or on the orderly operations of prison systems. Indeed, there are virtually no methodologically rigorous studies that examine the effects of restrictive housing on order alone; that is, the extent to which restrictive housing improves the amount and quality of inmate rule compliance and the day-to-day operations of prison systems.

Some qualitative research accounts suggest that restrictive housing may be helpful in managing a crisis, such as a prison riot (Crouch & Marquart, 1989;

Ward & Werlich, 2003; Mears, 2008a; Austin & Irwin, 2012). However, there remains little methodologically rigorous empirical research to support that claim or to suggest that restrictive housing prevents riots.

Restrictive housing may seem to incapacitate inmates from contributing to violence or disorder. However, inmates can and do affect both while in such housing (Austin et al., 1998; Preer, 2004; Mears & Watson, 2006; Mears, 2013). On theoretical grounds, restrictive housing might contribute to improved systemwide safety and order through incapacitation, deterrence, and normalization of prison environments, but it might as easily worsen these outcomes. For example, use of restrictive housing might divert resources from more effective strategies and better prison management, and it may antagonize inmates in restrictive housing and in other prison facilities (Briggs et al., 2003; Mears & Reisig, 2006). Such possibilities remain largely unexamined empirically.

Impacts on Inmates While in Restrictive Housing

Considerably more research has focused on the impact of restrictive housing on individuals while they reside in restrictive housing rather than after they leave it. This research has tended to focus almost exclusively on mental health. A range of outcomes is relevant to assessing the impact of restrictive housing on inmates.

Protection — Less Victimization

A goal of restrictive housing is to protect inmates from victimization. Any such benefit depends on placing individuals most at risk of victimization in the housing. It also depends on the duration of the placement. A temporary stay in restrictive housing might prevent victimization during that stay, but it would do nothing to protect the inmate upon release. Little systematic empirical research has been undertaken to document the prevalence of restrictive housing for the purpose of protecting an inmate, the extent to which only highly at-risk individuals experience protective custody housing, the extent to which they are victimized upon release, and whether the rate of victimization declined after such custody. It may be safe to assume that certain inmates are victimized less often while in restrictive housing. However, it is possible, if not likely, that protective custody placement may increase victimization once the inmate is released back into general population facilities. It is also possible that some inmates are placed in restrictive housing under the auspices of seeking to protect them when in reality the primary goal is to remove nuisance inmates from these facilities (Lovell et al., 2000; Richards, 2015).

Misconduct

Inmates can and do engage in misconduct while in restrictive housing; indeed, some accounts suggest that housing design may directly induce violent behavior

(Austin et al., 1998; Bruton, 2004; Preer, 2004; Rhodes, 2004; Mears & Watson, 2006; King et al., 2008; Richards, 2015). The precise prevalence of misconduct among inmates in restrictive housing is not known. It also is not known how much the type or rate of misconduct decreases when an inmate is placed in restrictive housing.

Mental Health

Since the 1970s, a large number of studies have suggested that restrictive housing may harm inmates' mental health. In fact, mental illness is substantially more prevalent in the inmate population than in society at large (Mears, 2004; Mears & Cochran, 2012, 2015; Prins, 2014). Accordingly, inmates with mental illness can and do get placed in restrictive housing, despite legal challenges to this practice (Haney, 2003; Smith, 2006; Kupers et al., 2009; Beck, 2015; Haney et al., 2015). Whether restrictive housing causes mental illness or exacerbates existing mental illness is less clear. On the one hand, numerous studies document that inmates in restrictive housing have a mental illness and report that restrictive housing appears to contribute to the illness. This view is supported by the argument that humans fundamentally are social beings and that depriving them of social contact for extended periods contributes to mental illness, self-harm, and possibly suicide (Grassian, 1983; Haney, 2003; Smith, 2006; Dye, 2010; Kaba et al., 2014; Lanes, 2015; Shames et al., 2015). On the other hand, few studies exist that include appropriate, matched comparison groups to document the effect of restrictive housing on inmates with mental illness relative to what otherwise would happen to these inmates (Smith, 2006; Mears, 2008b, 2013; Gendreau & Labrecque, 2015). An exception is a study by Maureen O'Keefe and colleagues that found little evidence that restrictive housing caused mental illness (O'Keefe et al., 2011, 2013). This finding was echoed by a meta-analysis of prior published work (Gendreau & Labrecque, 2015).

The effect of restrictive housing on an inmate's mental health likely varies depending on a variety of factors. These factors include the extent to which inmates actively seek placement in restrictive housing, the duration of exposure to it, the ability of certain individuals to cope with isolation, and the conditions of confinement, such as the availability of treatment and programming and the quality of inmate and staff relationships (Lovell et al., 2000; Kurki & Morris, 2001; Mears & Watson, 2006; O'Keefe et al., 2011, 2013; Mears, 2013; O'Donnell, 2014; Gendreau & Labrecque, 2015; Morris, 2015; Richards, 2015; Valera & Kates-Benman, 2015). The effect likely varies, too, depending on the counterfactual condition, such as transfer to or placement in a maximum-security prison or mental health facility. Such possibilities have not been subjected to empirical analysis.

Physical Health

No systematic empirical research has been undertaken to document changes in the physical health of individuals placed in restrictive housing. However, confinement to a small cell likely contributes to minimal active movement or exercise and, by extension, associated harms (Booth et al., 2012).

Participation in Rehabilitative Programming

Studies show that inmates receive little or no rehabilitative programming, and services and treatment more generally, while in restrictive housing, and such programming is or may be of low dose and quality (Kurki & Morris, 2001; Haney, 2003; Mears & Watson, 2006; O'Keefe et al., 2011; Gendreau & Labrecque, 2015; Haney et al., 2015; Richards, 2015). However, the precise magnitude of difference between programming, or its effects, in restrictive housing and the general prison population is unknown and has not been documented for individual states or over time.

Ties to Family, Friends, and Communities

Inmates typically fear the loss of ties to family, friends, and their home communities (Adams, 1992). The fear is justified — few inmates receive visitors or sustain contact with their social networks outside the prison walls (Bales & Mears, 2008; Cochran & Mears, 2013). This separation may weaken ties to family and contribute to inmate misconduct, recidivism, and poor re-entry outcomes (Mears & Bales, 2008; Cochran, 2012; Mears et al., 2012; Cochran & Mears, 2013; Cochran et al., 2014; Siennick et al., 2013). Inmates in restrictive housing typically cannot or do not receive visits or telephone calls. However, the precise effect of restrictive housing, and its varying duration, on social ties to others remains largely unstudied.

Risk of Misconduct and Reoffending

While inmates reside in restrictive housing, they may change in ways that contribute to the likelihood of a specific deterrent effect upon release from the housing. At the same time, they are unlikely to receive rehabilitative programming, services, or treatment, which means that restrictive housing does little to address criminogenic factors that contribute to misconduct and recidivism. To date, however, no studies have systematically examined the change in an inmate's propensity to engage in misconduct from the time of entry into restrictive housing to release from it.

Impacts on Inmates During Re-entry Into General Population Prisons

Restrictive housing may affect inmates while they are confined to it, but it also may affect them after they return to the general prison population. Here, again, a range of outcomes may be relevant to evaluating the impacts of restrictive housing.

Protection — Less Victimization

There are no systematic or rigorous research studies that have documented the effect of restrictive housing on victimization of inmates after they leave it. Some research indicates that inmates may seek to be placed in restrictive housing for their own safety (Lovell et al., 2000; Mears & Watson, 2006; Gendreau & Labrecque, 2015). Indeed, it is also possible that placement in restrictive housing may signal to other inmates that a particular inmate is vulnerable or a problem. One inmate's account indicates, for example, that "convicts look down on 'checking in [to restrictive housing]'" for protection or to detox, avoid paying a gambling debt, or to "take a break" (Ferranti, 2015:55). It is also possible that placement in restrictive housing may give an inmate a reputation as someone who is tough and warrants challenging, or it may reduce the inmate's ability to cope with other people, thereby increasing the risk of victimization (Haney, 2003; Mears & Watson, 2006). However, no studies yet have empirically evaluated possibilities.

Misconduct

A stay in restrictive housing may deter inmates from future misconduct. Conversely, it may antagonize them — what has been referred to as the "rage hypothesis" (Ward & Werlich, 2003) — or increase their risk of misconduct. Few studies have tested this idea. One study of inmates, which used a matching design, found that short-term stays in solitary confinement as punishment did not appear to increase infractions (Morris, 2015). The study has its limitations; it focused on one large southern state, did not examine protective custody or administrative management segregation, and excluded gang members and inmates sentenced to capital punishment or life without parole. Accordingly, its generalizability to other states or other uses of restrictive housing is unknown. A separate study examined adult inmates in Ohio who were serving at least one year in prison and were placed in solitary confinement for punishment. This study, too, found no robust evidence that restrictive housing contributed to subsequent misconduct (Labrecque, 2015).[9] There was, however, some evidence that, among mentally ill inmates and gang members, solitary confinement might be associated with subsequent nonviolent or drug misconduct (Labrecque, 2015:113). Both studies stand out because they constitute the only studies to

[9] The motivation for the Morris (2015) paper stemmed in part from the fact that no published empirical study had examined the impact of restrictive housing, among the individual inmates exposed to it, on their subsequent in-prison behavior. Labrecque's (2015) study was undertaken after the Morris (2015) study was published.

date to employ strong research designs to examine restrictive housing effects on misconduct. Their generalizability to other populations (e.g., inmates in restrictive housing for non-punitive reasons or for extended periods) or states is unknown.

Mental Health

The inference from extant research is that restrictive housing may adversely affect inmate mental health prior to and after release from restrictive housing. However, recent work and a meta-analysis raise questions about such claims (O'Keefe et al., 2011; Gendreau & Labrecque, 2015). Research on the effects of restrictive housing on inmate mental health has focused primarily on the period of time in which the inmates reside in the housing. Many studies proceed from the assumption that restrictive housing creates near-instantaneous effects on mental health (O'Keefe et al., 2011; Gendreau & Labrecque, 2015). The effect of restrictive housing on subsequent in-prison mental health outcomes has not been systematically evaluated using "apples to apples" comparisons between inmates exposed to restrictive housing and similar inmates who were not. Some researchers have suggested that, though restrictive housing may have harmful effects on inmate mental health, longer exposure to restrictive housing is required (Kupers, 2008; O'Keefe et al., 2013). Research has not examined the range of restrictive housing stays and conditions across different populations and prison systems using matched comparison groups to assess such possibilities.

Physical Health

Studies have not systematically evaluated the effects of restrictive housing on inmates' physical health during or after release from it. Some commentaries and qualitative accounts involving nonrepresentative samples suggest that placement in restrictive housing might lead to a greater risk of victimization after release. For example, an inmate may have acquired or reinforced an affiliation as a gang member while in restrictive housing, or alternatively, that inmate may have denounced an affiliation and so exposed himself or herself as a potential snitch (Hunt et al., 1993; Kassel, 1998; Kurki & Morris, 2001; Briggs et al., 2003; Mears & Watson, 2006; King et al., 2008; Richards, 2015).

Participation in Rehabilitative Programming

Little is known about the extent to which inmates released from restrictive housing engage in or receive rehabilitative programming and whether receipt of programming varies from what it otherwise would be if inmates had not been placed there. To the extent that restrictive housing adversely affects mental health, there would seem to be a need for more such programming. To the extent that it contributes to increased misconduct, inmates may be more likely to be returned to restrictive housing, thereby reducing their opportunities for rehabilitative intervention even more. This possibility, however, remains largely unexamined empirically.

Ties to Family, Friends, and Communities

Restrictive housing — particularly lengthy stays — may weaken or sever inmates' ties to other inmates and to family members, friends, and others in their home communities. To the extent that social ties are helpful in navigating and coping with prison life, and that restrictive housing stays degrade these ties (Adams, 1992; Bottoms, 1999; Cochran, 2012; Mears & Cochran, 2015), inmates may be more likely to experience adverse outcomes when they return to general population facilities. This possibility, too, has not been examined empirically.

Risk of Reoffending

An inmate's risk of recidivism might increase or decrease as a result of time in restrictive housing, and this change might be greater among inmates who have greater exposure — whether through total duration or frequency of placement — to restrictive housing. Although several studies have examined restrictive housing and recidivism, none has estimated changes in the risk of reoffending at the point of release from restrictive housing to general population facilities or to society.

Impacts on Inmates During Re-entry Into Society

Recidivism

Few studies exist that use methodologically strong research designs, such as matching analyses, to examine restrictive housing impacts on recidivism.[10] One exception is a study of supermax inmates in Washington state. David Lovell and colleagues found that supermax incarceration was not associated with recidivism; however, inmates released directly from supermax incarceration were more likely to recidivate compared to inmates with supermax stays that entailed first returning to a general inmate population facility before release (Lovell et al., 2007). A related study of Washington state inmates that employed a weaker research design found that restrictive housing was associated with a greater likelihood of violent recidivism (Lovell & Johnson, 2004). Another study examined supermax incarceration among Florida inmates. Using propensity score matching, the study found a positive effect of supermax incarceration on violent recidivism but no effect on general recidivism (Mears & Bales, 2009). It also found no evidence that time in supermax housing or direct-release from it to society exerted a greater effect on reoffending. Finally, a study by Daniel Butler and colleagues found no significant effect of supermax housing on recidivism (Butler et al., forthcoming, as reported in Steiner & Beard, 2015).

[10] The motivation for the Morris (2015) paper stemmed in part from the fact that no published empirical study had examined the impact of restrictive housing, among the individual inmates exposed to it, on their subsequent in-prison behavior. Labrecque's (2015) study was undertaken after the Morris (2015) study was published.

Collectively, these few studies suggest that restrictive housing may increase violent recidivism. Whether the total duration in or timing of release from restrictive housing matters is unclear. Indeed, the main conclusion mirrors that for other outcomes — too few methodologically strong studies have been conducted to state with confidence the effect of restrictive housing. Extant studies not only are few in number, but they also do not systematically evaluate the impact of various dimensions of restrictive housing, such as the effects of using restrictive housing for protective custody or punishment or the potential for effects to vary according to the characteristics of inmates or the conditions in restrictive housing.

Employment

Prison may adversely affect the employment prospects of individuals (Mears & Cochran, 2015). Empirical research has not systematically examined how different types of prison experiences may differentially influence employment outcomes upon release. Short-term stays in restrictive housing would appear, on the face of it, to exert little appreciable effect on such outcomes. Longer-term stays, however, might do so by limiting participation in vocational and educational programming as well as in re-entry planning. Restrictive housing also might affect employment outcomes by adversely affecting inmates' mental health. Regardless, to date only one study has examined restrictive housing's effect on employment; it found no evidence that such housing harmed employment after an inmate is released into society (Butler et al., forthcoming, as reported in Steiner & Beard, 2015). It is presently unknown what would be found in state-by-state studies of varying doses of restrictive housing and of different approaches to the design and operation of restrictive housing.

Mental Health

Research that examines mental health outcomes among inmates during their stays in restrictive housing has been hampered by methodological limitations, and few studies have examined mental health outcomes among inmates after they leave restrictive housing and return to general population facilities. No methodologically rigorous studies have examined the long-term effects of restrictive housing on inmate mental health during incarceration and after re-entry into society.

Physical Health

No empirical research has used strong study designs to systematically examine the impacts of restrictive housing on the physical health outcomes of inmates when they return to society. The accounts of gang members suggest the possibility, one not evaluated empirically, that placement in restrictive housing may increase the risk of victimization when inmates return to society (Hunt

et al., 1993; Kassel, 1998; Kurki & Morris, 2001; Briggs et al., 2003; Mears & Watson, 2006; King et al., 2008; Richards, 2015).

Ties to Family, Friends, and Communities

Here, again, there is no empirical research that draws on strong methodological research designs to estimate the effect of restrictive housing on ties to family, friends, and communities.

Impacts on Punishment (Retribution)

One of the central justifications for, or goals of, restrictive housing is to punish inmates (King, 1999; Riveland, 1999; Lovell et al., 2000; Kurki & Morris, 2001; Neal, 2003; Shalev, 2009; Browne et al., 2011; Mears, 2013; Beck, 2015; Morris, 2015). Such punishment can be viewed as instrumental in promoting specific or general deterrence. However, it also clearly has been and is viewed as a goal in and of itself. Whether restrictive housing achieves a desired level of retribution has not, to date, been empirically evaluated by researchers. To do so would require an empirically based, explicitly articulated calculus of a given set of sanctions, including restrictive housing. This type of "science of punishment" — or, more specifically, science of retribution — has not been developed (Mears et al., 2015:706). If applied to restrictive housing, any such science would need to examine the amount of perceived punishment among those sent to restrictive housing as well as the amount of perceived punishment among other inmates and the prison administration. In so doing, it would need to take into account the fact that some inmates may seek placement in restrictive housing, while others may be greatly harmed by it. Without such information, the extent to which restrictive housing achieves the goal of retribution will remain unclear — both conceptually and empirically.

Impacts on Gang Influence

Some prison systems have used restrictive housing as a means by which to control gangs and reduce their influence on prison operations and violence (Ralph & Marquart, 1991; National Institute of Corrections, 1997; Ward & Werlich, 2003; Pizarro & Stenius, 2004; Mears & Castro, 2006; Mears & Reisig, 2006; Shalev, 2009; Mears & Watson, 2006; Naday et al., 2008; Sundt et al., 2008; Butler et al., 2012; Reiter, 2012; Mears, 2013; McGinnis et al., 2014; Richards, 2015). To date, there are no methodologically rigorous evaluation of the impact of restrictive housing on gang influence. Such studies would need to examine rates of misconduct before and after the use of restrictive housing or in relation to changes in how much it is used, and they should address potential confounding from other strategies that prison systems simultaneously employed to address gang activity. The latter issue is critical because when prison systems face a crisis of any kind — such as riots or a

dramatic increase in violence or disorder — they will employ a range of strategies. That approach is understandable but makes it difficult to isolate the unique effects of restrictive housing.

Existing accounts point to ways in which restrictive housing may decrease or increase gang influence and violence. Beneficial effects may arise when restrictive housing allows prison officials to inhibit gang leadership. Harmful effects may arise when the leadership is replaced, new gangs emerge to fill a void, reliance on restrictive housing distracts officials from focusing on potential root causes of gang problems or prison violence, and so on. However, extant research has not addressed these methodological issues and, therefore, provide little credible basis on which to claim that restrictive housing affects gang activity in either the short term or long term.[11]

Impacts on Society

Restrictive housing might benefit society by improving re-entry outcomes and by enabling the prison system to operate more effectively and efficiently. For example, if staff can better perform their roles and obligations and rehabilitative programming can be better implemented, an improvement might occur in aggregate inmate behavior and recidivism, as well as housing, mental health, and employment outcomes (Mears & Reisig, 2006). Such benefits might arise from improvements among inmates sent to restrictive housing or general population inmates.

Conversely, restrictive housing may harm society by worsening outcomes for segregated housing and general population inmates and officers.[12] It might distract officials and divert funding from the causes of the problems that restrictive housing seeks to address such as violence, disorder, and gangs.

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[11] Thoughtful attempts to study restrictive housing impacts on gang activity exist and paint a mixed portrait. Ward and Werlich's (2003) account suggests that prison wardens view restrictive housing as effective in controlling gangs (see also Mears & Castro, 2006). Paige Ralph and James Marquart (1991) examined whether use of Texas supermax facilities to house gang leaders affected gang violence; they found little evidence that it did so (as compared to Austin et al., 1998). Geoffrey Hunt and colleagues (1993) interviewed ex-prisoners who reported ways in which placing gang members in restrictive housing might increase prison violence. One mechanism is that doing so may create a "vacuum" of power in the inmate culture that allows new and potentially more dangerous prison gangs to emerge. The study did not directly examine systemwide effects of restrictive housing on gang-related activity. Other empirical accounts that rely on non-random samples or qualitative research methodologies exist and identified mixed findings (see, generally, Kassel, 1998; Bottoms, 1999; Briggs et al., 2003; Mears & Watson, 2006; Pizarro & Narag, 2008; Austin & Irwin, 2012; O'Donnell, 2014; Richards, 2015).

[12] "[Solitary confinement] is not solely a corrections issue; the overwhelming majority of people incarcerated will be released, and the impact of long periods of isolation on their health, employability, and future life chances will be felt in the families and communities to which they return. It is important to understand the health impacts of the widespread use of segregation at the population level, in addition to assessing the effect of time spent in solitary confinement on individual health outcomes" (Cloud et al., 2015:21; see also Mears, 2013).

It also might engender a culture of abuse among officers and of defiance among inmates. In addition, it might harm inmates' families by eliminating or greatly reducing contact between families and inmates. Finally, use of restrictive housing might harm society by releasing inmates to communities who are less equipped to succeed than they otherwise might be.

These potential benefits and harms are speculative. No systematic, methodologically rigorous evaluations have examined their existence or magnitude. What is known is that prison-based behavioral programs can reduce inmate misconduct and that this benefit can be sustained during their transition into the community (French & Gendreau, 2006). Accordingly, the benefits or harms of restrictive housing may have effects on inmates that also extend into the community.

Impacts of Not Using Restrictive Housing When Needed

When restrictive housing may be needed but is not used, the clear risk of harm arises. For example, if such housing serves as the only viable option for preventing or halting a prison riot, the failure to use it — or to have it available to use — may enable a riot to happen or lead to longer riots. Presently, there is no clear empirical basis for establishing when or how much restrictive housing is needed to achieve various goals. Accordingly, there is no clear basis on which to estimate the harms that may arise from having no — or enough — restrictive housing, or from failing to use it at all or using it in an insufficient dose to achieve a particular goal.

This situation applies to virtually all of the goals associated with restrictive housing. For example, if the goal is to punish inmates, there may be a consequence of not using restrictive housing, but that consequence is not clear. Many options exist for punishing inmates. In such a context, the only basis on which to estimate the impacts of not having restrictive housing is to determine precisely which punishments are available and which are appropriate for various acts of misconduct. Prison systems may designate and follow a hierarchy of sanctions, but that practice merely affirms a policy; it does not establish empirically the extent to which restrictive housing is needed or, in turn, the impacts of not employing the housing.

Similarly, if the goal is to protect certain inmates, there may be a consequence of not having or using restrictive housing. However, the consequence cannot be established empirically without first knowing what factors contributed to the need to protect inmates and what other approaches can be adopted to address the problem.

Impacts of Using Restrictive Housing When It May Not Be Needed

When restrictive housing is used but not needed, a range of potential harms may arise, including the diversion of resources from more cost-effective approaches to managing prison systems and inmates, creation of a culture of abuse among officers, and emergence of a culture of inmate hostility and defiance. Other possibilities include greater harm to officers, higher rates of mental illness among inmates, more inmate misconduct, and worse re-entry outcomes for all inmates, especially for those who have experienced restrictive housing. There is no empirical research that directly identifies the extent of such harms or the extent to which restrictive housing is not used as an option of last resort (Mears, 2013). Studies have documented potential harms of restrictive housing, but they have not systematically and simultaneously evaluated the range of benefits and harms associated with its use. Accordingly, those studies primarily draw attention to a particular benefit or harm without demonstrating the net benefit or harm relative to a particular counterfactual (Mears & Watson, 2006).

Cost-Efficiency

Impacts alone are irrelevant if they are small, are offset by substantial financial costs, or could be achieved more effectively through alternatives. To date, no research documents the effect of the cost-efficiency of restrictive housing on the overall efficiency of jails and prison systems (Lawrence & Mears, 2004; Pizarro & Stenius, 2004; Mears, 2006, 2008b, 2013; Shalev, 2009). Two important conceptual issues, discussed below, bear on evaluating cost-efficiency.

Restrictive Housing as Presumptive Policy or as Alternative

In the early 1980s, prior to the expansion of restrictive housing, a central policy question was "What is the effect of increasing the use of restrictive housing?" That question remains relevant in contemporary times. However, the widespread use of restrictive housing also raises a related question: "What is the effect of decreasing the use of restrictive housing?" The first question examines the effects of increasing restrictive housing in a context where such housing is little used; the second examines the effects of decreasing restrictive housing in a context where it is widely used. Two implications flow from these opposing circumstances.

First, in both instances, research on the effectiveness of restrictive housing is lacking. Second, the most relevant research question is not necessarily whether restrictive housing should be retained until evidence emerges that more effective and cost-efficient alternatives exist. That question makes restrictive housing appear to constitute the presumptive policy. The equally relevant question begins with presuming that restrictive housing constitutes an alternative to other

policies for protecting, punishing, and managing inmates, and for achieving prison system goals.

The Cost-Efficiency of Restrictive Housing and Other Approaches

Prison systems seek to achieve a range of goals (e.g., protecting, punishing, and managing inmates, and creating a safe and orderly environment) that not only minimizes harms to inmates and staff but also prepares inmates for re-entry into society. Prison systems can employ a wide range of approaches to achieve these goals. Approaches include —

- Better inmate classification.
- Dispersing certain inmates strategically throughout the prison system.
- Increasing and improving staff training, education, and professionalism.
- Improving inmate culture.
- Improving officer culture.
- Ensuring fair and consistent enforcement of rules.
- Implementing and using incentives to motivate inmates to comply with prison rules.
- Providing evidence-based cognitive-behavioral treatment and rehabilitative, vocational, and educational programming.
- Structuring the prison environment and activities in ways that reduce opportunities for misconduct and promote rule conformity and participation in programming (DiIulio, 1987; Logan, 1993; Sparks et al., 1996; Gendreau et al., 1997; Reisig, 1998; Bottoms, 1999; Gendreau & Keyes, 2001; Kurki & Morris, 2001; Briggs et al., 2003; Irwin, 2005; French & Gendreau, 2006; Mears, 2008a, 2008b, 2013; Pizarro & Narag, 2008; Sundt et al., 2008; Useem & Piehl, 2008; Cullen et al., 2014; Browne et al., 2015; Wooldredge & Steiner, 2015).

How cost-efficient is each approach, or combination of approaches, to achieving prison system goals? That question remains largely undetermined. Instead, research documents that some approaches effectively improve certain outcomes in certain contexts. No rigorous comparative empirical analyses of the effects of the different approaches exist. Yet, the fact that such a diversity of approaches exists highlights the problem of assuming that restrictive housing is needed or that it is more effective and cost-effective than other approaches at achieving various prison system goals.

Critical Research Gaps and Questions

An abundance of research gaps and questions on restrictive housing have been identified by researchers.[13] Addressing them presents many opportunities to advance science and policy. For example, knowledge about the conditions that create safe and orderly prisons would contribute to theory and scholarship aimed at understanding how organizations operate. It also would contribute to corrections officials' efforts to improve safety and order in their prison systems.

Below are some of the most critical empirical research gaps and questions that bear directly or indirectly on efforts to understand the impacts of restrictive housing on inmates and the institutional environment of prison systems. The gaps and questions can be organized broadly into five categories: need, theory, implementation, impacts, and cost-efficiency. They include, however, additional areas that relate to restrictive housing impacts and efforts to improve the science and policy on this housing.

Restrictive Housing Classification

Restrictive housing discussions are severely hampered by inconsistent definitions of the housing and its design and goals. Definitions and classifications are not correct or incorrect, but rather more or less useful. Which definitions and classifications are most useful in ensuring that appropriate inmates are sent to restrictive housing to achieve particular goals?

Clarification of the Goals and Need for Restrictive Housing

The goals relate directly to the need for restrictive housing. Clear goals have ripple effects along many dimensions, including identifying appropriate inmates for restrictive housing, the design of the housing, and its impacts. Thus, what are the precise goals of restrictive housing? Which goals should be weighted more heavily than others? For each goal, how many inmates fit the profile of those who require restrictive housing?

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[13] A non-exhaustive listing includes the following: Cooke (1989); Ward (1995); King (1999, 2005, 2007); Rivel& (1999); Lovell & colleagues (2000); Kurki & Morris (2001); Briggs & colleagues (2003); Henningsen & colleagues (2003); Haney (2003); Neal (2003); Toch (2003); Ward & Werlich (2003); Pizarro & Stenius (2004); Mears (2005, 2006, 2008a, 2008b, 2013); Cloyes et al. (2006); Mears & Castro (2006); Mears & Reisig (2006); Mears & Watson (2006); Smith (2006, 2008); Lovell & colleagues (2007); King & colleagues (2008); Kupers (2008); Naday & colleagues (2008); Pizarro & Narag (2008); Sundt & colleagues (2008); Kupers & colleagues (2009); Mears & Bales (2009, 2010); Shalev (2009); Browne & colleagues (2011); Butler & colleagues (2012); Reiter (2012); Mears & colleagues (2013); McGinnis & colleagues (2014); O'Donnell (2014); Pizarro & colleagues (2014); Baumgartel & colleagues (2015); Cloud & colleagues (2015); Frost & Monteiro (2015); Gendreau & Labrecque (2015); Labrecque (2015a); Morris (2015); Richards (2015); Valera & Kates-Benman (2015); U.S. Department of Justice Work Group (2016).

Effective Use of Steps to Reduce the Need for Restrictive Housing

Inmates do not act in isolation. Their behavior typically derives from their individual characteristics and the settings in which they reside. Ignoring the effects of these settings — including the composition of the inmate population and prison conditions, programming, staffing, and management — contributes to inmate misconduct. This in turn creates an apparent need to seek recourse with incapacitating measures, such as restrictive housing. For any given goal associated with restrictive housing, to what extent have other approaches for achieving the goals been pursued? Have they been implemented well? If they have not been pursued or implemented well, then there is likely a need for improvements that target these approaches, rather than a need for restrictive housing.

The Theory of Restrictive Housing

The theory underlying the use of restrictive housing for any of a variety of goals remains poorly developed, which creates missed opportunities to use, design, and modify restrictive housing to maximize benefits and minimize harms. What, then, are the most credible theoretical grounds on which to anticipate that restrictive housing — or a particular design (e.g., duration, deprivations, programming) — will improve any given outcome (e.g., reduced gang influence, reduced violence among the most violent inmates, improved systemwide safety and order)?

Adherence to Protocols, Rules, and Procedures

Numerous protocols, rules, and procedures guide restrictive housing operations, in part to protect against lawsuits (Collins, 2004; Naday et al., 2008; Baumgartel et al., 2015). To what extent do states and the federal government — and various prison facilities — administer restrictive housing in ways that fulfill these different operational requirements and that comport with the Constitution and court rulings (King et al., 2008; Reiter, 2012; Mears, 2013)?

Amount and Quality of Services, Treatment, and Privileges in Restrictive Housing

Prison systems typically purport to offer services, treatment, and some privileges to inmates in restrictive housing. To what extent do these systems actually do so? What is, and what affects, the amount and quality of such amenities? What is the amount and quality of mental health counseling and treatment?

Admissions to and Releases From Restrictive Housing

Restrictive housing operates largely in the equivalent of a black box (Mears, 2005, 2006, 2013; Butler et al., 2012). Little systematic or comprehensive empirical analysis exists — by state or federal prison system and over time — in the actual use of restrictive housing. Some exceptions exist. For example, a study of Washington state inmates in restrictive housing found that they varied greatly in their characteristics. Some had extensive histories of violence and others did not. Approximately one-third had a serious mental illness. Many younger inmates appeared to behave in ways that would result in their placement in intensive management housing as a way to protect themselves. Some inmates spent little time in restrictive housing while others spent most of their total prison stay in it (Lovell et al., 2000).

A study of Florida supermax inmates found that 55 percent had experienced three or more stays in supermax housing (Mears & Bales, 2010). For 44 percent of supermax inmates, their time in restrictive housing constituted less than 15 percent of their total term of incarceration. Fourteen percent of the supermax inmates spent more than half of their incarceration in supermax housing. One inmate in four (28 percent) had been in supermax housing within three months of their release to society. The study also found that younger inmates and black inmates were more likely to be placed in supermax housing; this difference stemmed primarily from these groups engaging in more of the behaviors that lead to such confinement. (The study did not examine whether these inmates were differentially managed and treated by the prison system, which could contribute to such behavioral differences.)

A study of California supermax inmates identified similar variations and patterns (Reiter, 2012). These included widely variable durations — ranging from months to 10 years or more — spent in supermax housing. Other findings included a greater likelihood that Hispanic inmates resided in restrictive housing, approximately one-third or more of inmates being released directly from supermax housing to the streets, and considerable variability in patterns across supermax facilities.

In 2015, BJS released its national study of restrictive housing, which provided a one-time snapshot of restrictive housing in 2011-2012. The report provided more representative and extensive details about restrictive housing inmates than has ever been published (Beck, 2015). As with the 2014 Yale/ASCA survey of corrections administrators, the study documented considerable heterogeneity in the inmate population in restrictive housing and the use of restrictive housing across facilities (Baumgartel et al., 2015). Inmates who spent time in restrictive housing were more likely to be young, lesbian, gay, or bisexual; to have committed a violent offense; and to have a mental illness. Other studies point to additional factors associated with restrictive housing placement, such as gang membership, infractions, and prior stays in segregation (Motiuk & Blanchette

2001; O'Keefe et al., 2011; McGinnis et al., 2014; Helmus, 2015). Some prisons rarely place inmates in restrictive housing, while others do so frequently (King, 1999; Mears, 2006; Baumgartel et al., 2015).

These studies have advanced understanding about the use of restrictive housing — including who is admitted to and released from it — but they provide only one-time snapshots and leave many questions unaddressed. For states and the federal government, critical questions remain to be answered. In every instance, data are needed by year to establish changes in patterns and to explain what accounts for variations in the use of restrictive housing over time. For example, to what extent are policies for restrictive housing fully implemented? What are the demographic, social, criminal, and mental and physical health characteristics of individuals in restrictive housing? What characteristics or behaviors lead to such confinement? What other strategies or options are pursued with these inmates? How frequently and how long do individuals spend time there? To what extent are admission and release processes fair? Which facilities use restrictive housing more than others? Which inmates in restrictive housing experience more benefits and which experience higher rates of self-injury or harm? What factors explain variation across these different dimensions? For example, if minorities are more likely to be in restrictive housing, what explains the difference? How have patterns of restrictive housing use changed over time, and what factors explain such variation?

Impacts of Restrictive Housing

For state or federal prison systems, what are the impacts of restrictive housing for a range of outcomes? Few credible studies of impact exist, and those that do focus on one state, point in time, or outcome. What is needed are studies that employ rigorous research methodologies, including appropriate comparison groups or conditions identified through matching or related procedures, that estimate restrictive housing impacts on a range of outcomes. These include systemwide prison safety and order, gang influence, inmate protection, perceived and objective severity of punishment, and inmate outcomes during and after restrictive housing (e.g., misconduct, self-injury, mental and physical health, family ties). Also needed are reviews of inmate outcomes upon release from restrictive housing to society (e.g., recidivism, employment, reunification with family), as well as restrictive housing's effects on the inmates' families and on public health and safety. Other outcomes to be examined include prison system operations and staff (e.g., effects on available programming or on staff), the effects of not using restrictive housing when it is needed, and the effects of using restrictive housing when it is not needed.

In each instance, information is needed on the magnitude of the impacts and the features, including the dose and timing, of restrictive housing that create them. For example, does release directly from restrictive housing affect recidivism?

If so, is the effect greater than that on inmates who are first transitioned from restrictive housing to general population prison facilities before release into the community (Lovell et al., 2007; Mears & Bales, 2009; Reiter, 2012)? Research is also needed on how inmates perceive the experience of restrictive housing. What aspects of the experience — such as duration, staff-inmate interactions, treatment and services, re-entry preparation — might be changed to maximize benefits and minimize harms (Cooke, 1989; Crouch & Marquart, 1989; Bottoms, 1999; Kurki & Morris, 2001; Mears, 2008a, 2008b, 2013; Gendreau & Labrecque, 2015)?

Conditions Under Which Restrictive Housing Achieves Intended Goals

Impact evaluations provide an estimate of the effect of a given policy on one or more outcomes. They do not necessarily provide insight into why exactly the impacts arose. The more general research question, then, is: Under what conditions does restrictive housing achieve its various intended goals? For example, are there certain durations of exposure to restrictive housing that must occur for inmates to be protected or for systemwide safety and order to be increased? What percentage of inmates must be placed in restrictive housing to halt a riot or to prevent one? Under what conditions does litigation improve restrictive housing use and its impacts?

Conditions Under Which Unintended Harms Can Be Minimized

Restrictive housing may contribute to any of a range of unintended harms. For example, it may worsen inmate mental health and possibly contribute to recidivism and systemwide violence and disorder. A related question, then, is: Under what conditions can all appreciable unintended harms be minimized while maximizing any potential benefits?

Impacts of Duration, Frequency, and Recency of Restrictive Housing

The effect of time served in restrictive housing has gone largely unexamined. Time served constitutes a critical issue because it directly relates to cost. Holding inmates longer than necessary wastes scarce resources. If lengthier stays create more benefits, then longer stays may be warranted. Conversely, if they cause more harm, then two negative conditions occur — scarce resources are wasted and their expenditure causes more harm than benefit.

No clear theoretical basis exists for establishing a precise amount of time in restrictive housing that must occur to create particular outcomes. Accordingly, this lack of theoretical basis, along with the apparent heterogeneity in time served, gives rise to a series of questions. How long must individuals reside in restrictive housing to achieve a particular benefit or to produce harm? What are the minimum

durations necessary to achieve benefits? What are the effects of repeated restrictive housing placement? What are the effects on re-entry of the recency of placement in restrictive housing? From a more macro-level perspective, what prison-specific or systemwide numbers or percentages of inmates must be placed in restrictive housing to achieve particular impacts? What are the effects of dramatic increases or decreases in the use of restrictive housing?

Cost-Efficiency of Restrictive Housing Compared to Other Approaches

Restrictive housing stands as but one of myriad approaches that prison systems can use to achieve various goals (DiIulio, 1987; Sparks et al., 1996; Reisig, 1998; Bottoms, 1999; Gendreau & Keyes, 2001; Toch, 2003; French & Gendreau, 2006; King, 2007; Mears, 2008a, 2008b, 2013; Useem & Piehl, 2008; Shalev, 2009; Browne et al., 2011; Association of State Correctional Administrators, 2013; Ross, 2013; Baumgartel et al., 2014; Browne et al., 2015; Frakes, 2015; Shames et al., 2015). How cost-efficient is restrictive housing relative to the other approaches? Ideally, prison systems would have credible answers to this question prior to investing in any particular approach, including restrictive housing. When they already have these approaches and the housing, the relevant comparison can be challenging. What in fact is a prison system willing or able to implement? Can it build a new maximum-security facility? Hire more staff? Invest in more rehabilitative programming? Answers to such questions may be dictated by political considerations or management philosophies. In such instances, cost-efficiency analyses should focus on comparisons to approaches or changes that are most likely to be implemented.

Special Populations, Prison Contexts, and Restrictive Housing

Programs and policies may have different effects on certain groups or in certain contexts (Gendreau et al., 1997; Mears, 2010, 2013; Browne et al., 2015; Morris, 2015). The same possibility holds for restrictive housing, which may have more beneficial or harmful effects for certain groups (e.g., female inmates, inmates with mental illness, very young or older inmates). It also may have variable effects in different prison systems. For example, in a prison system where inmates view correctional administrators as wielding authority in a legitimate manner, restrictive housing may serve as a useful tool for improving safety and order. In a system where inmates view administrators as lacking in legitimacy, restrictive housing may serve primarily to antagonize inmates and reinforce their unwillingness to comply with rules. In short, what are the uses and effects of restrictive housing for different populations and prison system contexts?

Juveniles and Restrictive Housing

The extent to which the juvenile justice system uses restrictive housing or analogous housing is largely unknown. A study in California estimated that "between 10-12 percent of wards were housed in units in which they were confined to their rooms for 23 hours a day" (Krisberg, 2003:51; see, generally, Richards, 2015). The prevalence of restrictive housing since the time of that study or in other states, and the impact of restrictive housing on young people, their families, or the juvenile justice system, remains largely unknown.

Jails and Restrictive Housing

The above-identified research gaps apply even more to the use of restrictive housing in jails, about which almost no empirical research exists. One national study found that the jail inmate population is as likely as the prison population to be placed in restrictive housing and that inmates in jail segregation or prison segregation share many characteristics (Beck, 2015). A study of Rikers Island, one of the largest jails in the country, found that restrictive housing was widely used and that its use often appeared to be inappropriate and harmful (Haney et al., 2015). In general, though, restrictive housing in jails has not been well studied, and it warrants attention because of the large numbers of individuals in jails and the unique challenges that jails face.

Views and Opinions From Corrections Officers and Administrators, Policymakers, and the Public

Restrictive housing is used in part because of the belief that the public supports it and that correctional system officers and administrators find it necessary and effective. Its use, too, stems from policymaker support. However, few studies have systematically examined the views and opinions of these groups. Extant studies suggest that uniform support for restrictive housing should not be assumed. Corrections administrators and wardens, for example, can and do disagree about the need for restrictive housing, its goals or effectiveness, and the conditions under which it is needed and helpful (Wells et al., 2002; Mears & Castro, 2006; Mears & Watson, 2006; Ferdik & McKee, 2015). Legislators, too, have varied understandings and opinions about it (Mears, 2005, 2006; Pizarro & Narag, 2008; Goode, 2012; Baumgartel et al., 2015). Similarly, public opinion varies. In a public opinion study of Floridians, 80 percent of adults expressed support for supermax housing (Mears et al., 2013). However, this support declined to 60 percent when respondents were asked whether they supported its use if no public safety benefit would occur. Approximately 30 percent of respondents viewed restrictive housing as inhumane, but most (70 percent) disagreed. Views about supermax housing varied among groups; for example, whites, men, political conservatives, and

individuals who strongly adhered to a philosophy of punishment as retribution were more likely to support the use of supermax incarceration.

The salience of examining the opinions of the public, prison officers and administrators, and policymakers stems from several considerations. Since restrictive housing constitutes an extreme form of incarceration that many view as inhumane, public opinion should perhaps be considered (Mears et al., 2013). Prison officers and wardens work "on the ground" and may have unique insights about particular inmates, the factors that contribute to particular problems, and how best to address them. Not least, policymakers may correctly or incorrectly understand public views and the problems that prison systems face; taking stock of the public's or practitioner's views thus provides a platform on which to ensure that policymakers more fully appreciate and understand the diverse set of considerations that attend the use of restrictive housing.

In short, how do the public, policymakers, and corrections officers and administrators view restrictive housing? What are their opinions about the causes of particular correctional system problems and how best to address them? What explains variation among these groups in their support for restrictive housing, their views about the conditions under which it may be used appropriately, and their opinion about its effectiveness in achieving various goals?

Ethical Concerns and How They Might Be Addressed

Restrictive housing has been criticized by many different groups and organizations, domestic and international, for being inhumane and for being operated in a procedurally unjust manner and in ways that harm inmates (Grassian, 1983; Kurki & Morris, 2001; Haney, 2003; Mears & Watson, 2006; Smith, 2006; King, 2007; King et al., 2008; Shalev, 2009; Katel, 2012; Mears et al., 2013; Amnesty International, 2014; O'Donnell, 2014; Baumgartel et al., 2015; Cloud et al., 2015; Haney et al., 2015; Richards, 2015; Valera & Kates-Benman, 2015). Although it has withstood legal scrutiny for several decades, lawsuits continue to be filed that challenge its use on constitutional grounds and as violating human rights (Collins, 2004; Amnesty International, 2014; Haney et al., 2015). Research is needed that systematically takes stock of the empirical grounds on which the ethical concerns exist. Some individuals may view restrictive housing as fundamentally unacceptable; conversely, others may view it as a moral imperative when inmates engage in certain activities. It is possible, however, that such views derive from misunderstandings about the need for restrictive housing; the theory, uses, impacts, and cost-efficiency of restrictive housing; and the variety of alternative sanctioning and management strategies available to corrections officials. What views, then, do various groups — the public, corrections officials, policymakers, advocacy organizations, and so on — hold about restrictive housing? Are their assumptions about it empirically supported? What steps can state or federal jails or prison systems take to address objective and perceived concerns

about the potential misuse, abuse, or harms of restrictive housing? How can they address disparities in its use among racial and ethnic minorities or other social and demographic groups (Mears & Bales, 2010; Reiter, 2012; Schlanger, 2013)?

How to Improve Research on Restrictive Housing

Conducting research on restrictive housing is not easy (Ward, 1995; Ward & Werlich, 2003; Mears, 2006; Baumgartel et al., 2014; Agha, 2015). A significant barrier to undertaking empirical studies and monitoring restrictive housing is the limited research infrastructure in jail and prison systems. Typically, research divisions in these settings are small and over-extended. They lack the time or resources required to regularly monitor restrictive housing or evaluate its uses, impacts, and efficiency; to conduct financial audits and case studies; or to survey officers, wardens, or inmates about their views of and experiences with restrictive housing. When outside researchers attempt to access jail or prison system data, they frequently confront closed doors. Even when data are made available, researchers typically confront a difficult situation — no codebook exists and the data are complicated to understand and use.

These and other barriers create a situation in which studies of restrictive housing necessarily either do not occur or occur rarely. In the latter instance, the studies typically have limited usefulness because they apply to only one prison or state at one point in time and illuminate only one particular issue. This situation can be remedied in part through federal funding for research. However, the only long-term viable solution for regular monitoring and assessment of the uses, impacts, and cost-efficiency of restrictive housing is to significantly increase the research capacity of states or state correctional systems.

The situation stands out in part because of longstanding calls for greater government accountability and evidence-based policy. Neither can occur without empirical research that continuously monitors and evaluates jail and prison operations. There are examples of states using the results of empirical research to modify their approaches to restrictive housing (Goode, 2012; Agha, 2015; Browne, 2015; Frakes, 2015), and, in general, corrections officials appear to embrace research that assists them in better understanding their facilities and how to improve their operations and effectiveness. These examples and the receptiveness to (useful) research, along with calls for government accountability and evidence-based corrections, lead to the question: Why have states not invested more in the kinds of research and research infrastructure necessary to create and support accountability and evidence-based practice in the use of restrictive housing?

A "Top 10" List of Critical Research Questions That Should Be and Can Be Addressed

Few, if any, of the research gaps and questions discussed in this paper can be justified in an era in which government accountability and evidence-based practice are promoted. Few, too, can be investigated without a substantial infusion of funds to create the research infrastructure necessary for monitoring and evaluating prison system operations. Even so, some research questions can be prioritized on the basis that (1) they involve a critical concern, (2) they can be evaluated, and (3) study results may be actionable in the near term. Any prioritization of research questions necessarily involves subjective judgment. Even so, the importance of these questions is reflected in the broader literature on restrictive housing.

Here, then, are 10 critical research questions that meet the above criteria and that hold considerable potential for improving accountability and creating more effective and efficient prison systems.

1. *To what extent do states employ effective strategies for managing their prison systems and limiting the use of restrictive housing to situations in which it is most needed?*

2. *What factors determine which inmates are placed in restrictive housing? To what extent is restrictive housing placement affected by variation in officer-, warden-, or facility-specific use of such housing? To what extent is such variation explained by inmate behavior?*

3. *What are the most important causes of prison violence and disorder? Compared to these causes, what is the relative contribution of certain inmates to violence and disorder?*

4. *To what extent do restrictive housing placements result from a propensity among some inmates to act violently or from poor administrative management practices or operations?*

5. *How effective and cost-efficient is restrictive housing relative to other approaches to managing prisons and inmates?*

6. *How effective and cost-efficient is restrictive housing relative to other approaches to punishing inmates?*

7. *What frequency and duration of restrictive housing create the most benefits and harms for inmates? Which aspects of or experiences in restrictive housing contribute to these outcomes?*

8. *What are the characteristics of inmates who most benefit from restrictive housing? Which inmates are most harmed by it? Why do these differences exist?*

9. *What are the short-term effects of restrictive housing on inmates while they are incarcerated? What are the longer-term effects during re-entry? What is the cost-efficiency of these effects relative to other prison management strategies or inmate sanctions?*

10. *To what extent do policymakers, the public, and prison administrators, staff, and officers support the use of restrictive housing? Which factors influence their support?*

Conclusion

Although research on restrictive housing has increased in recent decades, the overarching finding of this paper is that too little credible empirical research exists to state with confidence the need for such housing, its effects on inmates or prison systems, or its cost-efficiency. A balanced evaluation of the impacts of restrictive housing requires carefully examining the need for such housing, its implementation, its effects on inmates and other groups, its effects on the prison system at large, and its cost-efficiency.

Many critical research gaps exist along precisely these dimensions. Indeed, there is little about restrictive housing that has been consistently evaluated or well-evaluated using rigorous research methodologies, such as quasi-experimental designs that identify appropriate comparison groups or conditions. If the gaps remain unaddressed, jail and prison systems risk wasting their resources and missing opportunities to improve inmate, staff, and public safety. If appropriately addressed, restrictive housing policies — and jail and prison management policies, more generally — have the potential to rest on an evidence-based foundation. Doing so would help correctional systems to be more accountable, effective, and efficient.

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CHAPTER 8

The Effect of Administrative Segregation on Prison Order and Organizational Culture

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Introduction

Order is the central challenge of the well-managed prison, and the use of separation, in varying degrees of restrictiveness, features prominently in efforts to control the institution and its inhabitants. Indeed, how to classify, isolate, organize, and discipline prisoners to the "habits of order" (de Beaumont & de Tocqueville, 1833) has preoccupied correctional officials for centuries (Rothman, 1971). Early penitentiaries placed great faith in the ability of social isolation — enforced by austere architecture and authoritarian regimes — to impose a physical order even in the absence of an inmate's moral reform. Experiments with solitary confinement during the 1800s soon revealed, however, the inhumanity and ineffectiveness of isolation, and the practice was largely abandoned (Toch, 2003). Today, we again confront questions about the appropriate role of segregation and search for the lines of demarcation between its legitimate use as a management strategy, its overuse, and its potential to cause harm.

Managing the risks that prisoners pose and maintaining order are the primary purposes of classification decisions to place individuals in prison facilities

that differ by security level and organizational regime. "The very nature of our prisons," observes Cohen (2008), "means we must have some means by which to separate prisoners on the basis of those who are at risk from those who create those risks" (p. 1017). Thus, prisoners who present little risk to others and are unlikely to attempt escape are placed in minimum-security prisons; high-risk prisoners are placed in maximum-security prisons. Administrative segregation is a security classification for managing prisoners who are considered too dangerous or too disruptive to be housed among the general inmate population.

We can distinguish administrative segregation from other types of separation and isolation by its purpose: to control individuals who may pose a current or future threat (Metcalf, Morgan, Oliker-Friedland, Resnik, Spiegel, Tae, … Holbrook, 2013). In contrast, the purpose of disciplinary (or punitive) segregation is to punish inmates who engage in misconduct; protective custody is used to isolate inmates for their own safety.[1] A supermax facility is a stand-alone prison or a unit within a prison built or retrofitted specifically for the purpose of segregation (King, 1999; Riveland, 1999b).

Inmates held in segregation are typically confined to a cell for 23 to 24 hours per day, often behind solid doors. Segregation cells are austere. Inmates are allowed one hour of exercise five times per week, typically alone in small pens with metal fencing. Access to such personal items as family photographs and reading material is often restricted or denied. When inmates must be moved, they are shackled, chained, and escorted by two or more correctional officers. Meals are delivered within the cell, as are religious and educational services, sometimes via closed-circuit television. Visits and phone calls are sharply limited and closely monitored, or disallowed completely (see Cohen, 2008; U.S. Government Accountability Office, 2013; Kurki & Morris, 2001; Metcalf et al., 2013; Reiter, 2012; Toch, 2001).

The primary objective of administrative segregation is to improve prison order and safety by removing dangerous inmates from the general population and more effectively managing them in isolation (Metcalf et al., 2013; also see Mears & Watson, 2006). For this reason, administrative segregation and supermax units are sometimes referred to as "prisons within prisons." They are intended to serve a dual purpose: to incapacitate inmates and to deter them from future misconduct.

The number of inmates housed outside of the general prisoner population in some type of segregated housing has increased precipitously in the past decade. A recent study conducted by the Yale University Liman Program and the

[1] In practice, these distinctions may lose their meaning. Inmates may seek safety in administrative and punitive segregation, without the stigma of protective custody. Inmates in distress who harm themselves or attempt suicide may be punished for their actions, which violate prison rules. They also may be put in administrative segregation because they are disruptive and may harm themselves. Rumors that an inmate "snitched" may result in placement in protective custody. Regardless of why inmates are in segregated housing, the living conditions are similar, such as keeping inmates in a cell for 23 hours per day.

Association of State Correctional Administrators (ASCA) (2015) estimates that between 80,000 and 100,000 inmates were held in restricted housing in 2014. These numbers — coupled with longstanding concerns about the legal and ethical dimensions of the practice — have contributed to an emerging consensus that segregated housing is overused (Liman Program & ASCA, 2015; Mohr & Raemisch, 2015).

Despite the sense that there are too many inmates housed in isolation units, observers disagree about which inmates require segregation, when segregation is appropriate, whether it is an effective tool, or whether viable alternatives exist. This paper, commissioned by the National Institute of Justice, Office of Justice Programs, United States Department of Justice, assesses the research on the effectiveness of administrative segregation as a management strategy, including its effect on prison order and organizational culture. The paper also outlines a broad research agenda to help fill knowledge gaps and to learn how best to use this controversial strategy to maintain secure, humane correctional institutions that serve the public safety goals of our nation. These issues are relevant to anyone interested in better understanding the organizational effects of administrative segregation.

Corrections officials have argued that administrative segregation improves prison safety. The review of the research discussed below demonstrates, however, that its effects are inconsistent: sometimes improving order (Sundt, Castellano, & Briggs, 2008), sometimes making it worse (Briggs, Sundt, & Castellano, 2003; Labrecque, 2015; Wooldredge & Steiner, 2015), but mostly having no effect (Briggs et al., 2003; Huebner, 2003; Sundt et al., 2008; also see Labrecque, 2015; Morris, 2015).

Scholars also question how reliance on administrative segregation affects the organizational culture of prisons and shapes correctional employees' roles and work experience. Haney (2008), for example, warns of the deleterious effects that a "culture of harm" has on prison staff and their ability to work effectively and humanely with inmates in segregation. Correctional employees who work in segregation may be exposed to high levels of stress and trauma, which may contribute to destructive attitudes, the loss of professional skills, excessive use of force, and burnout. Some correctional leaders question whether the focus on isolating disruptive inmates detracts from the prisons' public safety mission (Mohr & Raemisch, 2015). More broadly, scholars caution that coercive strategies that rely on the use or threat of force may erode the legitimacy of prison management and lead to more, not less, prison disorder (Colvin, Cullen, & Vander Ven, 2002; Liebling, 2004; Sparks & Bottoms, 1995).

The next section examines the concepts that link the use of administrative segregation to prison order and reviews the research on the relationship between systemwide prison order and segregation. The latter portion of the review explores the relationship between administrative segregation and organizational

culture. Finally, the paper considers why so little research exists on this topic and concludes by recommending research priorities.

Administrative Segregation and Systemwide Order

Administrative segregation may affect prison order through three mechanisms (Mears & Reisig, 2006). First, it may incapacitate inmates by removing them from the general prison population, thereby reducing their opportunity to engage in serious misconduct. Second, administrative segregation may deter inmates from serious misconduct because of its promise for swift, certain, and severe punishment. Third, segregation may normalize facilities by removing troublesome inmates from the general prison population.

Administrative Segregation as Incapacitation

Incapacitation is the primary means by which administrative segregation is expected to improve systemwide prison safety. Severe restrictions on inmate movements and social interactions, the use of technology to control and surveil inmates, and stringent limitations on inmate property all reduce opportunities for inmates to assault others and engage in serious misconduct. Removing disruptive inmates from the general population — limiting their ability to interact with others and to access contraband and information — is expected to reduce the incidence of serious and violent misconduct.

Some evidence (Barak-Glantz, 1983; Bennett, 1976; Flanagan, 1983; Porporino, 1986; Toch, 1997; Toch & Adams, 1986), and much anecdotal information, support the theory that a small number of inmates is responsible for the majority of prison violence, lending credence to the claim that a policy of selective incapacitation may lower overall rates of prison violence. Bennett (1976) found, for example, that just 2 percent of the inmates held at San Quentin in 1960 were responsible for all the violent incidents that year. In a series of more rigorous studies, Toch (1997) and colleagues (Toch & Adams, 1986) demonstrated that "disturbed disruptive" inmates often struggle to adapt to prison and are responsible for a disproportionate amount of disruption and violence.

Using segregation less strategically — placing enough inmates in segregation for a sustained period in a process analogous to collective incapacitation — may reduce systemwide disorder. During the mid-1980s, for example, Texas placed all known and suspected gang members in administrative segregation, regardless of whether they were involved in an incident of serious misconduct. Although the Texas policy was not rigorously evaluated, Ralph and Marquart (1991) observed declines in the number of inmate murders and assaults (with and without weapons) following this change. Similarly, Irwin and Austin (1997) and Crouch

and Marquart (1989) credited the decline in inmate violence in California and Texas to these states' extensive use of segregation (but see Useem & Piehl, 2006).

In contrast, a number of studies indicate that rather than eliminating opportunities to engage in misconduct, administrative segregation may exacerbate it (Toch & Kupers, 2007). Rhodes' (2004) ethnography of segregation units in Washington state, for example, documented that "through practices that yield more trouble the tighter their hold, the prison tends to secrete the very thing it most tries to eliminate." Extreme control measures may result in extreme reactions and acts of resistance. Flooding and setting cells on fire; breaking furniture and cell fixtures; throwing and smearing blood, semen, urine, and feces; riots; hunger strikes; self-mutilation; and suicide have all been documented in segregated housing units, from the earliest penitentiaries (Rubin, 2015) to contemporary prisons (Edge & Jones, 2014; Human Rights Watch, 1997; King, Steiner, & Breach, 2008; Kupers, Dronet, Winter, Austin, Kelly, Cartier, … Vincent, 2009; Reiter, 2012; Rhodes, 2004). As Gawande (2009) explained, inmates who experience prolonged isolation "begin to see themselves primarily as combatants in the world, people whose identity is rooted in thwarting prison control" (paragraph 38). Thus, inmates may engage in acts of resistance to maintain a sense of purpose and identity in situations of severe social isolation (Rhodes, 2004; Toch & Adams, 1986).

Data from ethnographies, historical documents, and interviews about the high levels of violence and disorder found in segregation units are consistent with more quantitative reports. Bidna (1975) found rates of stabbings in California's secure housing units higher than in the general prison population, a difference that was statistically significant in the 1973-1974 study period, but not in the 1972-1973 study period. Bidna attributed the increased rate of assaults in secure housing units between 1972 and 1974 to a statewide crackdown on prison violence that included, among other policy changes, locking down the state's four maximum-security prisons. Similarly, a 1986 California task force report noted that rates of violence in "special housing (lockup) units" were particularly high. Rates of violence at Folsom State Prison's special housing unit were more than twice the rate for the mainline unit. Rates of violence in San Quentin State Prison's lockup unit were 60 percent higher than in its mainline unit (California Department of Corrections, 1986).

Further research points to a similar pattern. In a study of the Canadian prison system, Porporino (1986) found that, between 1980 and 1984, close to one-third of all self-directed violence and one-third of all property damage occurred in administrative segregation, even though it held only 5 percent of the total inmate population. Rates of assaultive behavior and general disruption were also disproportionately high in segregated housing. Similarly, more than half of all serious assaults against staff in Texas occurred in segregated housing and other close-control environments (Sorensen, Cunningham, Vigen, & Woods,

2011). The Sorensen team also found that a large proportion of violent assaults at medium-security prisons occurred within segregation cells.

Commenting on this pattern, Porporino (1984) concluded that the "concentration of violent incidents in higher security correctional settings suggest a simple, though often overlooked," fact.

> *Efforts to maintain order and control through more restrictive security can attain only limited success in curbing the incidence of prison violence. In the extreme, such measures may increase the motivation to engage in violence or prod the ingenuity of inmates and result in more extreme violence* (p. 218).

Thus, rather than reducing systemwide violence through incapacitation, segregation may simply change the location and form of the disorder and violence (Bidna, 1975; Sundt, Castellano, & Briggs, 2004) or amplify serious misconduct (Toch & Kupers, 2007).

Administrative Segregation as Deterrence

The significant deprivations associated with administrative segregation may also deter inmate misconduct. Inmates may be generally deterred by the threat of administrative segregation. Commenting on the opening of a supermax prison, for example, an Illinois prison official argued, "The majority of inmates will detest this place. … How much they detest it is going to be the key to how successful it is" (Hallinan, 1995). Similarly, those who are placed in administrative segregation may be specifically deterred by the experience, persuaded to never again warrant a return to segregation.

Speculation about the specific deterrent effects of segregation emphasizes the severity of conditions, extreme deprivation of social contact and basic amenities, and length of stay. For example, the U.S. Supreme Court upheld a Pennsylvania policy that denied inmates in long-term administrative segregation access to newspapers, magazines, and personal photographs, holding that the policy was reasonably related to the goal of motivating better behavior (see Cohen, 2008).

Research on the specific deterrent effects of short-term punitive segregation and solitary confinement does not support the idea that isolation motivates good behavior. In two early studies, Barak-Glantz (1983) found no relationship between initial placement in punitive segregation and subsequent placements there, and Suedfeld (1974) concluded that punitive isolation was not related to "productive change" in inmates. Two recent, methodologically rigorous studies by Morris (2015) and Labrecque (2015) confirm these conclusions.

Using a matched sample of 1,834 inmates from a large southern state, Morris (2015) found that punitive segregation had no effect on the probability, timing, or trajectory of violent misconduct. Similarly, Labrecque (2015) determined that

neither the experience of punitive segregation nor the length of time spent there affected subsequent involvement in violent misconduct, nonviolent misconduct, or drug use among a sample of Ohio inmates.

Notably, Labrecque (2015) detected some effect heterogeneity. Gang-affiliated inmates who experienced punitive segregation were 10 percent more likely to engage in violent misconduct and 14 percent more likely to engage in nonviolent misconduct. Inmates with mental illnesses were 23 percent more likely to engage in nonviolent misconduct and 24 percent more likely to engage in drug use following a term in punitive segregation. In contrast, inmates convicted of a drug offense were 28 percent less likely to commit an act of nonviolent misconduct after returning to the general prison population than were inmates convicted of a nonviolent offense.

Both Morris (2015) and Labrecque (2015) restricted their analyses to misconduct following punitive segregation, which shares some conditions of confinement with administrative segregation but likely differs in other important ways. Specifically, the length of stay in administrative segregation is much greater and inmates may interpret the experience differently. Nevertheless, Morris's (2015) and Labrecque's (2015) findings are consistent with a well-established body of research demonstrating that the severity of punishment has little effect on whether someone will reoffend. Instead, deterrence effects are mediated by perceptions and other factors such as stakes in conformity (Pratt, Cullen, Blevins, Daigle, & Madensen, 2006). To date, there is no empirical evidence that links deprivation or the restrictive conditions of confinement to improved inmate behavior. There are, however, some hints that the effects of confinement may vary among subgroups of inmates.

Little is known about how consistently punitive segregation or other types of restricted housing are used. Doubts about the certainty of punishment are fed by complaints that segregation is used arbitrarily and that the criteria for entry and exit from segregation are vague or nonexistent (Metcalf et al., 2013; Toch, 2007). Correctional officers' wide discretion in reporting and responding to misconduct (Bottoms, 1999) may undermine the certainty of punishment. In the only study to examine the effect of certainty of punitive segregation, Huebner (2003) found that the proportion of inmates in a prison facility who were punished with solitary confinement for a rule violation was not related to the frequency of assaults on inmates or on staff. Clearly, much more research is needed to understand the risk of punishment for prison misconduct and how the certainty of sanctions influences inmate behavior.

Administrative Segregation as Normalization

Finally, administrative segregation may normalize the general prison population by incapacitating the "bad apples" who instigate misconduct among

other inmates: the normalization hypothesis. The practice may also free up organizational resources and staff attention to focus on the routine maintenance of order and service provision. Officials from the Federal Bureau of Prisons maintain, for example, that segregated housing can reduce the use of facility lockdowns (locking general population inmates in their cells as a security measure), which are costly and require staff to perform custodial duties rather than other tasks (GAO, 2013, p. 33).

Lockdown days may be considered a proxy of disorder — prisons are locked down when there is a threat to safety or security. It is also reasonable to assume that the fewer days that inmates in general population spend locked in their cells, the more likely they are to engage in programs and access services. Sundt and colleagues (2008) examined lockdown use in the Illinois prison system, testing whether the opening of a supermax prison had a normalizing effect on the state's other prisons. Between 1996 and 1998, Illinois' 26 prisons were locked down an average of 55 times per month. The results of an interrupted time-series analysis indicated that opening the supermax prison resulted in 29 fewer lockdown days per month, a decline of 52 percent, which lends strong support for the potential normalizing effect of administrative segregation.

Additional research is needed to determine whether Sundt and colleagues' (2008) findings can be generalized and replicated. In addition, their method did not allow them to identify the mechanism that linked the use of administrative segregation to fewer lockdown days. More direct tests of the predictions derived from the normalization hypothesis are needed to reach a conclusion about the effect of segregation on systemwide prison operations.

The Total Effect of Administrative Segregation on Systemwide Prison Violence

Three studies have directly tested the effect of administrative segregation on systemwide levels of prison violence: Briggs and colleagues (2003), Sundt and colleagues (2008), and Wooldredge and Steiner (2015). Analogous to research on imprisonment and crime (Travis, Western, & Redburn, 2014), these studies tested the total effect of administrative segregation on prison violence and disorder. This strategy has the advantage of capturing simultaneously all incapacitating, normalizing, and deterrent effects, and the disadvantage of being unable to identify the specific mechanisms that link administrative segregation to prison safety and order.

Briggs and colleagues (2003) evaluated the effect of opening four supermax prisons on systemwide levels of prison violence against inmates and staff in three states — Arizona, Minnesota, and Illinois — using a quasi-experimental, interrupted time-series design. The prisons in these states differed in some important respects. Arizona and Illinois built stand-alone facilities for the

specific purpose of administrative segregation, and the supermax prisons in both states are notoriously punitive and austere (see Reiter, 2012; Kurki & Morris, 2001). Minnesota, however, retrofitted a prison to create its supermax facility. Inmates at Minnesota's Oak Park Heights facility were provided more opportunities to participate in programs and were less socially and physically isolated than were supermax inmates in Arizona and Illinois. The facilities also differed in operating capacity, utilization rates, and the proportion of supermax beds statewide. Arizona had the greatest supermax confinement capacity and the highest certainty of placement, while Illinois had the lowest. Minnesota used its supermax prison at a rate slightly higher than Illinois, and its inmates had more opportunity to participate in programs.

The opening of Arizona's two supermax prisons had no effect on statewide levels of inmate safety. Its first supermax facility had no effect on overall staff safety; however, a temporary (but significant) increase in assaults against correctional staff resulting in injury occurred in the month after Arizona opened its second supermax prison. Using Utah as a control to rule out regional effects, the analysis confirmed that the spike in serious assaults against staff was unique to Arizona. The analysis of Minnesota also found no relationship between the opening of its supermax facility and statewide assaults against inmates or staff. In Illinois, the statewide level of assault against inmates did not change after the supermax facility opened; however, its opening did correspond with a gradual (but sustained) improvement in statewide levels of staff safety. The Briggs team (2003) found 22 fewer assaults per month against staff after Illinois opened its supermax prison.

Sundt and colleagues (2008) further analyzed the effect of administrative segregation on systemwide prison order in Illinois. They first examined a security shakedown in 1996 that, among other effects, increased the number of segregation cells in the state's maximum-security prisons by 55 percent and converted one of the maximum-security prisons to a segregation housing unit. They then tested the effect of opening the Illinois supermax prison, controlling for the first set of policy changes in 1996. The team found that the policy changes implemented in 1996 resulted in approximately three fewer assaults per 10,000 inmates per month but had no effect on violence against staff. Sundt and colleagues could not determine whether improved inmate safety was attributable to the dramatic increase in the use of administrative segregation or to some other aspect of the shakedown, such as better property control, drug testing, or better security during visitation. The results regarding the effect of Illinois' supermax prison were largely unchanged from those reported by Briggs and colleagues (2003). The analysis confirmed that opening the supermax unit at Tamms had no effect on inmate safety but was associated with a significant decline in assaults against staff.

Wooldredge and Steiner (2015) analyzed the direct and total effect of the proportion of the total inmate population held in administrative and punitive segregation on rates of assault and nonviolent misconduct in 247 prisons from

Table 1. Summary of Research on the Effect of Segregation on System-wide Levels of Prison Violence

State	Intervention Tested	Inmate Safety	Staff Safety
Briggs et al. (2003)			
Arizona	Opening of 960 Bed Supermax	No Effect	No Effect
	Opening of 778 Bed Supermax	No Effect	Temporary (1 month) increase of 6.5 assaults with injury
Minnesota	Opening of 120 Bed Supermax	No Effect	No Effect
Illinois	Opening of 500 Bed Supermax	No Effect	Gradual, sustained decline of 22 assaults per month
Huebner (2003)			
National Sample of 185 Prisons	% inmate population receiving disciplinary segregation for most recent rule violation	No Effect	No Effect

40 states, using structural equation modeling. Contrary to expectations and controlling for inmate risk and other organizational characteristics, they found that segregation had a positive direct effect on rates of assault and nonviolent misconduct. Specifically, "A greater use of coercive control actually coincided with larger proportions of inmates who engage in assaults" (p. 244). Moreover, when examining the pattern of indirect and direct effects, Wooldredge and Steiner (2015) found that higher prison security was associated with greater use of segregation, which led to more assaults. The use of segregation was also positively associated with increased levels of nonviolent misconduct. These findings, argue Wooldredge and Steiner, call into question assumptions about the ability of security level and coercive controls to bring about prison order. They recommend reconsidering the concentration strategy of prison management and classification, and reevaluating the use of dispersion strategies to distribute high-risk inmates more evenly among facilities.

Summary of Results

It is difficult to draw conclusions from such a preliminary set of studies, most of which speak only indirectly to the ability of administrative segregation to achieve its objective of improved systemwide levels of prison safety and order. Nevertheless, the research reveals some patterns and tentative conclusions about the systemwide effect of administrative segregation on prison order.

Table 1. Summary of Research on the Effect of Segregation on System-wide Levels of Prison Violence (continued)

State	Intervention Tested	Inmate Safety	Staff Safety
Sundt et al. (2008)			
Illinois	55% increase in ad seg. cells at maximum security prisons; Pontiac prison converted to ad seg. facility; statewide "shakedown"	Decline of 3 assaults/month per 10,000 inmates	No Effect
	Opening of 500 Bed Supermax	No Effect*	Gradual, sustained decline of 25 assaults/ month*
Wooldredge & Steiner (2015)			
National sample of 247 prisons from 40 states	Proportion inmate population in ad seg. and disciplinary seg.	Increased rate of assaults	No Effect
		Increased rate of nonviolent misconduct	N/A

*Note: Results replicated findings from Briggs et al. (2003) with controls for 1996 "shakedown."

First, although it appears that a small number of inmates are responsible for a disproportionate amount of prison disorder, it is not clear whether incapacitation can prevent inmate disruption and violence. Inmates incarcerated within administrative segregation continue to engage in high rates of violence and misconduct (Bidna, 1975; California Department of Corrections, 1986; Porporino, 1986; Sorensen et al., 2011). It is possible that administrative segregation merely concentrates inmate violence in specific locations within the prison system, but there is also evidence that higher levels of security exacerbate inmate misconduct and disorder (Gaes & Camp, 2009; Wooldredge & Steiner, 2015). Administrative segregation may intensify some types of inmate misconduct (Rhodes, 2004; Toch & Kupers, 2007), particularly among certain types of offenders.

Second, there is neither support for the deterrent effect of punitive segregation (Huebner, 2003; Labrecque, 2015; Morris, 2015) nor for administrative segregation.

Third, the effect of administrative segregation on systemwide levels of prison violence is mixed (see table 1). Most of the evidence suggests that segregation does not improve systemwide safety (Briggs et al., 2003; Huebner, 2003; Sundt

et al., 2008) and may contribute to increases in inmate misconduct under some circumstances or among certain groups of offenders (Briggs et al., 2003; Labrecque, 2015; Wooldredge & Steiner, 2015). The effect of administrative segregation on the safety of correctional officers is also inconsistent — sometimes improving staff safety, sometimes making it worse, but most frequently having no effect (Briggs et al., 2003; Sundt et al., 2008).

Fourth, Sundt and colleagues (2008) found support for the argument that administrative segregation normalizes prison systems. An analysis of Illinois prisons found that opening a supermax facility substantially reduced the use of lockdown days. More research is needed to determine whether this result can be generalized and replicated in other locations.

Organizational Culture and Coercive Control

Questions about the effect of culture are woven throughout the canon of research on prison violence and order. Early prison scholars were particularly interested in the relationship between prison subcultures and the socialization of inmates and a set of values and social roles (Clemmer, 1940; Sykes, 1958). A later generation of scholars extended this work to examine the socialization of correctional officers and the attitudes and occupational experiences that characterize prison work (Jacobs & Retsky, 1975; Lombardo, 1981). The 1971 Stanford Prison Experiment studied prison life by randomly assigning students to roles as guards or prisoners for a 7- to 14-day trial. The results of this experiment (Haney, Banks, & Zimbardo, 1973) brought to light the powerful contextual influence that prison social roles have on the attitudes and behaviors of student "inmates" and "guards" and their interpersonal interactions. In just a few days, the students began to create a culture of control and resistance — "us versus them."

Organizational culture is difficult to define and measure. "You had to be there," explains the insider, a phrase that captures the intuitive and latent qualities of organizational culture (Liebling, 2004). Garland (1990) defined culture as an idea that "refers to all those conceptions and values, categories and distinctions, frameworks of ideas and systems of belief which human beings use to construe their world and render it orderly and meaningful" (p. 194). Contemporary theorists posit that culture is socially constructed, dynamic, expressive, and relational (for a discussion, see Stowell & Byrne, 2008).

Organizations form cultures through shared social experiences. Schein (1990) describes organizational culture as a pattern of assumptions that tells its members the "correct way to perceive, think, and feel" about organizational problems. Organizational culture serves an important function, explains Schein:

> *Once a group has learned to hold common assumptions, the resulting automatic patterns of perceiving, feeling, and behaving provide meaning, stability, and comfort; the anxiety that results from the inability to understand or predict events happening around the group is reduced by the shared learning* (p. 111).

These insights help to explain how organizational cultures form, their potential effects, and why they emerge and persist.

Given the importance of the concept of culture to penology, surprisingly little research has directly studied organizational culture (Byrne, Hummer, & Taxman, 2008). An important exception is the work by Alison Liebling (2004) that examined the "moral performance" of prisons. Liebling (2004) identified unique organizational cultures in five prisons that could be scored on the emphasis they placed on the values of security and harmony. Security values included rule enforcement, use of authority, risk management, control practices, and removal of privileges. Harmony values included respect, humanity, trust, support, relationships, activity or personal development, and contact with family. Good prison performance — and, by extension, good organizational cultures — achieve balance between the two values, whereas "poor" prison performance overly emphasizes either harmony or security.

Liebling's (2004) work on the moral performance of prisons shares some common ideas with Colvin and colleagues' (2002) theory of differential coercion and social support. As applied to prisons, Colvin (2007) hypothesizes that using coercion in the absence of consent and social support increases, rather than decreases, compliance and safety. Colvin defines coercion as the "force that compels or intimidates an individual to act because of the fear or anxiety it creates" (2007, p. 368). He argues that when social support for inmates is low and coercion is used inconsistently, prisons will see higher levels of violence and disorder as inmates become angry and direct their frustration at others. When coercion is used consistently in the absence of low and inconsistent social support, Colvin predicts that inmates will direct negative emotions inward, engage in acts of self-harm, and experience mental health problems.

Colvin (2007) analyzed the organizational policies and climate that existed just prior to the infamous riot at the New Mexico State Penitentiary in 1980.[2] He described an organization that provided low social support and used coercion inconsistently (including the arbitrary use of punitive segregation), with an organizational culture characterized by hostility between correctional officers and inmates. This period of violent unrest is compared with earlier periods when prison officials maintained a better balance of social support and coercion. Like

[2] The 1980 riot at the New Mexico State Penitentiary was one of the most deadly, expensive, and violent prison riots in U.S. history. Over two days, 33 inmates were killed, 400 were injured, and 12 correctional officers were held hostage. Rioting inmates took advantage of serious security lapses to beat, rape, torture, and murder (see Useem, 1985).

Liebling (2004), Colvin (2007) recommends a management strategy that meets the "Goldilocks test": neither too lax nor too severe, but just right.

Theorists have also identified the importance of legitimacy and fairness in achieving prison order (Liebling, 2004; Sparks & Bottoms, 1995; Useem & Piehl, 2006). Prisons are political communities that rely on cooperation and rest on the belief that the authority of correctional officials and prison regimes is legitimate and applied fairly. "Prisons cannot operate by force alone," contend Useem and Piehl (2006, p. 90). Moreover, when prisons lose legitimacy and prison regimes are viewed as unfair, the results are despair (Liebling, 2011), violence, disorder (Beijersbergen, Dirkzwager, Eichelsheim, Van der Laan, & Nieuwbeerta, 2015; Carrabine, 2005; Bottoms, 1999; Sparks & Bottoms, 1995; Useem & Piehl, 2006) and, occasionally, political resistance (Reiter, 2014).

The next section considers more fully the organizational cultures found in administrative segregation. Haney (2008) warns of a culture of harm found in administrative segregation that has deleterious effects on prison staff and their ability to work effectively and humanely with inmates. Working in administrative segregation exposes correctional staff to high levels of stress and trauma, which may contribute to destructive attitudes, high levels of fear, the loss of professional detachment and skill, excessive use of force, and burnout. Finally, the potential effect of organizational culture on efforts to reform the use of administrative segregation is considered.

The Organizational Culture of Administrative Segregation

The nature of organizational culture makes it a difficult phenomenon to study. Schein (1990) notes that case studies, clinical descriptions, and ethnographies are the best tools for its study at the beginning stage of research, because these methods are more holistic and better able to capture the complexity of assumptions and values. Only a handful of studies considers the organizational culture of administrative segregation units. However, some inferences can be drawn from official mission statements and analysis of the overt values expressed by the characteristics of the organizational regime. Rhodes' (2004) ethnography of Washington state's administrative segregation unit is a sophisticated and carefully documented study of one state's organizational culture. Court cases and investigations provide another glimpse into some of the worst qualities of the culture in segregated housing at various times (Cohen, 2008; King et al., 2008; Simon, 2014). Finally, a handful of scholars has shared and reflected on their direct observations of supermax culture (Haney, 2008; King, 1999, 2005; Kurki & Morris, 2001). Among them, Haney's (2008) discussion is a more formal description of the causes and effects of the culture of harm inherent in administrative segregation.

Organizational values and language are important makers of culture. An overriding concern for maintaining security and managing levels of risk and danger are among the most overt organizational values manifested by administrative segregation. This aspect of administrative segregation is consistent with the set of values that Feeley and Simon (1992) describe as the "new penology," which makes actuarial risk management of dangerous groups a priority over individualized treatment or concern for due process. These values are also consistent with what Liebling (2004) referred to as security values.

Rhodes (2004) characterized the administrative segregation prison as a security utopia. Like the penitentiaries of the early 1800s, supermax prisons embody an overriding faith in the ability of technology and architecture to enforce order and protect staff (also see Reiter, 2012). Emphasis on security values is so dominant that the supermax prisons in California were built without the physical space necessary to meet inmates' basic health care needs (Reiter, 2012; Simon, 2014). The Colorado Department of Corrections constructed a $200 million supermax facility that was open for mere months before a court closed it because it lacked outdoor recreation areas (Prendergast, 2015). The culture of administrative segregation emphasizes a single-minded concern for staff safety and risk control. The dominant value of staff safety is institutionalized in ceremonies and rituals that memorialize officers who were hurt or killed in the line of duty. It also is powerfully communicated and promulgated in organizational stories about riots, murders, and horrific acts of inmate brutality — all cited as reasons for needing administrative segregation.

Technological sterility and efficiency are inherent in contemporary segregation prisons and are reflected in their names, physical plants, and procedures. Older names for penal isolation — the hole, the box, and lockup — have been dropped in favor of technocratic names such as administrative maximum, intensive management, behavior modification, and, most commonly, administrative segregation (Metcalf et al., 2013). Newer segregation units rely on computers to open and close doors, closed-circuit monitors to deliver educational and other programming, surveillance cameras that constantly watch inmates, and computer monitors for conducting "visits." In these units, staff must follow prescribed protocols consisting of detailed, exacting procedures. Wall (2016) describes, for example, how canisters of pepper spray are weighed in Rhode Island segregation units to monitor whether an excessive amount of the chemical was discharged when used. The California Department of Corrections and Rehabilitation once required that guards use, as a matter of policy, a stun gun every time they forcibly removed an inmate from a cell, regardless of the inmate's behavior (Simon, 2014). These directives describe a culture that fixates on technology and formal rules. Rhodes (2007) explains, "supermax technology offers the cultural gloss of a 'high-tech solution' that helps frame problems — some of them caused by supermax confinement in the first place — largely in terms of their susceptibility to technical intervention"

(p. 549). According to Rhodes, the result is an impression of inevitability and necessity — a sense of progress and sophistication.

The culture of administrative segregation is also embodied in beliefs about inmates and correctional staff and the way that these belief systems play out through interactions. Rhodes (2004) shows that administrative segregation is based on the concept of the hyperrational, irredeemably dangerous inmate. Prisoners held in administrative segregation are called the worst of the worst, conjuring up archetypal images of convict revolutionaries and calculating serial killers (for a discussion, see Reiter, 2012). Rhodes (2004) illustrates how inmate behavior is interpreted within this belief system. Acts of serious misconduct and self-harm are interpreted as manipulation and malingering and are viewed as confirmation that the inmates require isolation and punishment (also see Haney, 2008). Yet, prisoners' records of good behavior are interpreted as evidence of their superhuman will and calculated rationality. Drawing on Schein's (1990) work, these organizational beliefs can be perceived as strategies for helping staff to understand the problem of the dangerous inmate and cope with the moral complexity of extreme deprivation and punishment.

Toughness and hypermasculinity are ascribed to correctional officers who work in supermax and segregation facilities (Haney, 2008). Supermax prisons, for example, are said to employ the best of the best to control the worst of the worst. These attributes are most clearly expressed via uniforms and security rituals. Haney (2008) describes the paramilitary insignia exhibited on uniforms, officers donning body armor and gas masks, and guards' use of overpowering physical force as examples (also see Rhodes, 2007). Haney also discusses the cultural value of seeing action and overpowering resistant inmates, experiences that build guards' status within the organization. Irwin (2004) hypothesizes that this type of "us versus them" culture allows correctional officers to maintain a sense of morality while participating in practices that may degrade and dehumanize prisoners.

Occupational Roles and Job Performance

During the 1970s and early 1980s, prison reformers advocated for diversifying and professionalizing prison staff. Recruiting more women, minorities, and college-educated correctional officers, reformers argued, would enable change in negative guard cultures characterized by racism, excessive use of force, and resistance to civil rights reforms. Research, however, typically found no relationship — or weak and inconsistent relationships — between correctional officers' personal backgrounds and work-related attitudes. Reflecting on these findings, one research team hypothesized that the demands of correctional work may be "so encompassing and yet so restrictive that all officers, regardless of gender, race, social backgrounds, and prior beliefs, will develop similar attitudes toward their jobs" (Jurik, Halemba, Musheno, & Boyle, 1987, p. 109).

Research on workplace socialization in prisons suggests that the organizational cultures of administrative segregation units could affect a variety of work-related behaviors, attitudes, and emotions. For example, organizational cultures create expectations among staff about their responsibilities regarding problem management. In a culture of harm, Haney (2008) argues,

> *Interventions aimed at de-escalation or compromise may be seen as capitulation, signs of weakness, or 'rewarding bad behavior.' Guards who violate the norms of punishment by routinely seeking compromise, finding ways to express encouragement, or showing empathy for the prisoners' plight face marginalization, ostracism, and reassignment* (p. 972).

Thus, culturally proscribed attitudes and organizational expectations are likely to shape how employees in segregation units perform their jobs. The organizational culture may also shape inmates' expectations and their reactions to correctional officers.

King (2005) interviewed supermax inmates in Colorado and Minnesota about their views on staff. In both locations, inmates said the officers were professional, did not abuse inmates, and could articulate a clear institutional mission. The officers at Minnesota's Oak Park Heights facility, however, were viewed as more helpful and fair, and less racist than the officers at the Colorado State Penitentiary. King (2005) noted that Oak Park Heights offered more programming opportunities and that inmates spent more time out of their cells, which increased opportunities for inmates and staff to communicate and interact informally. In contrast, inmates and officers at the Colorado facility rarely interacted, because inmates were locked down and behind barriers. These observations led King to hypothesize that "in situations where potential contact between staff and prisoners in public settings is higher, staff will experience a greater strain towards behaving in helpful, fair, consistent, and nonracist ways" (2005, p. 135).

Furthermore, King (2005) asked whether the use of administrative segregation might result in the loss of important skills. For example, the communication, de-escalation, and conflict-resolution skills of officers working in segregated housing units may atrophy from lack of use. King also questioned whether these skills may weaken in all officers who have a greater incentive to move difficult and troublesome inmates to administrative segregation rather than engaging with them to solve problems. Reliance on administrative segregation may, therefore, alter patterns of interaction between officers and inmates throughout a prison system. Briggs and colleagues (2003) noted, for instance, that they could not determine whether the lower rates of assault against staff members in Illinois after the supermax facility opened were due to changes in inmate behavior or staff behavior, or to a change in interactions between the two groups.

Civilian employees are not immune to the effects of working in administrative segregation. Doctors, nurses, psychiatrists, and chaplains may experience heightened conflict and ambiguity regarding their roles in segregation facilities, where the organizational culture and regime are more starkly at odds with the orientation and expectations of their professions. "It is hard to imagine a clinician anywhere else in society even attempting a therapeutic interaction with a patient who is standing or sitting inside a thick metal cage," notes Haney (2008, p. 973). Although he argues that staff cannot alter these security demands, Rhodes (2004) maintains that the struggle between treatment and custody ideals is an important check on the hegemony of the administrative segregation regime. Despite their potential to affect an organization, it is likely that treatment staff struggle to maintain standards of professional care and clinical empathy when working in administrative segregation, where security dominates every decision.

Finally, Haney (2008) argues that the culture of harm is particularly vulnerable to the escalation of punitive practices.

> *Because guards are encouraged to punish, repress, and forcefully oppose — by virtue of the fact that they are provided with no alternative strategies for managing prisoners — they have no choice but to escalate the punishment when their treatment of prisoners fails to produce the desired results (as it frequently does). Of course, over time, the correctional staff becomes accustomed to inflicting a certain level of pain and degradation — it is the essence of the regime that they control and whose mandates they implement. They naturally become desensitized to these actions and, in the absence of any alternative approaches (both the lack of conceptual alternatives or the means to implement them), they deliver more of the same* (p. 970).

U.S. Supreme Court Justice John Paul Stevens, dissenting in *Beard v. Banks,* recognized this potential, arguing that the desire to "motivate good behavior" via deprivation has no principle of limitation (cited in Cohen, 2008). It is reasonable to expect, then, that management philosophies and practices that place a heavy emphasis on security and coercion to achieve prison order are vulnerable to excessive use of force and abuse (Haney, 2008; Useem & Piehl, 2006). Research examining the use of force, and attitudes toward the use of force, is needed to learn more about this phenomenon and its relationship to formal and informal organizational values.

The Emotional Consequences of Working in Administrative Segregation

Haney (2008) describes administrative segregation as operating in an "ecology of cruelty" that affects all who work and live there. The stark environment of supermax prisons, in particular, exposes people to stress. The bunker-like atmosphere, constant vigilance, and wild swings between extreme boredom and extreme crisis may take a toll on employees' health. "[P]risoners *and*

guards — are likely to find the outer limits of their psychological tolerance pressed by these places," Haney observes (2008, p. 969). Recognizing this potential, correctional agencies attempt to rotate officers' assignments within segregation units, sometimes even rotating employees to other facilities (Riveland, 1999b). However, their efforts are hampered at supermax prisons, which are often located in rural locations. Prisons also struggle to manage high staff turnover and absenteeism, which make shift rotation difficult and unpredictable. It is important that future research considers how the duration of an officer's tenure in segregation may affect work-related outcomes and officer well-being. Similarly, it is unclear whether shift and institutional rotation are effective strategies for mitigating the effects of working in segregation.

Researchers and corrections leaders know a great deal about the stresses of prison work. A well-established body of research demonstrates both the high level of occupational stress experienced by prison employees and the harmful effects of chronic occupational stress (Cheek & Miller, 1983; Dowden & Tellier, 2004). For example, research has found particularly high rates of divorce, heart disease, absenteeism, turnover, and burnout among correctional employees (Dowden & Tellier, 2004). In interviews with staff working in control units, King (2005) observed that "[v]irtually without exception staff dealing with the 'worst of the worst' prisoners in England and Wales found their job stressful" (p. 135).

Those who work in administrative segregation may be regularly exposed to traumatic events, including suicides and disturbing acts of self-mutilation (Edge & Jones, 2014). Rhodes (2004) described the deep visceral disgust and anger that staff experience when prisoners engage in dirty protests — throwing feces and other body fluids on officers or covering themselves and their cells in feces to force officers to conduct cell extractions. Extended exposure to trauma and feelings of disgust may contribute to professional detachment and loss of compassion, causing employees to become numb to emotions or to act out in anger and frustration.

Vigilance and fear of victimization — feeling constantly on guard for signs of danger — may also be especially high among employees who work in administrative segregation. Inmates' rage and desperation are frequently directed at the correctional officers who work in segregation units and at the prison administrators who place inmates in segregation (Rhodes, 2004; Gawande, 2009). As discussed above, physical assaults against correctional staff occur at a high rate within segregation units. An exploratory analysis by Sundt and colleagues (2004) found that Illinois correctional officers at the supermax prison reported substantially higher levels of work stress and fear of victimization than did guards working in the general prison population. Supermax officers also were less committed to and less satisfied with their jobs than were officers working in the states' other four maximum-security prisons. Although a low response rate from the officers working at the supermax prison precludes generalization, the lack of participation is, perhaps, another indicator of the officers' disengagement and alienation.

Cultural Change and Reforming Administrative Segregation

In the mid-2000s, the National Institute of Corrections (NIC) developed the Cultural Change Initiative (CCI) to support corrections officials in their efforts to change organizational culture. The initiative was designed to address negative prison culture, which NIC opinion leaders believed contributed to breakdowns in leadership and problems among staff and inmates such as inadequate responses to sexual assaults, racist attitudes, and excessive use of force. The initiative provided training and technical assistance with organizational culture, change management, and strategic planning (Byrne, Hummer, & Taxman 2008).

Participants in CCI attended a three-day training, "Promoting Positive Prison Culture," where they learned about organizational culture, assessed the culture in their organizations, and began developing workplace improvement plans. Participating organizations then received technical assistance in writing mission statements for their facilities, identifying desired values and beliefs, and developing plans for achieving and monitoring desired outcomes. In a multisite evaluation of CCI, Byrne and colleagues (2008) found that, despite implementation problems, participating organizations generally showed improvement in organizational culture indicators. At one study site that provided outcome data, CCI was associated with declines in overall inmate misconduct over a 17-month period. Violent incidents also declined, but the change was not statistically significant. Although preliminary, the results found by the Byrne team are promising and support the need for additional research on organizational culture in prisons and for the development of more robust cultural change interventions.

The findings are also consistent with theoretical work that points to the important link between culture and organizational effectiveness. As doubts are raised about the appropriate use of administrative segregation and its potentially harmful effects, it will be important to consider how the organizational culture of prisons, generally — and administrative segregation units, specifically — may both impede and facilitate change. For example, Mohr and Raemisch (2015) suggest that too strong a focus on security or efficiency may detract from other important organizational goals and missions such as improving public safety.

For decades, administrative segregation has been justified as necessary for the protection of staff members. Moving away from reliance on administrative segregation and reforming its mission from containment to risk reduction, for example, will require significant changes in staff culture, belief systems about inmates, and assumptions about how best to create orderly and safe prisons. Discussions about the need to reform administrative segregation should specifically acknowledge the importance of protecting correctional officers from the negative effects of high stress and continued exposure to high rates of assault within segregated housing. Focusing exclusively on the well-being of inmates and abuses documented in administrative segregation could contribute to a hostile "us versus them" culture and resistance to needed reforms.

A. T. Wall (2016), the director of the Rhode Island Department of Corrections, advocates for the full participation of correctional staff in efforts to reform the use of administrative segregation. "The success of any such venture will depend on our ability to win and maintain the trust of corrections personnel," he explains. Rather than the paramilitary, top-down organizational model of management traditionally employed in prisons, Wall argues for a more horizontal, collaborative approach to reform, wherein employees from all levels of the organization work to identify challenges and agree on changes. Such a change in the organizational culture of prisons could have far-reaching benefits.

Toward an Evidence-Based Model of Prison Management

The evidence-based practices movement is transforming the delivery of correctional programs (Taxman & Belenko, 2012). And for good reason: theoretically informed and scientifically validated practices deliver better outcomes with a higher return on public investment (Drake, Aos, & Miller, 2009). Institutional corrections, however, has been slower to adopt an evidence-based orientation and there is little empirical research on the nation's prison systems. It is noteworthy that the Department of Justice's recent Smart on Crime Initiative included technical assistance grants to support "smart policing," "smart prosecution," "smart defense," "smart probation," and "smart supervision" (to reduce the use of prisons). There was no "smart prison" initiative — there simply is no evidence base on which to build such a program.

It is worth considering why so little scholarship exists on such an important public institution. Although this question is worthy of careful evaluation, a few preliminary observations are offered here with the hope of identifying barriers to success and opportunities for improvement. Four issues seem particularly germane: public leadership, data infrastructure, institutional review boards, and the need for national reporting standards for corrections.

Federal and state governments spent billions of dollars to build supermax prisons and retrofit other facilities for administrative segregation without a single independent study documenting either the need for or the utility of this practice (Mears, 2008a). The use of evidence-based practices requires organizations to embrace the value of scientific knowledge and incorporate data into their decision-making. Although academic scholars and professional associations have for decades called for greater transparency, use of research, and performance measures, prisons remain a "black box" (Mears, 2008b). Strong leadership at every level of government is needed to address the problem. Embracing the value of data-driven policies will facilitate positive organizational change and promote positive organizational cultures. Promising examples of success in community corrections exist, where leaders in states such as Oklahoma and Oregon took assertive roles in promoting greater public accountability and organizational effectiveness (Latessa, 2004). The political context surrounding incarceration

is shifting. This opportunity should be embraced, and public leaders should be urged to support research on prisons that will lead to improved quality, efficiency, and public safety.

Given the lack of organizational support for research, it is not surprising that the data infrastructures of departments of corrections are grossly underdeveloped. As recently as 2012, the Government Accountability Office (2014) found that the Federal Bureau of Prisons did not document how long inmates spent in administrative segregation and had never evaluated the effect of long-term segregation on prison safety or inmate well-being. Although some fault lies with the hubris of decision-makers who have failed to subject their policies to study or monitoring, there is also a lack of infrastructure to support data collection and reporting. There is a tremendous need for technical assistance and funding to support the creation of robust, modern information technology systems that can support better decision-making to improve outcomes.

Prisoners are a protected class of research subjects, and scholars who conduct research on prisoners understandably have the extra burden of demonstrating that their research complies with all ethical and regulatory requirements governing research on human subjects. University review boards are often ill-informed about prisons and criminal justice and wary of exposing their institutions to any risk. In addition, departments of corrections may require researchers to submit proposals for research that, if approved, must go through another internal review board constituted by the prison system. Review boards within departments of correction also have incentives for denying research proposals that may expose their organizations to risk by revealing problems within the prison system or by questioning policy decisions. Moreover, the members of review boards within departments of corrections typically lack the scientific credentials and the expertise to make appropriate methodological or theoretical recommendations.

Current regulatory requirements may discourage scientific social research on prisons and prisoners. At the least, scholars who engage in research on prisons and prisoners need additional support to navigate the difficult and time-consuming institutional review board process. Timelines for conducting funded research on prisons and inmates, for example, should be more generous than those set for other types of research. There is also an opportunity for the Department of Justice to conduct a national assessment of institutional review boards and recommend best practices to better balance the protection of prisoners from unethical research practices and the pressing need to develop a scientific knowledge base about prisons and incarceration. States should also consider whether departments of corrections have a conflict of interest that prevents them from objectively reviewing the merits of proposed research.

Finally, the lack of national reporting standards makes it difficult to generalize from research findings and accumulate knowledge. It is hard to imagine where

criminal justice practice and scholarship would be if the Federal Bureau of Investigation had not created standards to measure crime in the 1920s. Yet, the corrections field has no standards for reporting performance indicators such as assaults and recidivism. Similarly, there are no agreed-upon definitions for basic organizational indicators such as security level or operating capacity. The Prison Rape Elimination Act of 2003 is an exception and an example of progress. It created national standards for reporting rape and sexual victimization in prisons. The corrections field may also need national legislation to establish additional reporting standards.

Directions for Future Research

Given the state of the knowledge base about prison management, administrative segregation, organizational culture, and prison order in general, a broad set of research questions and methodologies is needed. Although experimental research produces internally valid results, those results are often not suitable for generalization. Experimental research is not well-suited to developing new insights and is a poor strategy for describing or understanding complex, multivariate phenomena and contextual effects. Prison order is a complex, dynamic phenomenon intimately tied to context; thus, it is premature to establish a particular methodology or set of research questions. That said, some general recommendations are offered below.

Basic Research Needs

First, basic research on inmates' adjustment to incarceration is needed. Too little is known about the common patterns and causes of inmate behavior. Until more information about these patterns is gathered and assessed, developing effective interventions and programs for managing violent and disruptive inmates is guesswork. Absent a solid understanding of the cause of a problem, there is a tendency to focus too much on managing symptoms. The corrections field lacks the research on the etiology of prison violence, victimization, non-serious misconduct, suicide, self-harm, fear, gang activity, and mental health necessary to develop a solid basis for identifying effective strategies to manage and prevent serious and disruptive inmate misconduct. Basic research is the foundation on which good theory and good practice are built.

In a similar vein, the field lacks research on the trajectories of adjustment and maladjustment over the course of prisoners' sentences to better understand stability and change in inmate behavior. Studies of inmate behavior patterns before, during, and after placement in administrative segregation — and of other efforts to manage violent, disturbed, or disruptive inmates — are also needed to understand more fully the effect of interventions on prison order and inmate well-being (Toch & Kupers, 2007). Longitudinal research designs may be

particularly valuable for understanding the dynamic interplay among inmates, staff, the prison environment, and prison management. Until a better research base is developed, researchers and practitioners alike will continue to puzzle over the inconsistent and unpredictable results of efforts to manage and reduce prison violence and disorder.

Organizational Variation in Prison Order

Second, the field needs research on the causes of variation in institutional order from one prison system, prison, or cellblock to the next. Too little is known about the factors that distinguish prisons with high rates of disorder from those with low rates (Useem & Piehl, 2006). In particular, it is unclear whether prison security levels prevent disorder or create contexts that exacerbate and concentrate disorder and future offending (Gaes & Camp, 2009; Wooldredge & Steiner, 2015). Yet, under the assumption that this fundamental practice is critical to creating safer prisons, security classifications are used in every prison system. Studies evaluating the relative effectiveness of the "concentration model" versus the "dispersion model" are needed, as are studies that examine variation in management strategies and organizational cultures. It is particularly important that research in this area develop better measures of key concepts and move away from general indicators of policies and program participation.

Deterrence, Justice, and Legitimacy

Third, the effects of official responses to inmate grievances and formal sanctions for misconduct must be better understood. Strong theory and an emerging body of research point to the important interplay among the use of authority, perceptions of fairness and legitimacy, and compliance (Liebling, 2004; Sherman, 1993; Sparks & Bottoms, 1995; Tyler, 2003). Research is needed in three areas: deterrence, restorative justice, and procedural justice. Studies of the use of sanctions and deterrent strategies commonly yield inconsistent results (Sherman, 1993), such as those seen so far on the use of segregation. Perceptions of fairness, justice, and legitimacy appear to influence the effect of sanctions and explain some of the inconsistent findings in the literature. The corrections field should build on the works of Colvin (2007), Liebling (2004), and Sparks and Bottoms (1995) to develop an applied knowledge base of the effective exercise of authority in prisons. This may be a particularly important area of inquiry, because coercive practices can backfire.

The rise of supermax prisons and the expanded use of administrative segregation emerged, in part, because corrections officials believed that the court reforms of the late 1970s and 1980s severely limited their authority and their options for responding effectively to inmate violence and misconduct. As the field moves away from using segregation to punish and control violent and disruptive inmates, it is critical that it develop new options for preventing serious

misconduct and responding effectively when it does occur. Corrections officials need help from researchers and the National Institute of Justice to identify effective alternatives to administrative and punitive segregation. Swift and certain deterrence, restorative justice programs, and supervision informed by procedural justice are promising areas for beginning this research.

Studies of Administrative Segregation

Fourth, more research is needed to understand the effect of administrative segregation on prison order and safety and to answer questions about when administrative segregation should be used, how many inmates may require it, and for how long. Comparative case studies, process evaluations, and outcome evaluations can reveal more about administrative segregation's effect on systemwide prison order and the mechanisms that connect this practice to various outcomes. Priority should be given to studies that conceptually and methodologically distinguish between the effects of separating dangerous or disruptive inmates from the general population and the effects of conditions of confinement. Studies that systematically examine the various policies and practices found in administrative segregation will also be revealing.

The field also needs better data about the effect of working in administrative segregation. Developing and supporting the prison workforce is a longstanding priority of the Office of Justice Programs as well as the various professional associations that represent corrections officers. The handful of observations about how working in supermax prisons affects employees raises concerns about the heavy burden and risks borne by staff in these facilities. More information is needed about all that staff experience when they work in administrative segregation. Then, the field can better consider how to mitigate the potential effects of chronic occupational stress, fear, and workplace victimization. It is also important to understand more about how the culture of supermax prisons affects the use of force, hostility between inmates and staff, and the escalation of punishment and resistance.

Effective Practices of Inmate Supervision

Fifth, too little is known about how prison employees contribute to inmate adjustment, prison order, and rehabilitation. There are hints that the quality of interactions between correctional officers and inmates is consequential (Day, Brauer, & Butler, 2015; King, 2005; Liebling, 2004). For example, recent research on the effectiveness of probation and parole officers indicates that both officers' professional skills and their relationships with the offenders they supervise are important (Bonta, Bourgon, Rugge, Gress, & Gutierrez, 2013; Kennealy, Skeem, Manchak, & Eno Louden, 2012; Smith, Schweitzer, Labrecque, & Latessa, 2012). Research is needed to help the field understand more about interactions between inmates and officers and how these interactions contribute to prison order, safety,

fear, perceptions of fairness, and inmate behavioral change. The corrections field must also learn more about effective (and ineffective) practices for working with dangerous and disruptive inmates.

Organizational Culture and Effectiveness

Sixth, and finally, additional research is needed to improve the field's understanding of the relationship between organizational culture and organizational effectiveness. The National Institute of Justice's Cultural Change Initiative is a promising strategy for developing positive organizational cultures and improving outcomes such as prison order and safety. Evaluations of efforts to reform administrative segregation should incorporate assessments of organizational culture, which may be an important determinant of the Cultural Change Initiative's success. More broadly, additional case studies, histories, and ethnographies are needed to better understand prison cultures and what distinguishes harmful, destructive prison cultures from just, reintegrative prison environments. This research will help correctional leaders to think strategically about the relationships among their management practices, culture, and the mission of their institutions.

The Well-Managed Prison

The appropriate role of administrative segregation in maintaining an orderly and safe prison system is not yet known. Certainly, there is very little scientific evidence supporting its effectiveness and enough contrary evidence to warrant limiting its use. Cohen (2008) argues that the field could concede to the need to separate dangerous and disruptive inmates from the general prison population without also agreeing that extreme social isolation and the harsh conditions of confinement are legitimate strategies for securing prison safety and order. Reforms to the regime of administrative segregation are clearly needed, but more fundamental doubts remain about the capacity of architectures and technologies of control to impose the habits of order.

In a footnote to his article on trends in prison management, Riveland (1999a) commented that prisons are one of the few social institutions that measure themselves by their failures. Departments of corrections report rates of recidivism, and, occasionally, rates of prison violence, suicide, and major disruption. These are critically important elements, but they reveal nothing of the other important organizational goals of prisons. They do not help corrections officials to understand markers of quality such as inmate productivity, reduction in criminal risk, increased fairness, and the improved well-being of staff and inmates. Performance measures are not merely indicators of success or failure; they also powerfully communicate organizational values and priorities — What gets counted tends to count.

Alison Liebling (2004) wraps up her analysis of prison performance by identifying what matters in prisons: the quality of the relationships among inmates, staff, and institutional leaders. Liebling concludes that firm, fair, and caring relationships are the foundation of moral correctional practices.[3] Good organizational performance, argues Liebling, is characterized by a value balance between security and harmony that is rooted firmly in the concept of a just community. Respect, humanity, good and right staff-prisoner relationships, fairness, effective security and management systems, and strong leadership are the markers of a well-managed prison.

Improving knowledge about inmate adjustment, prison organizations, and effective management strategies will help correctional officials and scholars to develop approaches to achieving prison order and developing a set of effective practices for inmate supervision. In addition, correctional leaders need data to inform and support their decisions about the appropriate use of administrative segregation. The United States spent billions of dollars building the capacity to incarcerate a large number of inmates in restrictive housing without conducting a careful study of either the need for or efficacy of segregation (Mears, 2008a). The corrections field should not compound this mistake by investing in other unproven strategies. It is time to invest in developing an evidence base to guide prison management in the use of strategies such as administrative segregation.

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[3] Firm and fair officer-offender relationships may also be the foundation of effective correctional practices (Andrews & Bonta, 1994; Skeem, Louden, Polaschek, & Camp, 2007).

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CHAPTER 9

Toward an Understanding of "What Works" in Segregation: Implementing Correctional Programming and Re-Entry-Focused Services in Restrictive Housing Units

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Introduction

Issues related to prison management have been the topic of heated debate over the years (Gendreau & Keyes, 2001). Within this context, the use of "solitary confinement" — also known by terms such as *restrictive housing, administrative segregation*, and *disciplinary segregation* — has generated special attention and controversy, with repeated calls to abolish the practice. It is instructive, however, that such housing units have been used since the inception of the prison to isolate inmates from the general population of offenders for both punitive (i.e., disciplinary) and administrative (i.e., safety) purposes (Labrecque & Smith, 2013). In fact, as the incarceration rate increased dramatically between the 1970s and 2008 in the United States (Glaze & Kaeble, 2014; Simon, 2007), many

prison managers felt that they had few options for controlling the institutional environment but to place extreme limits on prisoners' activities (Mears & Watson, 2006; Pizarro & Stenius, 2004). Therefore, it is perhaps not surprising that several recent studies have indicated that the use of segregation has also increased over the past two decades in the United States (Haney, 2008; O'Keefe, 2008). Coupled with the fact that segregation is a more restrictive and very expensive option for housing inmates, it is critical to understand both the utility and efficacy of solitary confinement (Frost & Monteiro, 2016).

At the moment, there is an active debate about the constitutional and humanitarian concerns related to the use of segregation, as well as its effectiveness as a tool for managing prisons (Labrecque & Smith, 2013). On one side, corrections officials underscore the daily challenge of managing disruptive inmates in crowded prisons. They cite the very practical reality that segregation is a necessary tool in the continuum of placement options within correctional institutions, particularly for inmates who pose a threat to themselves or others. On the other side, critics assert that segregation is one of the most restrictive and stressful settings for offenders to experience (Arbour, 1996; Human Rights Watch, 2000). From this perspective, solitary confinement is held to violate basic human rights, with harsh conditions that are unduly severe and disproportionate to legitimate security and inmate management objectives (Human Rights Watch, 2000). For these reasons, advocates for prison inmates have characterized the practice as "cruel and unusual punishment" (Grassian, 1983), citing a lengthy list of objectionable conditions: lack of windows, 24-hour lighting, minimal opportunities for exercise and recreation, restricted interpersonal contact, removal of privileges, denial of personal items, and limited therapeutic services.

Support for finding alternatives to managing prisons safely and humanely has gained momentum. In fact, several recent legislative changes have been announced to limit the use of solitary confinement in adult inmate populations, and completely eliminate its use with juvenile inmate populations in the United States (e.g., Eilperin, 2016). Recently, the U.S. Department of Justice (2016) released a document entitled *Report and Recommendations Concerning the Use of Restrictive Housing* to delineate guidelines, or "best practices," for correctional agencies to consider. In general, there is renewed interest in developing and implementing theoretically informed and empirically valid approaches to support rehabilitation for inmates in restrictive housing units (Frost & Monteiro, 2016).

Given concerns over whether solitary confinement constitutes "cruel and unusual punishment," it is not surprising that the vast majority of empirical research conducted to date has focused on whether or not segregation produces any adverse physiological or psychological effects on inmates (see Gendreau & Labrecque, in press; Labrecque & Smith, 2013). Far less attention has been paid to the impact of segregation on subsequent institutional behavior and post-release recidivism, despite the considerable benefit that such knowledge would represent for correctional agencies worldwide (Labrecque & Smith, 2013).

Simply put, segregation has historically been viewed as a form of *punishment and incapacitation* within the prison system rather than as a mechanism for facilitating *rehabilitation*. Moreover, there are even fewer evaluations of offender rehabilitation programs or services in restrictive housing units. This neglect is especially consequential because those receiving what is typically an institution's most severe sanction are often the very inmates in critical need of services to support both their short-term compliance with institutional rules and long-term behavioral change. Furthermore, inmates admitted to restrictive housing facilities often possess certain characteristics (e.g., mental illness, gang affiliation, low self-control) that create significant barriers to managing them in the general population of offenders (Gendreau & Thériault, 2011).

Although some disagreement exists over the short-term effects of brief periods of isolation, there is a general consensus that solitary confinement for prolonged periods is inhumane and causes long-term harm. Some of the most vulnerable inmate populations (e.g., offenders with mental illness) are at the highest risk for lengthy periods of incarceration in restrictive housing units. Advocates of offender rehabilitation and prison reform contend that solitary confinement represents a passive correctional intervention that often reinforces short-term solutions to problems with inmates (Gendreau & Labrecque, in press). This is especially prescient when administrative policies, clinical assessment protocols, and treatment interventions are in place that can limit the use of segregation while maintaining institutional safety and promoting behavioral change (Gendreau & Thériault, 2011). In short, prisons cannot expect to rehabilitate offenders merely by confining and restricting them (Cullen & Gilbert, 1982). In fact, segregating inmates may ultimately undermine legitimate attempts to rehabilitate them (Rothman, 1980). Moreover, the results of research by Lovell, Johnson, and Cain (2007) suggest that inmates released directly from administrative segregation into the community have higher recidivism rates compared to offenders released from the general prison population. This finding is consistent with a handful of other studies that examine the post-release outcomes of inmates who are released directly from segregation (e.g., Mears & Bales, 2009; Seale, Atkinson, Grealish, Fitzgerald, Grassel, & Viscuso, 2011; Ward & Werlich, 2003).

For all of these reasons, the need for services to assist offenders in segregation cannot be understated. Several jurisdictions have applied evidence-based correctional practices within the context of administrative segregation to reduce subsequent institutional misconduct and post-release recidivism (e.g., North Dakota Department of Correction and Rehabilitation, Ohio Department of Rehabilitation and Correction, Washington State Department of Corrections). Many other prison authorities are engaged in similar initiatives (e.g., The Vera Institute of Justice; see Shames, Wilcox, & Subramanian, 2015).

Within this context, it is important to understand "what works" in solitary confinement to improve inmate behavioral outcomes. This white paper addresses the issue from an evidence-based perspective. The first section undertakes a brief review of what is known about the impact of segregation on inmate institutional adjustment.[1] The second section summarizes the principles of effective intervention and provides a framework for how correctional programming and re-entry-focused services might be integrated into restrictive housing units. The third section presents specific recommendations to guide the design and implementation of evidence-based services in segregation. It provides specific examples from select jurisdictions to demonstrate how some of these concepts are being implemented.

As a prelude to this discussion, it is important to define the terminology used in this white paper. Within correctional contexts, the terms used to describe segregation policies and practices vary greatly across jurisdictions (Frost & Monteiro, 2016; Labrecque & Smith, 2013). For example, it is difficult to separate the literature on *disciplinary segregation* from the literature on *administrative segregation*; the former refers to short-term confinement after a specific infraction, whereas the latter refers to long-term classification to a restrictive housing unit. Furthermore, researchers have tended to study s*olitary confinement* without carefully distinguishing the various types of segregation (Frost & Monteiro, 2016). There is no universal definition of segregation, nor is there consensus about who should be placed in such settings (Frost & Monteiro, 2016; Riveland, 1999). Nevertheless, most of these units have enough distinctive features in common to be analyzed together. For this white paper, the use of the term *administrative segregation* has been avoided in favor of the more general term *segregation* or *restrictive* housing units.

The Effects of Solitary Confinement

As previously mentioned, whether segregation produces any harmful effects has been a longstanding debate in the field of corrections (Gendreau & Thériault, 2011). The literature reveals two very different perspectives. While some researchers have characterized segregation as psychologically harmful (Grassian, 1983; Grassian & Friedman, 1986; Haney, 2008, 2009; Jackson, 2001; Smith, 2006), others have argued that the empirical literature suggests that segregation produces minimal, if any, negative psychological effects *when used for relatively short periods and under reasonable conditions of confinement* (Bonta & Gendreau, 1995; Ecclestone, Gendreau, & Knox, 1974; Gendreau & Bonta, 1984; Gendreau & Thériault, 2011; Gendreau, Freedman, Wilde, & Scott, 1972; O'Keefe, 2008; O'Keefe, Klebe, Stucker, Sturm, & Leggett, 2010; Suedfeld, 1984; Zinger, Wichmann, & Andrews, 2001). It is important to emphasize here

[1] This topic is considered in detail by other contributions commissioned by the National Institute of Justice.

that both perspectives generally agree that prolonged periods of segregation should be avoided, and that inmates should be housed in the *least restrictive setting necessary* for maintaining the safety and security of the institution (U.S. Department of Justice, 2016).

It is critical that practitioners understand the short-term effects of segregation, as they have important implications for assessing, treating, and delivering services in restrictive housing units. If short-term placement in segregation does not produce dramatic adverse effects under certain conditions, then it seems reasonable to further investigate how this context might be used to deliver more individualized and intensive interventions to inmates in need. This white paper briefly reviews the available research on the effects of segregation (for a detailed review, see Frost & Monteiro, 2016; Gendreau & Labrecque, in press).

The empirical literature on restricted environmental stimulation (Suedfeld, 1980), or sensory deprivation, is relevant to the discussion here about the physiological and psychological effects of segregation (Zubek, 1969). The sensory deprivation literature was the first to suggest that such environments could be harmful. It also reveals a crucial methodological problem that is present when sensory deprivation is enforced.

Some of the first sensory-deprivation experiments were conducted at McGill University in the 1950s, and the researchers reported dramatic cognitive deterioration and perceptual impairment in samples of college students (e.g., Bexton, Heron, & Scott, 1954). However, subsequent studies failed to replicate these findings (e.g., Zubek, Bayer, & Shephard, 1969). The reason for this inconsistency was eventually recognized in a landmark study by Orne and Scheibe (1964); namely, a strong placebo effect occurred when care was not taken regarding how information was elicited from participants (see also Zubek, 1969; Hunt & Chefurka, 1976). Specifically, it was noted that, "… subjects' behavior can be differentially manipulated by altering the implicit and explicit clues in the experimental situation, and further (they) may react to social cues or demand characteristics in such a way as to confound experimental results" (Orne & Scheibe, 1964, p. 10).

In the early 1960s, researchers with the Canadian Penitentiary Service noted that solitary confinement cells had some physical resemblance to the conditions of sensory deprivation in previous experimental studies. As a result, the researchers were interested in how inmates responded to isolation in solitary confinement cells. Clearly, the policy implications of this research for the field of corrections would be profound. Gendreau, Freedman, Wilde, and Scott (1968, 1972) as well as Eccelstone and colleagues (1974) conducted a series of studies in which inmates spent between two and eight days in segregation. The results indicated that inmates in segregation exhibited lower EEG frequency as measured by visually evoked potentials (which is indicative of lowered sensory arousal and cortical activity as well as a need for sensory stimulation), and lower stress levels as indicated by plasma cortisol levels. Other studies by this group also failed

to find adverse effects on inmates' physical health, auditory functioning, and discrimination learning ability (for a review, see Bonta & Gendreau, 1990).

Subsequently, studies were conducted with greater ecological validity in which inmates were admitted to segregation involuntarily (Andersen, Sestoft, Lillebaek, Gabrielsen, & Hemmingsen, 2003; Suedfeld, Ramirez, Deaton, & Baker-Brown, 1982; Wormith, Tellier, & Gendreau, 1988; Zinger et al., 2001). Collectively, these studies involved longitudinal assessments, repeated measure comparison group designs, multisite replications, different forms of segregation, male and female samples, and standardized assessments. The strongest effects were reported for increases in hostility and depression, but the effect sizes were still rather small.

Two decades after the publication of Orne and Scheibe's (1964) critique of the sensory deprivation research, two studies commanded considerable attention in the prison literature. First, Grassian (1983) claimed that segregation produced psychological harm (e.g., hallucinations, overt psychotic disorganization, massive free-floating anxiety, primitive aggressive fantasies, paranoia, and lack of impulse control leading to random violence). His assessment protocol consisted of open-ended interviews and an interview style that actively encouraged disclosure and provided reassurance. Second, Haney (2003) generated similar results almost 20 years later in a sample of 100 inmates in a supermax prison. Again, data were collected through interviews, although it is unclear exactly what measures were used. Furthermore, there was no indication as to whether the prevalence of the symptoms reported by the sample existed prior to incarceration, or how long these effects persisted after the assessment.

More recently, other scholars have noted that the methodological shortcomings of the research reporting harmful effects (e.g., selection bias, response bias, inadequate or no control groups) has limited the credibility of the results (see Gendreau & Labrecque, in press; Labrecque & Smith, 2013; Suedfeld et al., 1982; Zinger et al., 2001). Several primary studies and two recent independent meta-analytic reviews on this topic have been completed (Smith, Gendreau, & Labrecque, 2015; Morgan, Van Horn, MacLean, Bolanos, Gray, Batastini, & Mills, 2014). Both meta-analytic reviews conclude that the mean effect size for psychological outcomes tends to be in the small to moderate range.

In short, if there are outliers in the empirical literature, they appear to be from studies that claim segregation produced dramatic adverse psychological effects (Gendreau & Labrecque, in press). The vast majority of the empirical studies on segregation point to a similar conclusion: the negative effects associated with relatively brief periods of segregation are not nearly as dramatic as once feared (Smith et al., 2015; Gendreau & Thériault, 2011; Morgan et al., 2014). At the same time, more empirical research is needed on the psychological effects of segregation. If the conditions of confinement are humane, however, there is good reason to support the idea that restrictive housing units can be managed in a

manner that allows for the delivery of intensive interventions to inmates in need of services for successful transition into the general population of offenders.

It is also important to note that a very limited number of studies have been conducted to examine the impact of segregation on behavioral outcomes.[2] Within this limited research base, there are three types of behavioral outcomes of interest: *institutional violence, post-release recidivism, and institutional misconduct*. Once again, two independent meta-analyses have summarized the available studies (Smith et al., 2015; Morgan et al., 2014), and small mean effect sizes were reported for behavioral outcomes. The paucity of research on this topic is rather alarming given that segregation is often described as an important tool in ensuring systemwide order in prison systems (Mears & Watson, 2006). These behavioral outcomes must be a priority for future research. This issue will be further discussed in a later section of this white paper.

The Principles of Effective Intervention

Correctional rehabilitation refers to *planned interventions* that target for change some characteristic of the offender that causes criminality (e.g., attitudes, cognitive processes, personality factors or mental health, social relationships, educational and vocational skills, and employment), and intend to make the offender less likely to recidivate (see Andrews & Bonta, 2010; Cullen & Gendreau, 2000).[3] This requires the specification of *what* to target (i.e., dynamic risk factors, or criminogenic needs), *who* to target (i.e., higher-risk offenders), and *how* to target (i.e., cognitive-behavioral and social learning treatment modalities). Collectively, these fundamental concepts are referred to as the *principles of effective intervention*.

Setting the Stage for the Principles of Effective Intervention

The principles of effective intervention were established as a result of a three-stage research agenda. Initially, researchers conducted narrative literature reviews, and generated recommendations in consultation with colleagues who had conducted successful programs. Second, demonstration projects were conducted to evaluate the effectiveness of correctional treatments (e.g., Andrews, 1979, 1980; Andrews & Keissling, 1980; Gendreau & Ross, 1979, 1987; Ross & Fabiano, 1985). Finally, meta-analytic techniques were applied to the corrections

[2] See, for example, Briggs, Sundt, & Castellano, 2003; Butler, Steiner, Makarios, & Travis, in press; Huebner, 2003; Lovell et al., 2007; Labrecque, 2015; Mears & Bales, 2009; Mears & Castro, 2006; Morris, 2015; Seale et al., 2011; Sundt, Castellano, & Briggs, 2008; Ward & Werlich, 2003.

[3] Correctional rehabilitation does not include interventions that seek to suppress criminal behavior through specific deterrence (i.e., use of punishment and sanctions).

literature to generate a more precise estimate of the empirical support for the principles of risk, need, and responsivity (RNR). Compared to narrative reviews, meta-analysis involves *the quantitative synthesis* of research, and thus yields a more precise estimate of the overall mean effect size (for a review, see Gendreau & Smith, 2007). Meta-analysis is the review method of choice for many disciplines, including corrections, which has more than 44 meta-analyses of correctional treatment effectiveness (see McGuire, 2004; Smith, Gendreau, & Swartz, 2009). Taken together, the results of these studies provide strong empirical support for the principle of effective intervention. This section presents the findings from three categories of meta-analyses: (1) those which affirm that, overall, correctional treatment programs reduce recidivism; (2) those that identify some general principles of "what works" in reducing offender recidivism; and (3) those that search for more specific clinically and psychologically relevant criteria (for a detailed review, see Smith, 2013).

Garrett (1985) and Davidson, Gottschalk, Gensheimer, and Mayer (1984) published the first meta-analyses in the field of corrections. Garrett (1985) synthesized 433 effect sizes from studies of 13,000 juvenile offenders and reports a mean effect size of $r = .12$. Furthermore, the results indicate that cognitive-behavioral interventions are associated with the largest mean effect size ($r = .22$). Davidson and colleagues (1984) produced similar results in that behavioral interventions (e.g., positive reinforcement, token economies, behavioral contracts) are associated with the greatest reductions in recidivism.

Subsequently, Lipsey (1992) analyzed the results of a large database of juvenile interventions (i.e., a total of 443 effect sizes). Sixty-four percent of these estimates are in the expected direction (i.e., reduced recidivism), and the average reduction in recidivism varies from 5 percent to 9 percent depending on statistical adjustments. Similarly, Lösel (1995) provides a comprehensive assessment of 13 meta-analyses of juvenile and adult offenders published between 1985 and 1995, and reports that mean effect sizes ranged from $r = .05$ to .18 with an overall mean of about $r = .10$. This basic pattern of results remains even after controlling for the effects of several other factors, including subject attrition, methodological quality, length of follow-up, and study publication status.

In summary, the meta-analyses referenced above identify the most effective treatment programs as those which are cognitive-behavioral in nature, have a high degree of structure, are demonstration programs (rather than "real world" or "routine" correctional programs), and are delivered in the community rather than in institutional settings (see also Cleland, Pearson, Lipton, & Yee, 1997; Izzo & Ross, 1990; Lipsey, 1999; Lipsey, Chapman, & Landenberger, 2001; Lösel, 1995; Redondo, Sanchez-Meca, & Garrido, 1999). Although skeptics might argue that the 10 percent reduction in recidivism found by Lösel (1995) is of little practical value, several authors have demonstrated that the finding represents a meaningful and cost-effective reduction in recidivism (Lipsey & Wilson, 1993;

Rosenthal & DiMatteo, 2001; Aos, Lieb, Mayfield, Miller, & Pennucci, 2004; Cohen, 1998; Welsh & Farrington, 2000).

Developing the Principles of Effective Intervention

The next series of meta-analyses searched for more specific "clinically relevant and psychologically informed" principles of effective offender treatment (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990). A meta-analysis conducted by the Andrews team (1990) coded the treatment literature (a total of 154 effect sizes) along various dimensions that provided the basis for developing the RNR framework. This database was subsequently extended to 374 effect sizes (see also Andrews & Bonta, 2010, pp. 365-369). In short, the results indicate that there was considerable heterogeneity in the effectiveness of correctional interventions; that is, correctional programs that have certain characteristics yield much larger effect sizes when compared to approaches that do not (Andrews et al., 1990). This section reviews the three main principles of effective intervention (for a detailed review of the meta-analytic evidence for the RNR framework, see Smith et al., 2009).

The Need Principle

To develop a comprehensive theoretical framework, it is necessary to first identify the *covariates* of crime — that is, the biological, personal, interpersonal, situational, and social variables that are statistically associated with antisocial behavior (Andrews & Bonta, 2010). These variables include both static predictors (e.g., criminal history) as well as dynamic factors (e.g., antisocial attitudes, pro-criminal peers, substance abuse). The latter *criminogenic needs* are the appropriate targets for intervention because they are amenable to change. Several meta-analyses have demonstrated that certain criminogenic needs are robust predictors of recidivism (Bonta, Law, & Hanson, 1998; Gendreau, Little, & Goggin, 1996; Hanson & Morton-Bourgon, 2004). These predictors include (1) an antisocial personality pattern (e.g., aggression, hostility, impulsivity, lack of self-control, poor emotion regulation); (2) antisocial attitudes, values, and beliefs; (3) the presence of antisocial peers and associates; (4) substance abuse; (5) problematic circumstances within family/marital relationships; (6) difficulties with education and employment; and (7) lack of prosocial leisure and recreation activities. Together with criminal history, the first three criminogenic needs identified are referred to as *first-tier predictors* because the predictive validities associated with these covariates are especially robust (Andrews & Bonta, 2010). The most effective treatment programs target criminogenic needs and prioritize the first-tier predictors in this regard — the *need principle* in the RNR framework. In fact, Andrews and Bonta (2010) report that treatment programs targeting criminogenic needs reduce recidivism by 20 percent more than programs that do not target them. Moreover, these meta-analyses also found that

other factors had weak predictive validities (e.g., low self-esteem, depression, anxiety, fear of official punishment) and should therefore not be the primary targets for intervention (for a detailed review, see Gendreau et al., 1996).

The predictors of institutional misconduct are very similar to the predictors of post-release recidivism (French & Gendreau, 2006). Furthermore, the same correctional interventions that are effective in decreasing post-release recidivism also lead to meaningful reductions in institutional misconduct (see French & Gendreau, 2006). This is particularly relevant for determining how to best implement programming in segregation, knowing that the appropriate treatment targets for improving institutional adjustment (and therefore post-release recidivism) can be identified and targeted through structured interventions (French & Gendreau, 2006).

The Risk Principle

Research consistently indicates that higher-risk offenders derive the most benefit from treatment (Andrews & Bonta, 2010). In fact, treatment programs that target higher-risk samples reduce recidivism by 7 percent more than programs that target lower-risk offenders. From a theoretical viewpoint, this finding makes sense; higher-risk offenders, by definition, are likely to have more criminogenic needs and therefore require more intense treatment. In contrast, participation in treatment services can increase the failure rates of lower-risk samples by disrupting protective factors and exposing them to their higher-risk counterparts (see Lowenkamp, Latessa, & Smith, 2006). This is referred to as the *risk principle*.

The Responsivity Principle

Finally, the *general responsivity principle* describes how to best target criminogenic needs. The meta-analyses of earlier studies have consistently found that the most effective interventions are those that were cognitive-behavioral in nature. In fact, Andrews and Bonta (2010) reported that cognitive-behavioral interventions produced 19 percent greater reductions in recidivism when compared to other models of offender treatment.

In addition to the general responsivity principle, Andrews and Bonta (2010) also underscore the importance of specific responsivity factors. This refers to the need for corrections practitioners to match the mode and style of service delivery with key offender characteristics (e.g., offenders with lower IQs derive more benefit from behavioral approaches than cognitive strategies; Cullen, Gendreau, Jarjoura, & Wright, 1997).

The Effectiveness of RNR Treatment Programs

Previous research demonstrates that adhering to the RNR framework has a cumulative effect (for a review, see Andrews & Bonta, 2010). When treatment

programs are categorized by whether they followed all three RNR principles in contrast to those that did not, Andrews and Bonta (2010) report a 23 percent difference in recidivism. These principles also apply to a variety of corrections populations, including female offenders, minority groups, youthful offenders, mentally disordered, violent, and sex offenders (Andrews, Dowden, & Rettinger, 2001; Dowden & Andrews, 2000).

Core Correctional Practices

The clinical skills related to effective service delivery with offender populations are referred to as *core correctional practices* (Andrews & Bonta, 2010; see also Gendreau, Andrews, & Thériault, 2010). They include effective reinforcement, disapproval, and use of authority; relationship practices; structured skill-building (including problem-solving); and cognitive restructuring. These therapeutic practices are consistent with the cognitive-behavioral model of treatment, and are associated with reductions in recidivism that range from 19 percent to 27 percent for programs that apply them versus those that do not (Andrews & Bonta, 2010). These competencies can be used by all front-line staff members — in the daily interactions between officers and inmates — and in clinical sessions, group interventions, and case-management meetings (Andrews & Bonta, 2010). Each of these competencies is briefly described below.

Corrections professionals must be capable of using *high-level social reinforcement* to encourage prosocial behaviors, as well as *effective disapproval* to discourage antisocial behaviors (Gendreau et al., 2010). Effective reinforcement involves providing specific praise and acknowledgment for desirable behaviors, and requires the offender to think about both the short-term and long-term benefits associated with its continued use. Effective disapproval involves providing statements of non-support for undesirable behaviors, and requires the offender to think about both the short-term and long-term costs associated with its continued use. Once the undesirable behavior has been corrected and the offender engages in an appropriate prosocial behavior, it is important that the staff member immediately terminate disapproval and provide social reinforcement for the change.

Most corrections professionals are in positions of power relative to the offender, and must use their authority to *respectfully guide the offender toward compliance* (Gendreau et al., 2010). Staff members are encouraged to focus their message on the behavior exhibited (and not on the person performing it), to be direct and specific concerning their demands, and to specify the offender's choices and attendant consequences in any given situation. The guidelines associated with the effective use of authority are particularly important in segregation units where inmates are often not compliant with rules and staff requests.

In addition, staff should adopt several important *relationship practices* to help them develop a collaborative working relationship (also referred to as the

therapeutic alliance in the clinical counseling literature) with the offender (Gendreau et al., 2010). From this perspective, the most effective front-line staff members are open, warm, respectful, nonjudgmental, empathic, flexible, enthusiastic, and engaging. Furthermore, it is important for corrections professionals to use humor and express optimism, and to be solution-focused, structured, and directive. Moreover, front-line staff members should avoid arguments and power struggles with offenders, and instead work to enhance internal motivation and self-efficacy within the offender (Gendreau et al., 2010).

Another core correctional practice involves *structured skill building* (Gendreau et al., 2010). Goldstein (1986) identified five main components of this process:

1. Define the skill to be learned by describing it in discrete steps.
2. Model or demonstrate the skill for the client.
3. Have the client practice the new skill by role playing it, and provide corrective feedback.
4. Use homework assignments to generalize use of the skill beyond the treatment setting.
5. Have the offender practice the skill in increasingly difficult situations, and provide feedback (i.e., graduated rehearsal).

Previous research has underscored the importance of *problem solving* as a specific social skill that should be taught to offenders because, once mastered, they can apply it to a wide variety of high-risk situations (see Trotter, 1999).

Finally, corrections professionals should be thoroughly trained in c*ognitive restructuring*. Front-line staff members should be able to teach clients how to generate descriptions of problematic situations, as well as the associated thoughts and feelings that accompany them. Corrections professionals must then help offenders identify risky thinking and practice replacing this self-talk with more prosocial alternatives. Many correctional programs use thinking reports (e.g., Bush, Bilodeau, & Kornick, 1995) to assist clients in identifying risky thoughts and feelings and how these affect their behavior.

In summary, it is important to acknowledge that beyond a theoretical understanding of the variation in criminal behavior and the principles of effective intervention is a need for a pragmatic "how to do it" that they can teach offenders in order to change offenders' behaviors. Research on the principles of effective intervention has led to the development of numerous composite offender risk and need assessments, structured treatment interventions, and program evaluation instruments. Many of these same tools can be adapted for use in restrictive housing units, and will be further discussed in the recommendations provided later in this document.

Understanding the Limits of Deterrence and Punishment

Despite a plethora of research on the principles of effective intervention, corrections practitioners continue to implement strategies that are ineffective — and that might even cause greater harm to offenders than good (Latessa, Cullen, & Gendreau, 2002).[4] The term *correctional quackery* describes programs that are developed without considering the principles of effective intervention, and instead rely on common sense, personal experience, and conventional wisdom (Latessa et al., 2002). For example, punishment-oriented strategies (i.e., intermediate sanctions such as intensive supervision, house arrest, electronic monitoring, boot camps, Scared Straight programs) have not been determined to be effective in reducing recidivism, and yet continue to be frequently implemented (Gendreau, Goggin, Cullen, & Andrews, 2000).

An increasing amount of research has also challenged the notion that incarceration functions as an effective deterrent. To illustrate, the empirical literature on offender re-entry has documented high levels of parole failure for inmates released from prison (see Hughes, Wilson, & Beck, 2001; Langan & Levin, 2002; Petersilia, 2003; Pew Center on the States, 2011). Furthermore, a number of methodologically rigorous studies with diverse samples have demonstrated that the effect of prison is, if anything, a slight to moderate increase in post-release recidivism (Cid, 2009; Jonson, 2010; Nagin, Cullen, & Jonson, 2009; Nieuwbeerta, Nagin, & Blokland, 2009; Sampson & Laub, 1993; Spohn & Holleran, 2002; Villettaz, Killias, & Zoder, 2006). Perhaps even more relevant to the segregation debate is a smaller amount of literature that has examined the relationship between the conditions of confinement and recidivism. Chen and Shapiro (2007) measured the harshness of prison conditions by level of security (e.g., minimum versus maximum). Controlling for offender risk level, they find that harsher prison conditions do not lead to higher levels of deterrence and, "if anything … may lead to more post-release crime" (Chen & Shapiro, 2007, p. 1). Gaes and Camp (2009) report similar results with a sample of offenders randomly assigned to higher- versus lower-security correctional institutions. Inmates in the higher classification had a hazard rate of reincarceration that was 31 percent higher than that for inmates in the lower classification. A handful of other studies also find results that are consistent with this general pattern that harsher prison conditions are associated with higher post-release recidivism rates (Drago, Galbiati, & Vertova, 2008; Listwan, Sullivan, Agnew, Cullen, & Colvin, 2013; Windzio, 2006).

How does this research relate to the restrictive housing units? It can be argued that segregation routinely involves two separate but interrelated components: (1) isolation (e.g., confinement in a single cell, restriction of social interaction); and (2) deprivation (e.g., removal of personal items, denial of privileges).

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[4] Several reasons have been offered to explain why ineffective programs are so frequently implemented in the field of corrections. See Gendreau, Goggin, and Smith (2001) for a more detailed consideration of the topic.

Corrections officials often contend that both conditions are necessary to maintain the safety and security of the institution. Although this is a legitimate consideration in certain cases (e.g., threat of suicide or extreme violence), the deprivation inherent in many segregation settings is more often intended as punishment (see Mears & Castro, 2006). In other words, the harsh conditions introduced in segregation are intended to be aversive, and therefore produce a greater deterrent effect.[5] In many cases, however, isolated confinement could be accomplished with far less deprivation. This is an important point because the introduction of deprivation and harsh conditions of confinement might even undermine legitimate attempts at rehabilitation, in much the same way that institutional climate can create barriers to effective service delivery in the general population of inmates (Rothman, 1980).

Translating Research into Practical Recommendations

As previously discussed, there is a well-developed literature base on "what works" to reduce offender recidivism. The principles of effective intervention have now been extensively applied in both institutional and community-based settings, and with diverse samples of offenders (for a review, see Andrews & Bonta, 2010). Similarly, there is also a substantial literature base on "what doesn't work" to rehabilitate offenders (Gendreau et al., 2000). Taken together, the "what works" and "what doesn't work" discoveries lead to a better solution — the RNR framework, which provides a blueprint for how services should be designed and delivered in correctional settings. However, attempts to systematically use this information to inform policies and practices within restrictive housing units have been far less frequent. In fact, it is obvious from this review of the literature that the integration of evidence-based practices within the context of segregation is still in the very early stages of development, and published outcome evaluations of treatment programs based on RNR principles are virtually nonexistent. Instead, this section considers how the principles of effective intervention might be applied to inmates in restrictive housing units.[6] This does not constitute a list of "best practices" given the lack of empirical evidence on the topic, but it offers 10 recommendations that are theoretically relevant and grounded in the "what works" literature. The recommendations included in this section have implications for both research and practice. The reader should note that a handful of these guidelines are based on those previously discussed by Gendreau and Thériault (2011). Furthermore, all of these recommendations are consistent with the recently published guiding principles issued by the U.S. Department of Justice (2016) concerning the contemporary use of segregation.

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[5] This is further underscored by the term *restrictive* housing unit, implying the removal of privileges and liberties.

[6] Examples of innovative programs that have piloted components of the recommendations included in this section are highlighted. In most cases, formal process and outcome evaluations are ongoing, and the results have not been published.

Recommendation 1: Adopt a meta-analytic perspective to encourage knowledge cumulation.

It is difficult to achieve clarity in a field where scholars are divided (Hunt, 1997). This is certainly true in the empirical literature on the short-term effects of segregation. Moreover, conflicts within civil rights, moral, and political agendas can lead to further confusion (Gendreau & Thériault, 2011; Jackson, 2002; Mears & Watson, 2006). Gendreau and Thériault (2011) note that debates and literature reviews in the field of corrections have frequently been framed in narrow — and often ideological — frames of reference, and convergent validity is compromised (see also Gendreau, 1996; Gendreau & Ross, 1979). The discourse that follows from this state of affairs is often antithetical to systematic attempts at knowledge cumulation (Hunt, 1997).

The previous section referred to *meta-analysis* as a quantitative review of the literature that is the review method of choice in most disciplines, including corrections (Smith et al., 2009). Single studies offer limited information; useful policies in the social sciences are based on replication with diverse samples in multiple jurisdictions before sound conclusions are reached (Hunter & Schmidt, 1996; Schmidt, 1992). The importance of meta-analysis in this regard cannot be overstated; the results of systematic quantitative reviews can have a significant impact on policy and practice. The principles of effective intervention presented in the previous section are based on the results of meta-analysis, and the main findings have been replicated with remarkable consistency (Smith et al., 2009). In comparison, the literature on the effects of segregation has only recently been summarized using meta-analytic techniques (see Smith et al., 2015; Morgan et al., 2014), and the conclusions drawn were limited by the fact that relatively few studies were eligible for inclusion. Furthermore, information on important moderators could not be systematically analyzed due to small sample sizes and missing data.

There is an urgent need for research to investigate segregation as a correctional policy and rehabilitative practice. Future studies should examine the effects of segregation on behavioral outcomes (i.e., institutional violence, post-release recidivism, institutional misconduct) and for special populations of offenders (e.g., those with mental illness, juvenile offenders) to determine the traits of offenders who do not respond well to segregation. Precious few evaluations of correctional treatment services in restrictive housing units have been published to date (see Batastini, 2015; Pizarro, Zgoba, & Haugebrook, 2014). As the field accrues more primary research, it will be exceedingly important to continue to support knowledge cumulation and meta-analyses of the empirical literature (Gendreau & Thériault, 2011; Labrecque & Smith, 2013). Meta-analysis has another important advantage — it allows academics to systematically document gaps in the literature to recommend future priorities for research. In short, a meta-analytic perspective on topics related to segregation can inform priorities for both research and practice.

Recommendation 2: Monitor the prison environment and institutional climate to prevent misconduct and reduce the need for segregation.

Crime prevention strategies that originate in community settings also can be applied to correctional institutions (Gendreau & Thériault, 2011). For example, structural features of a prison (e.g., pod designs, lighting, camera surveillance) can be used to analyze patterns in the time and location of institutional misconduct — to be proactive about the situations and environments where incidents are most likely to occur. For example, the systematic analysis of data on institutional misconduct might reveal that incidents are more likely to occur in certain locations within the prison or during specific shifts under the supervision of particular front-line staff members. This information can then provide prison administrators with the knowledge they need to prevent these incidents. From the perspective of the cognitive-behavioral model, these data allow corrections professionals to better understand the *risky situations* that inmates will likely encounter while incarcerated. Specific skills can then be taught to offenders to equip them to make prosocial choices.

Similarly, information gained from analyzing aggregate statistics like inmate and staff turnover rates can be used to understand fluctuations in institutional misconduct (French & Gendreau, 2006; Porporino, 1986; Wortley, 2002). With this information, prison administrators can identify when their institutions might be particularly vulnerable to fluctuations in the rate of institutional misconducts, and then implement measures to counteract predicted increases in incidents. For example, prison administrators might use this information to strategically inform staff assignments and inmate placements.

Perhaps even more significant is the observation that institutional misconduct and the use of segregation cannot be understood without considering the institutional climate and behavior management practices of the correctional facility at large. A correctional institution with a therapeutic environment and high-quality programs is much more likely to have lower rates of institutional misconduct because its offenders are actively engaged in learning skills that they can apply to avoid and manage risky situations (Andrews & Bonta, 2010; French & Gendreau, 2006). Similarly, offenders who have privileges and other incentives in the general population will be more motivated to comply with institutional rules and progress in their treatment — and less motivated to spend time in segregation settings. Therefore, prison administrators are advised to design their institution's schedules in a manner that ensures that inmates are consistently engaged in meaningful, prosocial activities. For example, it is generally recommended that inmates participate in therapeutic tasks for at least 35 hours each week, and have access to a wide range of reinforcers to encourage program participation and prosocial behavior (Gendreau et al., 2010).

Recommendation 3: Screen inmates at intake to determine risk for placement in segregation.

Efforts to prevent or divert offenders from segregation can be greatly enhanced by identifying offenders who are at risk of placement in segregation. Although there has been little research on the topic, the available literature examining individual-level and institutional-level predictors generally suggests that the predictors of segregation may be similar to the predictors of other outcomes, including institutional misconduct and post-release recidivism. Institutions use many different types of risk measures or scales to predict institutional adjustment. Some of the noteworthy scales include the Static Factor Assessment (SFA; Motiuk, 1993), the Dynamic Factors Identification and Analysis (DFIA/DFIA-R), the Custody Rating Scale (CRS; Solicitor General Canada, 1987), and the Statistical Information on Recidivism-Revised (SIR-R1) scale (Nafekh & Motiuk, 2002).

The construction of a new actuarial assessment scale for predicting placement in segregation merits special comment here. Using data from the Offender Management System maintained by the Correctional Service of Canada, Helmus (2015) developed an instrument, the Risk of Administrative Segregation Tool (RAST), specifically to predict placement in administrative segregation. The study includes both a development sample (n = 11,110) and a validation sample (n = 5,591) of offenders incarcerated in Canadian federal institutions. The tool contains six static items (age, prior convictions, prior segregation placement, sentence length, criminal versatility, and prior violence) with scores ranging from 0 to 13. Results indicate that the RAST scale can predict placement in administrative segregation for both security concerns and protective custody, as well as placements in segregation within periods of one and two years after admission. Additionally, the instrument has adequate predictive accuracy for both non-Aboriginal and Aboriginal men and women (AUC = 0.80). The tool also exhibits superior performance when compared to other risk scales used by the Correctional Service of Canada for similar purposes (Helmus, 2015).

In the process of developing and validating the RAST scale, Helmus (2015) provides several options for practitioners to use to designate nominal risk categories (e.g., low, moderate, high). The options available depend on the agency's goals or criteria, but the selection of risk categories should be clearly articulated, not arbitrary, and related to how the scale will be used in practice (Helmus, 2015). Helmus also notes that the RAST scale is useful to correctional agencies because all of the information required to score the items is available at admission to the institution, and it does not require a significant investment of time or resources to administer.

An important cautionary note is warranted here. The RAST scale is undoubtedly an important contribution to the empirical literature because it identifies offenders at higher risk for placement in segregation; however, it is a static

instrument. Therefore, it cannot be used to measure reductions in risk over time. Although it can be applied as a screening tool, research into dynamic predictors should continue to help prison officials further understand the criminogenic needs that should take priority.

Recommendation 4: Implement programs and services based on RNR principles to prevent misconduct.

By identifying inmates who are at higher risk for placement in segregation, corrections administrators can provide interventions to teach offenders skills that might prevent them from engaging in institutional misconduct, and therefore reduce subsequent placements in administrative segregation. It is critical that such programming and services have a solid basis in the RNR principles — integrating cognitive-behavioral and social learning approaches to target the known predictors of institutional misconduct. For example, a brief intervention module is being developed for this purpose (Smith, 2016a). Through structured sessions, inmates learn skills they can use to establish a prosocial support network within the correctional institution. They also learn how to interact with peers and staff members (including how to deal with authority and avoid negative peer pressure). Additional sessions are also included to help offenders learn to regulate their emotions (e.g., frustration tolerance) and solve problems.

Compelling meta-analytic evidence now shows that participation in general cognitive-behavioral treatment reduces prison misconduct in addition to post-release recidivism (French & Gendreau, 2006). Specifically, cognitive-behavioral interventions that teach prosocial skills for addressing high-risk situations in the community can also be used to enhance skills that offenders can apply in correctional institutions. This also underscores the importance of the timing of correctional programming, particularly for inmates with an elevated risk for placement in segregation.

Recommendation 5: Transform segregation from a deprivation environment to a therapeutic environment.

As discussed earlier, restrictive housing units have historically been defined as environments involving both isolation and deprivation. However, previous research has called into question the conventional wisdom that the harshness of the prison condition functions as an effective deterrent (for a review, see Listwan et al., 2013). Except in circumstances where the removal of personal items is demonstrated to be necessary, there is good reason to believe that such conditions of deprivation interfere with the delivery of effective correctional programs (see Smith & Schweitzer, 2013). Arguably, the instances where there is a legitimate concern that requires extreme restriction are relatively rare.

While most previous evaluations focused on the *content of treatment*, it is also important to consider the *context of the intervention* (Smith & Schweitzer, 2013). Correctional officials must devote significant attention to transforming segregation from a deprivation environment to a therapeutic environment. Previous studies have underscored the importance of normalization within the prison setting to create a more humanized environment (e.g., Centen & Sampson, 1991). Although this will be challenging for many jurisdictions, such efforts can create a context that is more conducive to offender rehabilitation. Such initiatives should consider the aspects of the physical milieu, the availability of correctional programming and rehabilitative services, access to meaningful social interactions and other activities, access to privileges, and the content of interactions between staff and inmates. Some departments (e.g., the North Dakota Department of Corrections and Rehabilitation) are addressing this issue in numerous innovative ways within restrictive housing units. Some of these strategies will be discussed in conjunction with later recommendations.

Recommendation 6: Select the least restrictive option and limit the use of segregation for prolonged periods.

Inmates should be housed in the least restrictive setting necessary to ensure safety and security (U.S. Department of Justice, 2016). Correctional agencies must be capable of articulating the specific reasons for an inmate's placement and retention in segregation (U.S. Department of Justice, 2016). Furthermore, the development of a detailed case plan and regular reviews of inmate progress should occur to ensure that this setting remains the most appropriate placement option over time. Such reviews should be objective and based on documented, observable behaviors.

In some cases, inmates may spend months or years in restrictive housing units without the opportunity to engage in correctional programming or other services. These inmates are deprived of human interaction, with the exception of limited interaction with correctional officers and other corrections personnel (e.g., mental health and medical professionals). To reiterate, there is little debate that segregation for prolonged periods is inhumane, counterproductive, and should be avoided (see Pizarro et al., 2014). One such initiative to limit the use of segregation deserves particular comment here. The Vera Institute of Justice is dedicated to developing a fairer, more humane, and more effective criminal justice system (Browne, Cambier, & Agha, 2011). One of its efforts working toward this goal is the Segregation Reduction Project and the Safe Alternative to Segregation Initiative. As part of this initiative, the Vera Institute of Justice partners with state departments of corrections to (1) reduce the number of inmates in segregation, (2) improve the conditions of confinement in segregation, and (3) enhance programming and support for safe transitions back to the general prison population. Several recent partnerships have led to

the implementation of policies and strategies that have dramatically reduced reliance on prolonged periods of segregation.[7] Specific strategies include using alternative sanctions for minor rule violations, reducing segregation time for certain types of rule violations, reducing segregation time as an incentive for sustained good behavior, and introducing step-down programs to facilitate the inmate's reintegration into the general population (Browne et al., 2011). Such initiatives are critical because they can examine both system-level factors as well as individual service delivery variables.

Recommendation 7: Divert inmates who cannot cope with segregation to other placement options to reduce harmful effects.

Very little is known about the specific traits of inmates who cannot tolerate segregation. Although the results are tentative, some examples of offender characteristics associated with poor patterns of adjustment include high stimulation seeking, impulsivity, low conceptual level, and low adrenal functioning (Gendreau & Bonta, 1984; Gendreau & Thériault, 2011; Zubek, 1969). Collecting this type of data should not be onerous, as most prison systems should have considerable information available in client files to determine the types of inmates who have exhibited problems in the past (Gendreau & Thériault, 2011). These data are critical to identifying the specific types of offenders who should be diverted from restrictive housing units to other placement options within the system (e.g., secure prison hospital wards).

Inmates with mental health needs merit special consideration here. Correctional institutions should use psychiatric screening measures to identify offenders with mental health needs (Gendreau & Thériault, 2011). The specific measures selected should have demonstrated adequate reliability and validity. Inmates with serious mental illness pose unique challenges for restrictive housing units, and services must be made available to prevent critical incidents, including self-harm and suicide (Gendreau & Thériault, 2011).

Two views exist as to how inmates with mental illness might react to segregation. The traditional criminological perspective (e.g., Mears & Watson, 2006) suggests that such inmates are adversely affected by periods of isolation. On the other hand, the psychiatric literature suggests that some inmates with mental illness might react positively to solitary confinement because of the need for less stimulation (Grassian & Friedman, 1986). In fact, corrections professionals frequently observe that inmates with mental illness seek out solitary confinement (see Scott & Gendreau, 1969). Similarly, previous studies have demonstrated that offenders with mental illness often respond best to environments with reduced

[7] Browne et al. (2011) describe partnerships with agencies in Illinois, Maryland, and Washington that have implemented changes to reduce the use of segregation.

sensory input (Smith, Gendreau, & Goggin, 2008). An understanding of how inmates with mental illness respond to segregation can inform the delivery of rehabilitation programs and re-entry-focused services. Although more research is needed in this area, it remains clear that assessment and services are critical considerations for offenders with mental illness who are placed in restrictive housing units.

Recommendation 8: Ensure that all front-line staff members are trained and skilled in core correctional practices to facilitate both short-term compliance with rules and long-term behavioral change.

Restrictive housing units are often populated with inmates who are prone to behavioral infractions (i.e., misconduct) and institutional violence. Given their propensity for rule violations, many are sent to segregation where some will continue to exhibit antisocial behaviors. The practical reality is that some inmates can be very difficult to manage, and often test the patience of front-line staff members (Gendreau & Thériault, 2011). Nevertheless, advocates of offender rehabilitation underscore that, "… the guiding principle of any human service enterprise is to treat individuals with respect and humane care" (Gendreau & Thériault, 2011, p. 7). It is therefore crucial for the front-line staff members who work in restrictive housing units to be skilled in core correctional practices related to effective service delivery with offender populations. Ideally, corrections professionals would be equipped to deliver structured interventions to modify target behaviors in a relatively short time. These front-line staff members could also take advantage of teachable moments to reinforce and extend inmates' coping skills and prosocial behaviors. For this reason, it is advisable for prison authorities to assign dedicated staff (e.g., correctional officers, case managers, clinicians, supervisors, and others) to restrictive housing units to ensure better communication, consistency, stability, and on-site supervision for implementing services and interventions.

Finally, cross training should be provided in mental health, substance abuse, and criminogenic needs for correctional officers working in segregation. Corrections professionals who can balance the dual roles of security and rehabilitation are particularly valuable in working with offenders (see Skeem, Eno, Louden, Polaschek, & Camp, 2007; Soderstrom, 2007). At an even more basic level, all correctional staff should receive formal training on restrictive housing policies. Furthermore, data on compliance with these policies should be collected and analyzed, and the information should be reflected on employee performance evaluations, as appropriate (U.S. Department of Justice, 2016).

Recommendation 9: Develop an individualized treatment plan and measure inmate progress.

Among the more common (and rational) recommendations made for segregation settings are improving assessment protocols (Bottos, 2007; Gendreau & Thériault, 2011; Human Rights Watch, 2000; Lanes, 2011; Wormith et al., 1988) and adding more rehabilitative services (Arrigo & Bullock, 2008; Lovell, 2008; O'Keefe, 2008; Scott & Gendreau, 1969). Although the field does not have established criteria for "best practices" in segregation, scholars and correctional officials have started to contemplate these issues in an attempt to design and implement evidence-based services. This work must involve close partnerships between practitioners and researchers.

In addition to the obvious involvement of psychologists in intervention activities in segregation, these professionals could also provide useful contributions to several of the research/program evaluations noted in other recommendations (Gendreau & Thériault, 2011). One area where this is particularly relevant involves the application of applied behavior analysis (ABA) within segregation, which involves applying learning theories and behavioral interventions to change specific target behaviors (Cooper, Heron, & Heward, 2007). Specifically, it is an individualized approach to behavior modification that requires identifying individual target behaviors, maintaining conditions to elicit those specific behaviors, developing a schedule of reinforcement and punishment, and then following that schedule to elicit the desired changes.[8] The North Dakota Department of Corrections and Rehabilitation recently initiated a pilot ABA program in one restrictive housing unit to provide a focused, structured treatment program to target discrete problem behaviors under the close supervision of licensed psychologists. Although preliminary, the initial results are very promising (personal communication, K. Wolfer, November 20, 2015). A more comprehensive empirical evaluation of the program is currently in progress.

In addition to using ABA (particularly in the early stages of segregation), corrections officials are advised to consider a combination of treatment strategies to target the criminogenic needs of offenders by using evidence-based strategies, and particularly for those dynamic factors that are linked to problems with institutional adjustment. The RNR framework provides clear guidance about the approaches most likely to be beneficial in this regard: (1) *radical behavioral approaches* that are based on the principles of classical and operant conditioning; (2) *social learning approaches* that involve modeling and behavioral rehearsal techniques that engender self-efficacy; and (3) *cognitive approaches* that include cognitive skills training, problem-solving therapy, self-control procedures, self-instructional training, and stress inoculation training (Gendreau & Thériault, 2011).

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[8] The term *maintaining conditions* refers to the specific antecedents and consequences that cause a person to perform a behavior (see Spiegler & Guevremont, 2010, for a detailed discussion).

In terms of radical behavioral approaches (including contingency management), correctional agencies should develop a range of appropriate reinforcers that include, at a minimum, tangible, token, and social reinforcers and activities (see Spiegler & Guevremont, 2010).[9] It is also advisable for correctional programs to identify reinforcers that are most meaningful to offenders by surveying inmates. Furthermore, prisons should develop a detailed written protocol to ensure that reinforcers and punishers are administered consistently and immediately. Similarly, it is important to identify a range of consequences such as fines, loss of tokens or points, time out from generalized reinforcers, and social disapproval (for a detailed review, see Spiegler & Guevremont, 2010). Finally, front-line staff members should assess whether the punishment produces any negative effects after administration, including emotional reactions (e.g., anxiety, anger), withdrawal or avoidance behaviors, and perpetuation effects (i.e., when an inmate learns to use punishment to control others' behaviors). Punishment should never interfere with new learning, lead to response substitution, or disrupt social relationships. Although research has suggested that the number of reinforcers should far outweigh the number of punishers, it is very common for most correctional programs to spend more time and effort on developing protocols related to sanctions. It is important to emphasize that the use of reinforcers and sanctions applies to both the general population and within the context of segregation.

Group interventions can also be used to teach specific skills to small groups of inmates in segregation. In most cases, this treatment involves some form of special restraint apparatus to limit physical interactions between inmates. Adaptations of structured curricula have also been used in several jurisdictions (e.g., Washington State Department of Corrections) to expose inmates to treatment concepts prior to increased congregate time and transition back into the general population of offenders. Another structured curriculum for use in this specific manner is being developed by researchers in collaboration with practitioners in the field (e.g., Smith, 2016b).

Ideally, structured interventions are combined with treatment packages to address the individual needs of inmates. The interventions also may be organized into a phase or level system in which inmates can progressively earn privileges and advance through treatment by demonstrating desired behaviors. For example, two correctional institutions operated by the Washington State Department of Corrections have developed a contingency management system for inmates in segregation to encourage prosocial behaviors in preparation for re-entry into the general population of inmates. The phases are then tied to the curriculum content and the types of reinforcers that inmates can earn.

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[9] A simple definition of reinforcement is the application of a stimulus to increase the likelihood that a behavior will occur again. Reinforcers can take several forms, including tangible items and intangible incentives (e.g., activities or special privileges). The reader is referred to Spiegler and Guevremont (2010) for a comprehensive discussion of the selection and application of reinforcers.

Preliminary results provide evidence that the contingency management system is an important component of motivating offenders to learn the skills they need for successful adjustment in the general population.

Recommendation 10: Implement aftercare and re-entry-focused services to improve outcomes for inmates post-release.

Inmates released directly from segregation into the community have a higher risk for recidivism compared to those released from the general population (Lovell et al., 2007). For this reason, policies and practices should be developed to gradually introduce segregated offenders back into the general population before they are released from custody. This finding is consistent with other research in the area of corrections that has underscored the importance of re-entry-focused services and phase systems that transition offenders from higher levels of supervision and structure to lower levels based on demonstrated progress. Developing, implementing, and evaluating such programs in restrictive housing settings specifically should be a priority for the field of corrections to improve outcomes for inmates.

Meta-analyses of the treatment literature have found that institutional programs consistently produce smaller effect sizes in comparison with community-based programs (see Andrews & Bonta, 2010). This is attributable, at least in part, to the fact that community-based programs have the distinct advantage of offering interventions *in vivo*, that is, in more naturalistic environments where offenders can immediately practice new skills. Prisons, however, are by definition artificial environments where inmates have more limited opportunities to use skills in their own high-risk situations. Relapse-prevention plans are useful as offenders consider how they might immediately apply these skills within the prison context (e.g., interactions with staff members and other inmates) as well as post-release. To be successfully discharged from the institution, therefore, offenders should meet clearly defined completion criteria and be trained to observe and manage problem situations. The rehearsal of alternative, prosocial behaviors should include initial practice in a safe environment (e.g., treatment group session) using relatively simple scenarios. Eventually, offenders should practice their newly acquired skills in increasingly difficult situations (e.g., in the housing unit with peers). When clients demonstrate a new behavior, their improved competency should be rewarded to encourage them to exhibit the response again. Participating in aftercare and booster sessions can also improve treatment outcomes. For all of these reasons, it is critical for inmates who are nearing the end of their sentence and are still in segregation to be re-socialized, whenever possible, into the general prison population prior to release into the community. Pizarro et al. (2014) followed a sample of inmates released from supermax institutions to compare the characteristics of offenders who were successful with offenders who recidivated. The results suggest that successful inmates were more

likely to have been released on parole, and were more likely to have completed behavioral and psychological treatment while incarcerated (Pizarro et al., 2014).

In North Dakota, inmates in segregation are moved into a transition unit where they participate in daily activities with the general population of offenders, but then return to the secure unit in the evening. Special group sessions are held to discuss and troubleshoot risky situations that might have occurred during the day. This allows inmates a more gradual transition back into the general population. After inmates have been released from segregation, they are placed on a specialized caseload for a period to ensure that adequate services and resources are available to them in the general prison population. Such efforts are expected to reduce subsequent placements in segregation. Data collection is ongoing, but the preliminary results suggest that there is remarkable, measurable change in target behaviors (personal communication, K. Wolfer, November 20, 2015).

Conclusion

The use of segregation remains a controversial issue in prison management literature. It is common practice in prisons nationwide, but significant gaps in the empirical literature remain. Future research should further investigate the effects of segregation to ensure that correctional institutions are managed safely and humanely. Furthermore, the implementation of treatment programs within the context of restrictive housing units can be an important component of efforts to reduce institutional misconduct and enhance post-release behavioral outcomes. Many of the strategies discussed in the recommendations of this white paper attempt to reconfigure restrictive housing units into placement options that can support the goals of offender rehabilitation.

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CHAPTER 10

Restricted Housing and Legal Issues

Fred Cohen, LL.B., LL.M.

Introduction

The conviction of a crime is the legal gateway to punishment by government officials. Even the accusation of crime may result in punishment-like incidents in jail for the many who cannot obtain release on bail. As pretrial detainees, the accused may lawfully be incarcerated and therefore subject to the rules of the confining facility.

The convicted felon sentenced to prison receives a measure of protection from the U.S. Constitution's Eighth Amendment, which prohibits cruel and unusual punishment. The pretrial detainee is similarly protected by the 14th Amendment's due process clause, which prohibits punishment simpliciter. For example, in *Bell v. Wolfish* the Court held that absent conviction, detainees might not be punished at all. They are, however, subject to rules and regulations required to maintain the security and good order of the jail. We must distinguish incarceration-as-punishment from punishment for rule infraction while incarcerated.

The convicted and merely accused share the same affirmative rights as prisoners: the right to adequate food, shelter, and clothing; medical care; and a safe, life-sustaining environment. In *Kingsley v. Hendrickson*, the Supreme Court drew a distinction on the use of force against prisoners favorable to the claims of pretrial detainees. A detainee need only show that the force objected to was unreasonable

vis-à-vis also showing that the officer was aware that the force applied was unreasonable. In the management of a prison or jail, corrections officials are extended a variety of tools with which to create an orderly and safe environment.

The use of extended restrictive housing to separate and isolate inmates is among the most extreme measures (short of deadly force) available to prison and jail officials. The use of physical force is a singular event, and it may be used only in response to the use or imminent threat of force or to prevent an escape.[1] Incarceration in restrictive housing may, and often does, go on for years and may not be commensurate with the original rationale for its use.[2]

This white paper focuses on the legal issues surrounding restrictive housing, a practice that is known by a variety of names and imposed for a variety of purposes. It may range from what is termed "keeplock" in New York State (a type of in-cell, pretrial detention pending a disciplinary hearing) to the long-term incarceration of federal prisoners such as Thomas Silverstein, who has spent more than 28 years in the deepest form of restrictive housing available in the federal prison system. Thus, we have a range of prisoners being kept in their own cells for a few days to a week to those spending 28 years (or far more) —

> *[in a] cell so small that I could stand in one place and touch both walls simultaneously. The ceiling was so low I could reach up and touch the hot light fixture. My bed took up the length of the cell, and there was no other furniture ... . The walls were solid steel and painted all white. I was permitted to wear underwear but I was given no other clothing. I was completely isolated from the outside world and had no way to occupy my time. I was not allowed to have any social visits, telephone privileges, or reading materials except a bible. I was not allowed to have a television, radio, or tape player. I could speak to no one and there was virtually nothing on which to focus my attention* (Casella & Ridgeway, 2011).[3]

A recent study of segregated housing in the Federal Bureau of Prisons (2014) offered the following six categories of segregation:

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[1] Corporal punishment may not be used, per *Jackson v. Bishop*. Force, including deadly force, may be used to prevent an escape, quell a riot, or as an act of self-defense; *Whitley v. Albers* and *Kingsley v. Hendrickson* held that the use of force by officials against a pretrial detainee is subject only to an objectively unreasonable test and not an additional requirement that the officer was also subjectively aware that the force complained about was unreasonable. The Court left open whether convicted prisoners might benefit from this new rule on staff use of force.

[2] Albert Woodfox was held in solitary confinement for 43 years in Louisiana's Angola prison. He was recently released.

[3] Silverstein committed three murders in prison and is, or certainly was, one of the most feared and dangerous inmates in the federal system.

1. **Protective custody** protects an inmate from threats of violence and extortion from other inmates. The inmate remains in this status until the threats have been removed or the inmate is released from prison.

2. **Segregation due to acute or serious mental health needs** provides intensive mental health treatment to inmates with serious mental illness. The placement of an inmate and the treatment plan are determined by the mental health team.

3. **Segregation due to acute medical needs** provides intensive medical care to inmates with life-threatening medical conditions or physical disabilities. The placement of an inmate and the treatment plan are determined by medical health professionals, including a psychiatrist or a physician.

4. **Investigative segregation** temporally segregates an inmate until serious allegations of misconduct or the need for protective custody are investigated. Once the investigative process is completed, the inmate can be assigned to restrictive housing or returned to the general population.

5. **Disciplinary segregation** is placement to punish an inmate for a violation of a major disciplinary rule. The inmate is released into the general population once the period of disciplinary segregation has been served.

6. **Administrative segregation** incapacitates an inmate whose presence in the general population would pose an ongoing threat to inmates and staff. The placement of an inmate in administrative segregation is determined by a limited set of criteria established by correctional administrators.

The three most enduring and legally troublesome categories (or types) of segregation are administrative segregation, disciplinary segregation, and protective custody, which will be addressed later in this paper. Investigative separation, particularly when served in one's cell or dorm and for only a brief period, does not raise the nagging legal or policy issues presented by disciplinary and administrative segregation. Placement in administrative segregation does not require proof of an infraction; it is essentially an administrative decision with some nominal due process and typically has no durational limits. Disciplinary segregation, on the other hand, results from a finding — by plea or hearing — based on "some evidence" (the constitutional evidentiary requirement) of rule violation. A specific term of "solitary" may be imposed and may then be extended in the event of additional violations.

As the fixed term nears its end, it is not uncommon for a committee to inform the inmate that a term of administrative segregation has been imposed. There is no judicially enforced requirement of proportionality for placement in disciplinary segregation, although virtually every correctional system has a schedule of sanctions as a matter of policy and procedure. These schedules tend

to follow a felony–misdemeanor–violation approach linking the most serious offenses to the most onerous sanction.

The author of this paper has written elsewhere, "Let me begin with the obvious: The very nature of our prisons [or jails] means we must have some means by which to separate prisoners on the basis of those who are at risk from those who create those risks" (Cohen, 2008). Indeed, that statement of the obvious translates into a constitutional duty imposed on prison and jail officials to provide for the "reasonable safety" of prisoners.[4]

The preservation of life is the most fundamental obligation of prison and jail officials. The provision of food, clothing, exercise, medical care, and shelter share the common objectives of the preservation of life and the avoidance of needless pain and suffering. The Eighth Amendment's prohibition of cruel and unusual punishment serves as the guardian of those obligations, though it is not a particularly zealous guardian. The Eighth Amendment is not used as a vehicle for mandating best practices in correctional settings, nor was it intended to be. The operative words of the amendment are "cruel" and "punishment." Thus, "cruel punishment" does not encompass discomfort or even every harm, nor does every pain equate with punishment. The U.S. Supreme Court's interpretation of the Eighth Amendment has been quite conservative and cautious over the years, addressing conduct only at the edge of civilized decency in *Rhodes v. Chapman* as antithetical to human decency. On the other hand, the Court held in *Helling v. McKinney* that a remedy for patently unsafe conditions need not await a tragic outcome. On multiple occasions, the Court has affirmed the individual belief of a number of justices that the right to basic human dignity is at the core of cruel and unusual punishment and due process in this context.[5] This discussion leads us to the door of segregated housing and an important general statement of the law on point: No federal court, certainly not the Supreme Court, has found it unconstitutional to confine inmates in long-term administrative or disciplinary segregation. Where there has been a finding of unconstitutionality, there has also been a finding of special vulnerability related to the class of inmate or an individual inmate.

In *Madrid v. Gomez*, the lower court inveighed against an unconstitutional pattern of excessive force and a shockingly deficient system for medical and mental health care at California's Pelican Bay supermax prison. The court did not, however, find the overall isolation and idleness of prisoners held at this facility to be constitutionally deficient. Indeed, the judge posited that the conditions (including isolation) at Pelican Bay will likely inflict some degree of psychological trauma upon most of the inmates so confined, but he was

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[4] *Farmer v. Brennan* reiterates that constitutional obligation while expanding on the meaning of deliberate indifference (or reckless disregard) by officials for the safety of inmates.

[5] *Hope v. Pelzer, Trop v. Dulles,* and *Brown v. Plata* (citing *Atkins v. Virginia*) are among these decisions.

not persuaded that the risk of developing an impairment to mental health was sufficiently serious for the special housing unit (SHU) population as a whole to find that the conditions per se violate the Eighth Amendment.

However, in *Brown v. Plata*, the Court found that severe overcrowding in California's prisons was the primary factor in the unconstitutional provision of medical and mental health care. The Court upheld a mandated reduction in the prison population as the means by which to facilitate acceptable health care. The decision, however, is not precedent for ruling that overcrowded jail or prison conditions per se are unconstitutional. There must be a connection to a specific constitutional right that is severely diminished.

Early Solitary Confinement

Philadelphia's Eastern State Penitentiary opened in 1829. Eastern, with its Quaker heritage, was designed to create a humane opportunity for reformative penitence. Its key innovation was solitary confinement — prisoners could work alone in their 16-foot cells (Benforado, 2016). The silence of such confinement and the provision of in-cell work reflected the view that crime was caused primarily by the noisy, disorderly outside world and that silence, industry, and reflection were the best reformative measures. If inmates experienced pain, it was not the pain caused by punishment; it was the pain associated with treatment and the pursuit of a reformative ideal.

Today's use of extended isolation in restrictive housing settings reflects no theory of crime causation, and the absence of industry, recreation, and reformative programs reflects no valid theory of reformation. Today, extended isolation is a management tool, designed to attain order and security. However misguided the 19th-century prison reform-through-isolation concept turned out to be, it reflected a crime theory and reformative spirit. Today, restrictive housing is used for a variety of purposes, from punishment, to protection, to a type of social defense associated with administrative segregation. There is no unifying behavioral theory of use or outcome, and yet the consequences are devastating for so many inmates.

The Litigation Highway

Restrictive housing reform is in the air, but it has not as yet happened. Hundreds of articles on the topic are being written. Senate hearings have been held. Important professional organizations have issued standards and practices that would limit and sanitize restrictive housing. Some have called for a total ban, in the nature of the capital punishment reform agenda.

The Mandella Rules were adopted on May 22, 2015, by the United Nations Commission on Crime Prevention and Criminal Justice.[6] The rules forbid solitary confinement in excess of 15 consecutive days. The practice is viewed as a last resort and there are limits on the conditions of cell lighting, diet, and drinking water. While these rules are not binding on U.S. corrections facilities or practice, they may have a persuasive impact on national reform efforts.

Federal litigation continues. Any reforms achieved to date have primarily been attained through federal court intervention. This is not to say that judicially stimulated reform is the most desirable vehicle, but rather that the judiciary, as opposed to the executive or legislative branches of government, has conducted hearings, issued rulings (including declaratory and injunctive relief), and supervised consent decrees or stipulations that bring incremental measures of reform to this practice.

The Vulnerables: Juvenile and Mentally Ill Inmates

Judicially stimulated reform of restrictive housing began almost a half-century ago with juveniles confined in custodial settings in the juvenile system. Young inmates treated as adults for the purpose of criminal responsibility and confined in adult correctional settings should maintain their adolescent status for purposes of restrictive housing.

This paper focuses considerable attention on juvenile justice, as it was the early predicate for contemporary judicially imposed reform. This offers the opportunity to discern the early analysis of what constitutes a special vulnerability to extended isolation and the initial reformative measures imposed by the federal courts.

In *Lollis v. N.Y. State Department of Social Services*, the Federal District Court voided the two-week room confinement of a 14-year-old girl in a stripped room with no recreational outlets or reading material. The court also found it legally impermissible to use shackles on a young male inmate held in isolation for periods of 40 minutes to two hours.

The expert consensus of the 1960s and 1970s was that young people did not experience time in the same manner as adults. It was argued that to an adolescent, two weeks in social isolation could seem like years. Two weeks is, in fact, a much greater percentage of the life of a 14-year-old than, say, that of a 35-year-old adult. What exactly should follow from the "youth experience time differently" paradigm was never clarified. It served as a self-justifying statement

[6] This is a revision of the influential 1955 *United Nations Standard Minimum Rules on the Treatment of Prisoners.*

of belief with policy attached. However, developmental psychologists have since changed this perspective, and a clear shift has occurred.

Scott and Steinberg (2010) make the case that young people are less competent decision-makers than adults. Cognitive maturity approaches adult levels by age 16, while emotional and psychosocial development lags. Adolescents tend to be risk-takers and open to peer influence. Their identities are fluid and not yet fully formed. Many consequences follow from debunking the experience assertion, including criminal responsibility norms and limits on how a juvenile inmate may be subject to control or punished.

The adjudication of a young person as delinquent is not the equivalent of a criminal conviction. A youth held in custody pending an adjudicatory outcome is not the equivalent of a pretrial detainee awaiting the outcome of a criminal charge. A delinquency proceeding is civil in nature, is based on the best interests of the young person, and is premised — although not necessarily functioning — on reformative ideals. Thus, for young detainees, there is a complex set of new developments in the realm of psychology, with an existing, often inconsistent, legal framework that considers them to be entitled to rehabilitation and protected from the harsher measures of control that are imposed on adults in adult prison settings. If extended restrictive housing is considered the most extreme control measure for adults in adult prisons, it follows with even greater force that similar measures employed with young inmates would have at least the same ranking.

Given the psychological plasticity of adolescents, the case against long-term restrictive confinement appears even stronger. Thus, young people are considered a vulnerable population whose characteristics make them particularly susceptible to the rigors of prolonged physical and social isolation. Whereas an adult in restrictive housing might retreat into himself and even re-invent himself with a trauma-informed identity, the young inmate is more likely to become angry, physically violent, and increasingly resistant to educational and reformative efforts. Some jurisdictions employ time-out rooms to which a young inmate may go for solitude or even to scream, punch pillows, or otherwise let off steam.

In *R.G. v. Koller,* three young inmates confined at a state juvenile facility brought claims against the facility for a variety of grievances. The detainees' sexual orientation (lesbian, gay, bisexual, or transgender) formed an important backdrop to the decision. The state conceded that it used isolation as a means to protect the plaintiffs from abusive conditions. The court held, "The expert evidence before the court uniformly indicates that long-term segregation or isolation of youth is inherently punitive and is well outside the range of accepted professional practices." There may be some ambiguity in the holding because the ruling addresses a type of protective custody while suggesting that the

approach to punishing a rule violation might bring a different result. The court notes that social isolation is inherently punishing and that punishing young inmates to protect them from others is not legally acceptable. Other courts have also concluded that the use of isolation with young people, except in extreme circumstances, is a violation of due process (see *H.C. by Hewett v. Jarrard*).

As early as the 1970s, the Institute of Judicial Administration–American Bar Association (ABA) Juvenile Justice Standards Project[7] took what was then a relatively extreme approach to the isolation of juvenile inmates. In Standards Relating to Corrections Administration, 10 days of room confinement was the maximum allowed for even a serious infraction.[8]

The American Correctional Association (ACA) has taken some relatively strong stands on the use of room isolation with juveniles (ACA, 2009). In Standard 4-JCF-3B-06, time-out or room restriction may be used for minor violations or a cooling-off period, but only while the negative behavior is not controlled. Standard 4-JCF-3C-04 limits confinement in a "security room" to five days — with living conditions and privileges that are available in general population — for any offense. It is important to note that this is a representative, not comprehensive, picture of the ABA standards. A state's mandatory education laws must be observed, even during brief periods of room confinement.

President Obama recently announced a ban on holding young inmates in solitary confinement in federal prisons, saying that the practice could lead to "devastating lasting psychological consequences" (Shear, 2016). The President relied on research that focused on the psychological harm and risks of mental illness that support the ban. The ban is further evidence of the movement from conceptualizing young people as mini-adults who experience time differently to the newer evidence of psychological trauma associated with social isolation.

Dimon (2014) writes:

> *One of the reasons that solitary is particularly harmful to youth is that during adolescence, the brain undergoes major structural growth. Particularly important is the still-developing frontal lobe, the region of the brain responsible for cognitive processing such as planning, strategizing, and organizing thoughts or actions. One section of the frontal lobe, the dorsolateral prefrontal cortex, continues to develop into a person's mid-20s. It is linked to the inhibition of impulses and the consideration of consequences.*

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[7] The 23 original volumes are condensed in *Juvenile Justice Standards Annotated: A Balanced Approach*.

[8] Standard 8.7 (B). The author of this paper is the co-author of this volume of standards.

Social isolation soon became the major premise for explaining the harm caused by extended isolation on adult prisoners. Constitutional litigation in this area for juvenile inmates utilizes the 14th Amendment's due process clause. In decisions involving the death penalty for juvenile inmates sentenced to life without parole and the safeguards used during custodial interrogation, the Supreme Court has unhesitatingly taken a "kids are different" approach, holding that the state has a legitimate interest in detaining young people prior to delinquency proceedings, but their conditions of confinement must not amount to punishment (see *Roper v. Simmons; Graham v. Florida; Miller v. Alabama; J.D.B. v. North Carolina; Schall v. Martin; Morgan v. Sproat*). Some courts apply both the substantive due process protections and the prohibition against cruel and unusual punishment to conditions claims of post-adjudication youth. Vulnerability to harm and overreaching (as with custodial interrogations) are the common denominators in those decisions.

There are generally two pathways to follow on the road to legal reform of isolation for juveniles: the empirical pathway, which is strewn with empirical evidence (or assertions) of harm, and a human rights approach, which is not dependent on (but is receptive to) empirical assertions. Human rights law exists as something of a metaphor in our legal structure and, more concretely, at the level of international law. As noted earlier, the Supreme Court has interpreted the Eighth Amendment's cruel and unusual punishment clause as safeguarding no less than the dignity of man. That interpretation is not likely intended to serve as a bridge to the creation of new constitutional rights — rather, it has been used to strengthen an existing right, a prohibition against torture. In *Hope v. Pelzer*, Justice John Paul Stevens' opinion for the majority alludes to the Eighth Amendment as a repository for rights associated with the dignity of man. The actual holding found that on these facts there was a needless infliction of pain. Although this finding is important, it merely added a new set of facts to the prison-torture menu (as opposed, for example, to finding that a corrections officer's verbal abuse of a prisoner is such an affront to human dignity as to constitute cruel and unusual punishment).

A report by the American Civil Liberties Union (ACLU, 2014, p. 10) speaks to human rights law and practice. The extended quote on the next page illustrates this.[9]

[9] The extended quotation on the next page includes the text of the original footnotes.

U.S. courts, including the Supreme Court, have repeatedly relied on international law and practice on children's rights to affirm their reasoning that certain domestic practices violate the Constitution.[1] International human rights law, which identifies anyone below the age of 18 years as a child, recognizes that "the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth."[2] The International Covenant on Civil and Political Rights (ICCPR), a treaty ratified by the United States, acknowledges the need for special treatment of children in the criminal justice system and emphasizes the importance of their rehabilitation.[3] The Convention on the Rights of the Child (CRC), a treaty signed by the United States, also addresses the particular rights and needs of children who come into conflict with the law.[4]

A number of international instruments and human rights organizations have declared that the solitary confinement of children violates human rights laws and standards prohibiting cruel, inhuman or degrading treatment and called for the practice to be banned, including: the United Nations Guidelines for the Prevention of Juvenile Delinquency (the Riyadh Guidelines),[5] the Committee on the Rights of the Child,[6] the United Nations Rules for the Protection of Juveniles Deprived of their Liberty (the Beijing Rules),[7] and the Inter-American Commission on Human Rights.[8] Based on the harmful physical and psychological effects of solitary confinement and the particular vulnerability of children, the Office of the U.N. Special Rapporteur on Torture has repeatedly called for the abolition of solitary confinement of persons under age 18.[9]

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[1] Graham v. Florida, *130 S. Ct. at 2034;* Roper v. Simmons, *543 U.S. at 575 (citing* Trop v. Dulles, *356 U.S. 86, 102-103 (1958)). These cases start from the supposition that, whether a punishment is "cruel and unusual" is a determination informed by "evolving standards of decency that mark the progress of a maturing society."* Trop v. Dulles, *356 U.S. 86, 101 (1958) (plurality opinion).*

[2] *United Nations Declaration on the Rights of the Child, G.A. Res. 1386 (XIV), U.N. Doc. A/4354 (Nov. 20, 1959). Similarly, The American Convention on Human Rights ("Pact of San José, Costa Rica"), Article 19, states, "Every minor child has the right to the measures of protection required by his condition as a minor on the part of his family, society, and the state." Organization of American States, American Convention on Human Rights, Nov. 22, 1969, O.A.S.T.S. No. 36, 1144 U.N.T.S. 123 (entered into force July 18, 1978), reprinted in* Basic Documents Pertaining to Human Rights in the Inter-American System, *OEA/Ser.L.V/II.82 doc.6 rev.1 at 25 (1992).*

[3] *International Covenant on Civil and Political Rights, Arts. 10, 14(4), opened for signature Dec. 16, 1966, S. Exec. Rep. 102-23, 999 U.N.T.S. 171 (entered into force Mar. 23, 1976) (ratified by U.S. June 8, 1992) ("ICCPR"). The Human Rights Committee has interpreted the ICCPR's provisions on child offenders to apply to all persons under the age of 18. UN Human Rights Comm., 44th Sess., General Comment No. 1, U.N. Doc. HRI/GEN/1/Rev.1 at 155 (1994), available at http://www1.umn.edu/humanrts/gencomm/hrcoim20.htm. Treaties signed and ratified by the United States are the "supreme Law of the Land." U.S. CONST. art. VI cl. 2.*

[4] *Convention on the Rights of the Child (CRC), opened for signature Nov. 20, 1989, 1577 U.N.T.S. 3 (entered into force Sept. 2, 1990) ("CRC"). The United States signed the CRC in 1995 but has not ratified.*

[5] *U.N. Guidelines for the Prevention of Juvenile Delinquency, G.A. Res. 45/112, Annex, 45 U.N. GAOR Supp. (No. 49A), U.N. Doc. A/45/49, at 201 (Dec. 14, 1990) ("The Riyadh Guidelines").*

[6] *U.N. Comm. on the Rights of the Child, 44th Sess., General Comment No. 10, Children's rights in juvenile justice, U.N. Doc. CRC/C/GC/10 (2007).*

[7] *U.N. Rules for the Protection of Juveniles Deprived of their Liberty, G.A. Res. 45/113, Annex, 45 U.N. GAOR Supp. (No. 49A), U.N. Doc. A/45/49, ¶ 67 (Dec. 14, 1990) ("The Beijing Rules").*

[8] *Press Release, Annex to the Press Release Issued at the Close of the 147th Session (Apr. 5, 2013), available at http://www.oas.org/en/iachr/media_center/PReleases/2013/023A.asp (incorporating the definition of the United Nations Special Rapporteur on Torture, Mr. Juan Mendez, into the IACHR corpus juris).*

[9] *Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment,* Interim Rep. of the Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, *¶¶ 78-85, Annex (Istanbul Statement on the Use and Effects of Solitary Confinement), U.N. Doc A/63/175 (July 28, 2008) (by Manfred Nowak), available at http://www.unhcr.org/refworld/pdfid/48db99e82.pdf; Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment,* Interim Rep. of the Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, *¶ 77, U.N. Doc. A/66/268 (Aug. 5, 2011) (by Juan Mendez), available at http://solitaryconfinement.org/uploads /SpecRapTortureAug2011.pdf.*

What lessons learned from juvenile justice can be applied to the restrictive housing of inmates with mental illness? Adolescent inmates and adult inmates with serious mental illness share some characteristics. The available scientific and psychological research shows that the psychological impact of social isolation on members of both groups is often grave. The causative harm factor for an adolescent is the plasticity of the brain: Its normal development is altered by the lack of social interaction. The causative harm factor for an adult inmate with serious mental illness (or an adult who is at risk of developing serious mental illness) is the devastating psychological impact of social isolation, particularly of the extreme sort described earlier by federal prisoner Thomas Silverstein. Where mental illness is at issue, the focus is not the interruption of human development but on the serious impairment or destruction of the psyche: loss of reality, delusions, or treatment-resistant depression.

Deprivation may be deemed an unconstitutional condition of confinement — whether for adults or adolescents — when it is sufficiently serious and imposed with "deliberate indifference" to the inmate's health and safety. In *Farmer v. Brennan*, the Court interpreted deliberate indifference as a form of subjective recklessness where the standard of "should have known of the risks" is not sufficient for liability. Officials must be shown to have actual knowledge of the serious risks and fail to mitigate or eliminate those risks.

It is important to note that this paper's designation of young people and adults with mental illness as vulnerable populations is a *categorical* legal exemption as well as an exemption in an individual case of an extended term of isolation.

A categorical exemption means that a litigant need show only forbidden extended isolation and membership in the particular class. A categorical exemption flows most often from a successful class action, whereas individual exemption claims are usually characterized as — "I am a juvenile or have a mental illness. I was held in isolation for X months and, as a result, have suffered severe harm and seek monetary damages."

This paper turns now to the second important group of vulnerable inmates: persons with mental illness. Changes in correctional institutions' dealings with this population will have a broader impact on corrections operations.

Isolation and Mental Illness

The plight of prisoners with mental illness who are placed in various forms of restrictive housing has had more impact on legal reform than the similar treatment afforded juveniles.[10] The data on the number of adults held in such housing vary, with estimates ranging from 80,000 to 100,000 per day.

Although the number of young people held in custodial settings has decreased dramatically in the past 10 years, those numbers — even at their peak — never approached the millions of adults held daily in jails and prisons. The juvenile justice system has language for addressing limited (e.g., "time-out," "room confinement") isolation, along with a culture that is less accepting of the practice and has not used the extraordinarily long terms imposed in the adult system.[11] The Department of Justice estimates, based on survey data from 2003, that 35 percent of youth in custody (approximately 35,000 young people between 10 years old and 20 years old) at that time had been held in isolation with no contact with other residents. The vast majority (87 percent) were held for more than two hours, and more than half (55 percent) were held for more than 24 hours. More than 17,000 of the approximately 100,000 incarcerated young people have been subjected to solitary confinement.

Data gathered from a group of 162 voluntarily participating juvenile detention facilities in 29 states in 2012 by the Performance-Based Standards Initiative of the Council of Juvenile Corrections Administrators suggest that the average duration of isolation was slightly more than 14 hours. The group also reports that although the number of children held in solitary confinement for one to five days increased between 2010 and 2012, the number of youth who reported being held in solitary confinement for more than 11 days and from six to 10 days decreased.

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[10] For a compelling overview of correctional mental illness issues, see Human Rights Watch (2003). For a detailed treatment of correctional mental health law and policy, see Cohen and Knoll (2011).

[11] See Department of Justice Office of Juvenile Justice and Delinquency Prevention (2010); PbS Learning Institute (2012a, 2012b).

A Court Monitor's View From the Inside

Imagine that you are walking through a prison's restrictive housing facilities. You experience two starkly different phenomena. In one scenario, the unit is distressingly loud — inmates are banging or kicking at their unyielding steel doors, screaming, or hysterically laughing. The other unit is deathly silent. You hear your own footsteps on the always surgically clean, concrete floor. Peering into the silent cells, you see blankets pulled up over bodies; a vagrant hand or visible foot. The cell is utterly disorganized, littered with untouched food and scoops of paper. The mattress is on the floor.

As the federal court monitor for five years in *Dunn v. Voinovich*, I visited many a segregation unit in Ohio. My task during a site visit was to first screen inmates who might be mentally ill and then, with my clinical crew, determine the level of mental health care they were receiving and needed.

A mental health caseload chart was always available to me, but I employed a different and, for me, more effective approach. I would tell the sergeant in charge that as a lawyer, I was not an expert in diagnosing mental illness and could sympathize with his challenges in that regard. I would then ask, "Based on what you see on your shift, who are the four or five sickest inmates in the unit?" The officer would reply, for example, "Oh, that's easy. That would be Jones, Smith, Terry, and Loomis." I'd thank him, enter the unit, approach a cell in which an inmate was awake (or just not screaming), and introduce myself as the federal court monitor. I asked the inmates to tell me who they thought were the "craziest" inmates in the unit. A typical reply: "Oh, that's easy. That's Jones, Smith, Terry and Loomis."

The officers and inmates almost always agreed with each other as to who was mentally ill and who was the sickest of the lot. They could also tell me what kind of treatment they may have observed. More often than not, the story was of treatment not received. I learned that rounds designed to identify inmates who were not on the caseload were conducted so quickly that we called them "drive-bys." I also learned that rounds were conflated to include a brief "how are you feeling?" contact with a caseload inmate, which defeated the purpose of rounds.

Wherever I either monitored or conducted a study of correctional mental health care, I learned that restrictive housing units by any name were packed with inmates with mental illness. Their untreated illness often made them the most difficult and disruptive inmates in the facility. They were placed in restrictive housing for a reason, and that reason was not treatment — it was to assert control in lieu of providing treatment to these often difficult-to-manage inmates. A cell-side treatment session in restrictive housing invariably was a medication-management contact conducted on the fly; treatment (if any) was medication.

If it is accurate to call prisons the new asylums, it is just as accurate to call restrictive housing the new asylum lock-down wards. Litigation that addresses confinement in correctional lock-down units is, however, bringing change on behalf of inmates with mental illness.

Legal Framework

Estelle v. Gamble established that prisoners have a constitutional right to adequate health care for serious health needs. There is unanimity in the courts and among experts that there is no constitutional distinction between inmates' right to treatment for serious medical and for mental health conditions. The threshold factors for mandated mental health care are seriousness and the standard of care as measured by the awkward term "deliberate indifference."

There are two distinct sets of challenges associated with inmates with mental illness. First, as illustrated by the sidebar, "A Court Monitor's View From the Inside," are inmates diagnosed with severe mental illness who are confined in restrictive housing. Second is the more fluid challenge posed by inmates who appear to function normally but then either begin the long slide or fall quickly into mental illness. Prison is a hostile environment for an inmate with mental illness. How much more hostile, then, is the imposition of additional social isolation on an inmate already struggling with hallucinations, voices in his head, a belief that the staff is trying to poison him, alternating between bursts of manic conduct and the quiet despair of depression?

There is an inherent challenge rooted in the constitutional right to treatment for severe mental illness: Extended confinement in isolation is argued to be so pervasively destructive that extended confinement per se establishes cruel and unusual punishment. Extended social isolation, it could be argued, is as much a barrier to meaningful treatment as is the withholding of prescribed medication.

Jones-El v. Berge is a good example of a judge clearly differentiating inmates with existing serious mental illness from those who may be at risk. Judge Barbara Crabb banned the housing of inmates with serious mental illness at Boscobel, Wisconsin's supermax prison. Judge Thelton Henderson determined that the SHU at California's Pelican Bay prison violated the Eighth Amendment by housing inmates who were already mentally ill. However, he declined to reach a similar conclusion for inmates who were at an unreasonably high risk of developing serious mental illness as a result of the conditions in the SHU.

The second challenge relates to inmates who are at risk of developing serious mental illness, as described by Judge Henderson. Whereas the first challenge invites questions related to diagnostic accuracy and to determining a duration of confinement that constitutes "extended," the second at-risk category raises a multilayered question involving prevention as a viable aspect of the constitutional duty to treat.[12]

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[12] During the author's tenure as monitor in Ohio, a policy was developed that banned the transfer of inmates with serious mental illness and those who were at risk to the Ohio State Penitentiary (OSP), Ohio's supermax facility. There was a file review for at-risk inmates at the transferring facility and again at OSP reception that helped identify the more vulnerable inmates.

In addition to the duty to treat serious illness, correctional officials have a constitutional duty to provide a reasonably safe environment, which includes protecting inmates from assaults by other inmates (see *Helling v. McKinney*). Environmental hazards include fire and exposure to asbestos, toxic fumes, polluted water, and environmental tobacco smoke.

It may reasonably be argued that extended solitary confinement for a cognitively impaired or paranoid-type inmate is so likely to cause needless pain and suffering that it is deliberately indifferent per se to isolate such a person. By analogy, an inmate with asthma who seeks separation from tobacco-smoking cellmates will (likely successfully) argue that he or she is especially vulnerable and will likely suffer grave harm (see *Talal v. White*; *Kelley v. Hicks*).

In 2011, the U.N. special rapporteur on torture warned that solitary confinement of inmates with mental illness and young inmates can constitute torture or cruel, inhuman, or degrading treatment or punishment when used indefinitely or for a prolonged period. Torture is a more exquisite form of forbidden punishment. The literature is replete with assertions by individuals and organizations (including the American Friends Services Committee and the Center for Constitutional Rights) that extended isolation constitutes torture.

The constitutional duty to treat and to provide a reasonably safe environment is based on the cruel and unusual punishment clause in the Eighth Amendment. Lobel (2016) notes that the presence or absence of alternatives or legitimate penological interests should not be relevant to determining whether the knowing infliction of pain is punishment — cruel or otherwise — under the Eight Amendment.

Under the reasonableness test in *Turner v. Safley,* which calls for the judicial balancing of competing interests and the weighing of alternatives, the discretion of corrections officials is at its zenith.[13] Under the Eighth Amendment, then, corrections officials have considerable discretion, but the weighing of alternatives when mental illness is a factor is not part of the legal calculus.

Eighth Amendment jurisprudence goes to the heart of the human condition, from assuring necessary health care to safe and tolerable conditions of confinement. Dolovich (2009) writes, "If the prohibition on cruel punishment is to mean anything in a society where incarceration is the most common penalty for criminal acts, it must also limit what the staff can do to prisoners over the course of their incarceration." The long-term isolation of an inmate with serious mental illness would seem to be a clear example of the knowing infliction of needless pain and suffering — cruel punishment. The consensus on the harm

[13] See Mushlin (2009) for a comprehensive discussion of the extensive boundaries of the *Turner* test, including First Amendment issues, marriage, and opening attorney mail. The *Turner* test ends at the door of the Eighth Amendment, which encompasses use of force, treatment, and conditions of confinement.

caused by such confinement is so great that a court may well take judicial notice of the fact.[14]

There are many questions residing just under the surface of labeling a unit as "long-term restrictive housing." There is no obvious point of certainty beyond which the duration and conditions of confinement becomes unconstitutional. The polar extremes are relatively simple: at one end of the spectrum might be the 24-hour observational hold in a stripped cell of a psychiatric inmate in crisis, while at the other end is a two-year hold in that same cell without access to reading material or television. Another example of polar extremes might be hours of weekly out-of-cell time versus no access to programs or congregate activity, and treatment consisting only of medication management and documentation of a worsening mental condition. The latter would seem to be extreme punishment. The former, with its limited duration and an observation-protection motive, may be a poor option, but it is not the intentional infliction of needless pain as punishment.

Glidden and Rovner (2012) note that courts too often credit a prison's proffered "legitimate penological interest" in rejecting Eighth Amendment claims, including prolonged penal isolation. Relying on the Americans with Disabilities Act (ADA) and Sec. 504 of the older Rehabilitation Act (RA) (511 at 837), Glidden and Rovner note that where inmates have a mental illness that rises to the level of a disability, ADA and RA section 504 invite challenges to each of the defining characteristics of supermax (or solitary) confinement: limited access to education, telephone calls, programs, exercise, and books; mobility restraints, and so on.

The tactical advantage for inmates using these disability statutes is that the burden is on prison officials to justify the denials. That is difficult to do for books, television, education, and real outdoor exercise. In a constitutional challenge, the plaintiff (inmate) must show the seriousness of the condition, harm, and deliberate indifference in the denial or harsh conditions of confinement. As noted, "cruelty amounting to punishment as a result of deliberate indifference" ultimately are the key operative words in a constitutional challenge. In *Farmer,* where the Court attempted to clarify the meaning of deliberate indifference, the holding stressed that the Eighth Amendment is concerned with cruelty that amounts to punishment. "Cruel" here modifies "punishment." Not all cruelty imposed on jail and prison inmates amounts to punishment. If that were not the case, then *Bell v. Wolfish*, which forbids any punishment of a pretrial detainee, would make no sense.

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[14] A rule of evidence that allows a fact to be introduced into evidence if the truth thereof is so notorious or well known or authoritatively accepted that it cannot reasonably be doubted.

If the Eighth Amendment was intended to outlaw the most barbarous, the most uncivilized of punishments, then the Supreme Court's proper role is to patrol the outer boundaries of decency — the point at which the culture and ethics of our society dictate that government practices must stop. Critics of this viewpoint argue that it is far too subjective and gives unelected jurists who are appointed for life a power unmatched by any other branch of government. The late Justice Antonin Scalia and Justice Clarence Thomas, both self-proclaimed literalists and originalists, took this view, looking for the meaning of constitutional provisions at the time of the document's adoption.

The great majority of Supreme Court Justices accept the Eighth Amendment as subject to interpretation in light of evolving standards of decency. What constitutes uncivilized conduct is not frozen in time: It is to be given a contemporary meaning. This approach to judicial decision-making is hardly crystal clear. It does, however, allow for a discussion of some of the extreme — now rejected — tortures of the past: the public whippings and humiliation, branding, cutting off one or both ears, the ducking stool (Hatfield, 1990). These relics become points of departure for a contemporary analysis of a challenged punishment or "control" mechanism. The Court's search, then, is for what is tolerable today but not necessarily desirable. Desirability as a stand-in for good public policy is the purview of the legislative branch of government. As discussed earlier, our 19th-century experiment with solitude and penitence was based on the then-popular theory of crime causation. Inmates held at Pennsylvania's Eastern State Penitentiary, for example, could work and produce goods in their cells. The concepts of interrupted adolescence and the destructiveness caused by lack of social intercourse obviously had not yet emerged.

The highly regarded National Commission on Correctional Health Care (NCCHC) issued a position statement in April 2016 saying that prolonged (more than 15 consecutive days) solitary confinement is cruel, inhumane, and harmful to an individual's health (NCCHC, 2016). Juvenile inmates and adults with mental illness are categorically excluded for any duration. Prolonged isolation should be eliminated as punishment, according to NCCHC. This position places NCCHC at the forefront of progressive reform in this area. The organization also takes the position that correctional health care professionals should not be involved in deciding whether adults or young inmates are physically or psychologically eligible to be placed in isolation. The health care professional's role is to treat, not to participate in a practice that is now viewed as so damaging that its prolonged use is condemned.

Beyond Vulnerable Inmates

The movement to reform the use of restrictive housing in jails and prisons is occurring within the larger movement to undo the largely failed program of mass

incarceration that began in the 1970s. Michelle Alexander's *The New Jim Crow* (2010), with its emphasis on the racial inequities of the justice system, has been a rallying cry for decarceration. Alexander's argument is that mass incarceration in the United States has served as racialized social control in a manner strikingly similar to that of Jim Crow. Black men, for example, are admitted to prison on drug charges at rates 20 to 50 times greater than those of white men. Once in prison, black inmates constitute a greater percentage of inmates held in administrative segregation than the total administrative segregation population (Liman Program & ASCA, 2015).

In a metaphorical sense, restrictive housing resembles the use of small boxes for confinement in a system where confinement begins in a larger box. In *Meachum v. Fano*, the Supreme Court ruled that a conviction has sufficiently extinguished an inmate's liberty interest to allow authorities to confine him in any prison. Thus, a transfer from a minimum-security prison close to an inmate's home to a maximum-security prison hundreds of miles away evokes no procedural or substantive protections. *Vitek v. Jones* imposes some due process requirements on a prison-to-mental hospital transfer. *Wilkinson v. Austin* upheld some nominal, internal paper review as all the due process needed for a transfer to Ohio's supermax prison. The minimum-to-maximum-security prison transfer is likely to inflict substantial hardship and suffering on the inmate, yet correctional discretion is at its peak.

Moving an inmate from the "big box" of a prison to that prison's much smaller box, whether for disciplinary or administrative purposes, is the focus of today's restrictive housing reform.

Why is there no such outcry (young people and the mentally ill aside) when conviction and a lawful sentence allow wholly discretionary placement of an inmate in any prison chosen by the proper authority? Is there any difference between ending one's freedom at the perimeter wall and the encasement of the four walls of a restrictive housing cell? Is this not simply a tweak and not an incision or surgical excision?

In *Sandin v. Conner*, the Supreme Court indicated that where prison authorities impose an additional restraint on an inmate's limited freedom, and where such restraint is an "atypical and significant hardship in relation to the ordinary incidents of prison life," then some due process must be afforded. The compound of "atypical and significant" hardship has triggered hundreds of appellate decisions in search of its meaning. The case initiated a new era for liberty interests and the right to some procedural due process. A finding of atypical and significant hardship does not relieve an inmate from the deprivation. Rather, a small dose of procedural due process on a par with disciplinary proceedings for major infractions is available: written notice in advance of a hearing; the right to be heard; a limited right to witnesses; confrontation, cross-examination, and assistance (not by counsel) in certain instances; and a right of internal appeal. The source of these rights is *Wolff v. McDonnell*. It is important to note that the

Court in *Wolff* did not require that the decision-makers be truly independent, nor did it provide for personnel who are trained in the law to assist an inmate.

Sandin initially raised the question of whether atypical and significant means that conditions must be so severe, so close to life-threatening, that the line into forbidden cruel and unusual punishment would be crossed. That said, there is no procedural solution — cruel and unusual punishment cannot be imposed. The case has caused more confusion than anything else. It did not slow down the use of prolonged inmate isolation. Had the procedural bar been set sufficiently high that corrections officials would pause before seeking extended or open-ended periods of isolation, *Sandin* could have been more than an irritant to academics and corrections officials.[15] Keep in mind that *Sandin* does not preclude an atypical and significant hardship — it requires extra procedural steps before imposing that hardship.

There comes a point where a quantitative difference becomes qualitative. A fall while standing on a chair and a fall from the top of the Empire State Building are different in degree and category, but the loss of balance, the unsecured flight through space, and a sudden termination describe both events. The consequences, however, are so obviously different that the distinction becomes qualitative. With duration and the conditions of confinement the key variables, restrictive housing is open to sufficiently severe empirical and humanistic challenges as to be under considerable legal stress. California recently settled *Ashker v. Governor*, in which the plaintiff originally offered the promise of a broad judicial ruling on the use of extended SHU confinement for inmates other than adolescents and the mentally ill. Once again, the settlement stopped short of forbidding extended isolation for inmates who are not juveniles or who have serious mental illness.

Some new version of *Ashker*, then, would seem inevitable. Such a lawsuit would have plaintiffs who are not mentally ill or juveniles; rather, they will be relatively normal adults who will liken an extended stay in isolation to housing an asthmatic with a smoker and will argue that extended isolation is an unsafe condition of confinement precluded by the Eight Amendment.

This country is on the cusp of significant restrictive housing reform, and federal litigation has been the significant catalyst. It is in the very nature of social policy reform via the courts that change is incremental. Even the most history-changing U.S. Supreme Court decisions – *Brown v. Board of Education, Roe v. Wade, Mapp v. Ohio* – did not suddenly appear on the Supreme Court docket. A series of lower-court decisions on racial segregation in education, the privacy rights of women to contraception and abortion, and the exclusion of illegally seized evidence laid the foundation for *Brown, Roe, and Mapp*. The judiciary inherently

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[15] See *Wilkinson v. Austin*, which accepted an internal prison paper review as the due process required for transfer to Ohio's supermax prison. The Ohio Attorney General conceded the existence of the requisite liberty interest.

moves cautiously: Only after testing the water and evaluating the impact of the first few steps forward might the all-encompassing issue be dealt with head-on. The Supreme Court will observe the reception of the incremental steps. Where lower courts and state legislatures have fallen in line, the ultimate result is more predictable. The march to abolish the death penalty is an example. *Obergefell v. Hodges,* which validated gay marriage, is an even better example.

Does it violate the Eighth Amendment's cruel and unusual punishment clause to subject any pretrial detainee or convicted prisoner to an extended term of extreme isolation? This is the case now waiting in the wings.

The issues surrounding isolation as cruel and unusual punishment require further elucidation. For example, what is meant by "an extended term"? What are the conditions that constitute extreme isolation? This paper considers extended term to be 15 to 30 consecutive days. The conditions that ultimately may be constitutionally prohibited coalesce around the degree of social isolation experienced by an inmate. An earlier work by this paper's author described the "dark cells" of the past, in which inmates were completely deprived of access to light, sound, fresh air, or congregate activity (Cohen, 2006). A somewhat less rigorous form of isolation (restrictive housing), which this author refers to as second-degree isolation, is used today. This form of isolation typically houses inmates in single cells for 23 hours per day. Inmates have limited access to outside light and air, yet are able to hear some movements outside their cells and may even yell or tap (in code) as communication. Meals are taken alone in the cell; exercise is indoors and highly restricted; and access to programs, visits, telephones, radio, television, showers, and reading material is substantially limited. These restrictions are characteristic of the isolation or segregation units in typical supermax faculties.

Second-degree isolation conveys a set of circumstances beyond life in a single, quiet cell. It includes deprivation of many of the most basic elements that link one to social interaction, the rudimentary sights and sounds of life, and basic decision-making. As one moves from such isolation to the still-deprived world of ordinary prison conditions, an uncertain line divides prohibited isolation from the "mere" harsh conditions of penal confinement. The critical factors in this environment are out-of-cell time, congregate activity, exercise or "yard time," and access to work and programming. Put another way, the greater the social isolation and sensory deprivation, the more a unit qualifies as penal isolation.

Without regard to the harm of social isolation over time, the vulnerability of certain groups, or affronts to human dignity, a prison (or a unit thereof) may lack basic shelter, present serious fire hazards, and have health and sanitation deficits. Confinement of inmates — of human beings — even for the briefest interludes in such circumstances should and would be prohibited as cruel and unusual punishment (see *Carty v. Farrelly; Johnson v. Lewis*). The attachment of a rigorous form of isolation to such conditions should be absolutely prohibited, with severe penalties available for its use.

Habitability is not a necessary part of the calculus on the constitutionality of restrictive housing. However, to the extent that prison conditions in restrictive housing may be so primitive as to be life-threatening, the case for unconstitutionality is enhanced.

Cruel and Unusual Punishment Times Two

Today, the average time between sentencing and execution is almost 18 years, up from 11 years a decade ago. In *Moore v. Texas*, the U.S. Supreme Court was asked to decide whether the execution of a Texas inmate three-and-a-half decades after imposition of the death sentence is cruel and unusual punishment. The durational question was underscored in Moore's petition for a writ of certiorari (p. 30) by the assertion that the excessive-duration claim is aggravated where a death row inmate is held alone in his cell for almost the entire day.

Justice Anthony Kennedy's impassioned plea condemning this "dual death sentence" in *Davis v. Ayala* is receiving much attention on the issue of placing death row inmates in solitary confinement, whether automatic or not, and counsel for Moore certainly relied on it.

If the federal courts and, ultimately, the Supreme Court, are to resolve essential reform questions, they must be willing to accept even more generously the findings of psychology and neuroscience research about the mental and emotional pain experienced during extended periods in restrictive housing. The Supreme Court has indeed, become increasingly receptive to such research as a basis for recognizing grave mental or emotional harm.[16] However, where the harm is not physical, the case may be quite difficult for the complainant inmate to prove. The overarching challenge may be to escape the reach of the ever-present mantra that prisons were not intended to be comfortable places. At what point is "discomfort" replaced by such suffering that an impermissible punishment has been inflicted? This is an area where additional empirical evidence would be very useful.

It is easy to accept that food, water, shelter, and clothing are essential for human survival and that restricting their availability in a correctional setting is a health- or life-threatening harm. The denial of socialization, however, may suggest that the demand for "mere" comfort is as profound a human need as any element of basic human sustenance. As Justice Kennedy recently wrote in *Davis v. Ayala*, "Years on end of near-total isolation exact a terrible price." He cites Grassian's (2006) seminal work on the common side effects of solitary confinement as including anxiety, panic, withdrawal, hallucinations, self-mutilation, and suicidal thoughts and behaviors.

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[16] See the excellent law review note, "The Psychology of Cruelty: Recognizing Grave Mental Harm in America's Prisons." (2015). *Harvard Law Review, 128,* 1250, 1255-1257.

More recently, prominent psychiatrist Terry A. Kupers (2016) reported on his discovery of what he terms "SHU post-release syndrome": disorientation; anxiety in unfamiliar places; retreat to small, circumscribed spaces; limitations in social interaction; hyperawareness of surroundings; suspicion of others; difficulty expressing feelings or trusting others; a belief that one's personality has changed; and substance abuse.

Not all former SHU inmates experience all of these symptoms, just as not every soldier who experiences the horror of the battlefield will experience post-traumatic stress disorder. The syndrome itself is not (yet) linked to anything other than profound isolation and the denial of the normal attributes of human interaction.

Moving Forward

Although the federal judiciary has served as a catalyst for reforms currently in place, there is no reason to abandon the legislative process as a change agent. Legislative action is less expensive than litigation — the hearing and legislative development phases are not constrained by rules of evidence, nor do they require a parade of competing experts — and the opportunity for many voices to be heard is an attractive benefit.

It is likely that in a given state system, or even in a jail that is comparable in size to the Los Angeles County, Cook County, and Rikers Island facilities, we will not know precisely how many inmates are held in isolation, for how long, for what reasons, and with what outcomes. Where such doubt exists, consideration should be given to retaining outside experts to conduct an independent investigation. A study could be ordered by the appropriate legal counsel and be protected from unwarranted dissemination by privilege, if desired. It should concentrate on the young inmates and inmates with mental illness, and should describe those who are outside those areas of vulnerability. Any report should offer conclusions that address whether there is deliberate indifference to the safety and health of inmates held in extended isolation.

The *ABA Standards for Criminal Justices: Treatment of Prisoners* (2011), for which this paper's author served as a member of the drafting task force, are arguably the best guidelines and standards in both concept and likelihood of adoption. Standard 23-3.8: Segregated Housing is the central standard on point:

(a) Correctional authorities should be permitted to physically separate prisoners in segregated housing from other prisoners but should not deprive them of those items or services necessary for the maintenance of psychological and physical wellbeing.

(b) Conditions of extreme isolation should not be allowed regardless of the reasons for a prisoner's separation from the general population. Conditions of extreme

isolation generally include a combination of sensory deprivation, lack of contact with other persons, enforced idleness, minimal out-of-cell time, and lack of outdoor recreation.

(c) All prisoners placed in segregated housing should be provided with meaningful forms of mental, physical, and social stimulation. Depending upon individual assessments of risks, needs, and the reasons for placement in the segregated setting, those forms of stimulation should include:

(i) in-cell programming, which should be developed for prisoners who are not permitted to leave their cells;

(ii) additional out-of-cell time, taking into account the size of the prisoner's cell and the length of time the prisoner has been housed in this setting;

(iii) opportunities to exercise in the presence of other prisoners, although, if necessary, separated by security barriers;

(iv) daily face-to-face interaction with both uniformed and civilian staff; and

(v) access to radio or television for programming or mental stimulation, although such access should not substitute for human contact described in subdivisions (i) to (iv).

(d) Prisoners placed in segregated housing for reasons other than discipline should be allowed as much out-of-cell time and programming participation as practicable, consistent with security.

(e) No cell used to house prisoners in segregated housing should be smaller than 80 square feet, and cells should be designed to permit prisoners assigned to them to converse with and be observed by staff. Physical features that facilitate suicide attempts should be eliminated in all segregation cells. Except if required for security or safety reasons for a particular prisoner, segregation cells should be equipped in compliance with Standard 23-3.3(b).

(f) Correctional staff should monitor and assess any health or safety concerns related to the refusal of a prisoner in segregated housing to eat or drink, or to participate in programming, recreation, or out-of-cell activity.[17]

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[17] For other relevant standards see ABA, Treatment of Prisoner Standards, 23-2.6 (rationales for segregated housing), 23-2.7 (rationales for long-term segregated housing), 23-2.8 (segregated housing and mental health), 23-2.9 (procedures for placement and retention in long-term segregated housing), 23-3.3 (housing areas), 23-3.6 (recreation and out-of-cell time), 23-3.7 (restrictions relating to programming and privileges), 23-4.3 (disciplinary sanctions), 23-5.4 (self-harm and suicide prevention), 23-5.5 (protection of vulnerable prisoners), and 23-8.4 (work programs).

Standard 23-2.8: Segregated Housing and Mental Health states "No prisoner diagnosed with serious mental illness should be placed in long-term segregated housing" and requires mental health screening and subsequent monitoring. It is important to note the use of "serious" to modify "mental illness" as a basis for preclusion.

The ABA concept of segregated housing is to allow the separation of inmates from each other while retaining their well-being. Even the most dangerous inmates are human beings with the inherent dignity of that status. Extreme isolation is banned even for the most dangerous inmates, although appropriate, regularly reviewed, and higher degrees of security are accommodated.

The ABA standards may be compared with the Association of State Correctional Administrators (ASCA) Restrictive Status Housing Policy Guidelines (2013):

> *The following guiding principles for the operation of restrictive status housing are recommended for consideration by correctional agencies for inclusion in agency policy. They are to:*

- *Provide a process, a separate review for decisions to place an offender in restrictive status housing;*
- *Provide periodic classification reviews of offenders in restrictive status housing every 180 days or less;*
- *Provide in-person mental health assessments, by trained personnel within 72 hours of an offender being placed in restrictive status housing and periodic mental health assessments thereafter including an appropriate mental health treatment plan;*
- *Provide structured and progressive levels that include increased privileges as an incentive for positive behavior and/or program participation;*
- *Determine an offender's length of stay in restrictive status housing on the nature and level of threat to the safe and orderly operation of general population as well as program participation, rule compliance and the recommendation of the person[s] assigned to conduct the classification review as opposed to strictly held time periods;*
- *Provide appropriate access to medical and mental health staff and services;*
- *Provide access to visiting opportunities;*
- *Provide appropriate exercise opportunities;*
- *Provide the ability to maintain proper hygiene;*

- *Provide program opportunities appropriate to support transition back to a general population setting or to the community;*
- *Collect sufficient data to assess the effectiveness of implementation of these guiding principles;*
- *Conduct an objective review of all offenders in restrictive status housing by persons independent of the placement authority to determine the offenders' need for continued placement in restrictive status housing; and*
- *Require all staff assigned to work in restrictive status housing units receive appropriate training in managing offenders on restrictive status housing status.*

Although ASCA offers "guiding principles," it provides neither categorical exemptions nor principles that address when restrictive housing should or should not be used, and no delineation of acceptable physical conditions for restrictive housing. That said, ASCA's members are state correctional directors — such movement as there is by the organization on this issue is movement in the right direction.

The Path Going Forward

The current era of solitary confinement appears to be winding down. What many have termed torture has existed for decades and has been charged with causing immeasurable harm not only to many of the inmates so confined but also to the corrections sector itself due to its reflexive reliance on this primitive tool. The adoption of procedural solutions for a substantive problem is too often a beguiling reform option. Examples of such measures relating to restrictive housing include regular review, imposing durational limits without a stringent cap on duration, and offering an inmate an explanation of the rationale for confinement without providing an opportunity to challenge the rationale.

Some reforms that should be implemented only as interim or transitional measures can become embedded in perpetuity. Examples include a reduction in the grounds for imposing restrictive housing, adding limited opportunities for structured and unstructured out-of-cell time, and greater certainty of release time.

Any of these changes, be they procedural, interim, or terminal, will provide some measure of relief to inmates who have been confined in tiny cells for 23 hours per day (with perhaps an hour of out-of-cell time) five days per week. The critical restrictive housing reform measure might be to abandon the use of extended periods of isolation, either as punishment or to enhance security. There are many options short of "you are going to the hole" that may be less harmful and more successful in curbing misconduct in its various guises.

The addition of minimal, haphazard staff training may appear reformative, but it is likely insufficient. Toch (2014) speaks to the essence of the issue in addressing the "we versus they" culture of prison. In his experiment at Scotland's Penninghame Open Prison, he brought inmates and staff together in a model in which inmates were considered service consumers and staff were service providers. The critical focus of this type of deep reform is the corrections officers: who they are and how they see themselves. Toch's message to them was, "You are not working for FedEx (or Amazon) in the delivery of merchandise. You are not patrolling a border to keep some in and others out. You are not a night club bouncer or personal security guard. You are a provider of services within a human services model." The inmate becomes a consumer who has a voice not only in the quality of health care or conditions of confinement but also in what should be available. What do inmates want and need in the way of treatment and reformative opportunities? The greater the availability of desired amenities, the less need there is to consider the use of solitary confinement. For many inmates, the loss of some visiting time, access to television or the yard, clothing options, and other consequences are powerful inducements to avoid misconduct. Moving toward changes in prison culture while simultaneously reducing the worst aspects of extended isolation also seems realistic.

There are, and will be, inmates who are driven by mental illness and act out in a dangerous fashion. If residential treatment is the best option for curtailing that behavior, the current use of restrictive housing is perhaps the worst. A therapeutic, high-to-moderate-security, well-staffed, and well-administered unit is the ultimate solution.

Some inmates, few in number, are predatory, perhaps sociopathic, filled with rage, and highly dangerous. These inmates require safe separation from fellow inmates and staff. These inmates' movement and congregate activity should be severely restricted and their behavior monitored, but they should also be offered every therapeutic opportunity to change.

It is critical that the system not continue to craft prison or jail isolation responses based only on the most dangerous inmates. Of course, there must be a safe solution for those inmates, but the overall system of correctional services must reflect the vast majority of inmates who will give respect in return for respect, who are often self-loathing because of addiction or other conditions, and who need therapeutic opportunities.

The limited scope of this paper precludes the full development of an individual empowerment model such as that developed by Toch (2014). In the context of the legal issues surrounding restrictive housing, the reform takeaway is that the roots of reform will not grow deep without first addressing the organizational and cultural issues of jails and prisons and how the staff view themselves vis-à-vis those in their charge.

The recruitment, training, and supervision of the line officer is a good place to start as we simultaneously peel back the multilayer issues of restrictive housing. Abolition, or even the drastic changes promoted by the ABA standards and the NCCHC position statement, will not be achieved with the immediate stroke of a jurist's pen or a progressive governor. Rick Raemisch, director of the Colorado Department of Corrections, appears to have embarked on the nation's most ambitious, administratively driven reform in the nation. His Open the Door program rolls back the use of solitary confinement by dramatically reducing the number of inmates placed in that environment and employing a sensible use of transition both to the general prison population and, ultimately, the community. His critics say that the residential treatment programs are run so poorly and are seen as of such little utility that many prisoners avoid them (Casella & Stahl, 2016). This situation can and must be altered.

Authentic efforts to reform penal isolation should at least review the Colorado program first, cherry-pick what works, and never confuse an interim measure designed to relieve the harm of restrictive housing from the ultimate goal of its disappearance.

Conclusion

This country is in the midst of intense dialog and calls for reform in our criminal sentencing laws and practices as well as our corrections systems (see Silber, Subramanian, & Spotts, 2016). The United States comprises 5 percent of the world's population but holds 25 percent of the world's prisoners. The enhanced use of restrictive housing is a significant artifact of this mass incarceration.

As the proceedings from the John Jay Colloquium on extreme isolation in prisons notes, mass incarceration places extreme stress on corrections systems (Horn & Jacobs, 2015). Absent adequate resources or political support for rehabilitative environments, the increased use of restrictive housing became the default solution for many of the complex problems that evolved: inmates with mental illness acting out, adolescents who are difficult to control, and the nonconforming "regular" inmate. Our early use of solitary confinement attracted worldwide attention. The solitude of an Eastern State Penitentiary was near total but not viewed as punishment or a management tool. It was meant to free inmates from the disorder and temptations of open society and lead to redemption through isolation (which included in-cell work opportunities).

Today's use of correctional isolation is not based on any theory of crime causation or viable theory of reform. It is based on perceived management needs and used as a punishment for rule violation. The duration of an inmate's placement in administrative segregation is usually based on an assessment of the individual, particularly on an estimate of dangerousness. Some inmates have been held in administrative segregation has been known to last for as long as 43

years. Stays in disciplinary segregation are generally much shorter and should be proportional to the seriousness of the proven infraction.

The movement to reform the use of extreme isolation has centered on the federal courts. The Eighth Amendment to the U.S. Constitution, which prohibits cruel and unusual punishment, has been the primary constitutional change vehicle for those convicted of crimes. The 14th Amendment applies to pre-trial detainees and to young people held in the "rehabilitative" confines of the juvenile justice system.

In contrast to detainees (and young people) who will not be subject to punishment, convicted inmates may, indeed, be punished but not in a cruel fashion. The legal charges leveled at extended isolation, by whatever name, is that it is forbidden punishment. Some refer to extended isolation — beyond 30 days — as a form of torture. Torture, of course, is punishment taken to its most extreme limits.

No federal court, including the U.S. Supreme Court, has held extended isolation per se to be unconstitutional. The earliest federal decisions focused on young people and considered their youth as creating a highly vulnerable status. Even 14 days of room confinement was found to be a due process violation.

Inmates with serious mental illness were the next to be addressed. This class of vulnerable inmates has recorded notable federal court victories. The psychological plasticity of youth and the very nature of serious mental illness created two groups that are considered by the courts to be particularly vulnerable to the harmful effects of enforced, deadening, extended isolation.

While the courts have been the conspicuous forum for change, professional organizations and advocacy groups have been busily at work as well. A legislative approach to reform would be more desirable for all of the reasons discussed in this paper. The likelihood of such broad legislative reform, however, is not very high.

The most important — and most realistic — next step would be a well-brought constitutional challenge that urges a finding that extended isolation (15 to 30 days) is an unconstitutional condition of confinement without regard to any individual's or group's vulnerability. Consider this analogy: If a hypothetical prison system were to consider the amputation of an arm as punishment, there would be no discussion of the punishment's usefulness or of the adaptability of an inmate so sentenced. The practice would be viewed as a barbaric, medieval, unconstitutional punishment.

That analogy is the path forward.

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