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CHAPTER 2

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

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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” (Henningesen, 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-

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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