



National Institute of Justice

Restrictive Housing in the U.S.

Issues, Challenges, and Future Directions

CHAPTER 8

The Effect of Administrative Segregation on Prison Order and Organizational Culture

Jody Sundt, Ph.D.

The following chapter was originally published in *Restrictive Housing in the U.S.: Issues, Challenges, and Future Directions* (NCJ 250315). For more information about that volume, visit www.NIJ.gov/restrictive-housing-book.

Cite this chapter as: Sundt, J. (2016). The Effect of Administrative Segregation on Prison Order and Organizational Culture. NCJ 250323. In *Restrictive Housing in the U.S.: Issues, Challenges, and Future Directions*. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

U.S. Department of Justice
Office of Justice Programs
810 Seventh St. N.W.
Washington, DC 20531

Loretta E. Lynch

Attorney General

Karol V. Mason

Assistant Attorney General

Nancy Rodriguez, Ph.D.

Director, National Institute of Justice

This and other publications and products of the National Institute of Justice can be found at:

National Institute of Justice

Strengthen Science • Advance Justice

<http://www.NIJ.gov>

Office of Justice Programs

Innovation • Partnerships • Safer Neighborhoods

<http://www.ojp.usdoj.gov>

The National Institute of Justice is the research, development and evaluation agency of the U.S. Department of Justice. NIJ's mission is to advance scientific research, development and evaluation to enhance the administration of justice and public safety.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance; the Bureau of Justice Statistics; the Office for Victims of Crime; the Office of Juvenile Justice and Delinquency Prevention; and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking.

Opinions or conclusions expressed in this volume are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

CHAPTER 8

The Effect of Administrative Segregation on Prison Order and Organizational Culture

Jody Sundt, Ph.D.

Indiana University — Purdue University Indianapolis

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, Olicker-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 Increased rate of nonviolent misconduct	No Effect 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, & Nieuwebeerta, 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 Loudon, 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.

References

- Andrews, D. A., & Bonta, J. (1994). *The psychology of criminal conduct*. Cincinnati, OH: Anderson.
- Barak-Glantz, I. L. (1983). Who's in the hole? *Criminal Justice Review*, 8(1), 29-37.
- Beijersbergen, K. A., Dirkzwager, A. J., Eichelsheim, V. I., Van der Laan, P. H., & Nieuwbeerta, P. (2015). Procedural justice, anger, and prisoners' misconduct: A longitudinal study. *Criminal Justice and Behavior*, 42(2), 196-218.
- Bennett, L. (1976). The study of violence in California prisons: A review with policy implications. In A. K. Cohen, G. F. Cole, and R. G. Bailey (Eds.), *Prison violence: A sociological perspective* (pp. 149-168). Lexington, MA: D.C. Heath.
- Bidna, H. (1975). Effects of increased security on prison violence. *Journal of Criminal Justice*, 3(1), 33-45.

³ Firm and fair officer-offender relationships may also be the foundation of effective correctional practices (Andrews & Bonta, 1994; Skeem, Loudon, Polaschek, & Camp, 2007).

Bonta, J., Bourgon, G., Rugge, T., Gress, C., & Gutierrez, L. (2013). Taking the leap: From pilot project to wide-scale implementation of the Strategic Training Initiative in Community Supervision (STICS). *Justice Research and Policy*, 15(1), 17-35.

Bottoms, A. E. (1999). Interpersonal violence and social order in prisons. *Crime and Justice*, 26, 205-281.

Briggs, C. S., Sundt, J. L., & Castellano, T. C. (2003). The effect of supermaximum security prisons on aggregate levels of institutional violence. *Criminology*, 41(4), 1341-1376.

Byrne, J. M., Hummer, D., & Taxman, F. S. (2008). The National Institute of Corrections' institutional cultural change initiative: A multisite evaluation. In J. M. Byrne, D. Hummer, & F. S. Taxman (Eds.), *The culture of prison violence* (pp. 137-163). Boston, MA: Pearson.

Carrabine, E. (2005). Prison riots, social order and the problem of legitimacy. *British Journal of Criminology*, 45(6), 896-913.

California Department of Corrections. (1986). Task force on violence, special housing, and gang management. Sacramento, CA: State of California, Department of Corrections.

Cheek, F. E., & Miller, M. D. S. (1983). The experience of stress for correction officers: A double-bind theory of correctional stress. *Journal of Criminal Justice*, 11, 105-120.

Clemmer, D. (1940). *The prison community*. Boston, MA: Christopher Publishing House.

Cohen, F. (2008). Penal isolation beyond the seriously mentally ill. *Criminal Justice and Behavior*, 35(8), 1017-1047.

Colvin, M. (2007). Applying differential coercion and social support theory to prison organizations: The case of the Penitentiary of New Mexico. *The Prison Journal*, 87(3), 367-387.

Colvin, M., Cullen, F. T., & Vander Ven, T. (2002). Coercion, social support, and crime: An emerging theoretical consensus. *Criminology*, 40(1), 19-42.

Crouch, B. M., Marquart, J. R., & Marquart, J. W. (2010). *An appeal to justice: Litigated reform of Texas prisons*. Austin, TX: University of Texas Press.

Day, J. C., Brauer, J. R., & Butler, H. D. (2015). Coercion and social support behind bars: Testing an integrated theory of misconduct and resistance in U.S. prisons. *Criminal Justice and Behavior*, 42(2), 133-155.

- De Beaumont, G., & De Tocqueville, A. (1833). *On the penitentiary system in the United States: And its application in France; with an appendix on penal colonies, and also, statistical notes*. Philadelphia, PA: Carey, Lea & Blanchard.
- Dowden, C., & Tellier, C. (2004). Predicting work-related stress in correctional officers: A meta-analysis. *Journal of Criminal Justice*, 32(1), 31-47.
- Drake, E. K., Aos, S., & Miller, M. G. (2009). Evidence-based public policy options to reduce crime and criminal justice costs: Implications in Washington state. *Victims and Offenders*, 4(2), 170-196.
- Edge, D., & Jones, E. C. (2014). Solitary nation. *Frontline* [Television series]. Boston, MA: WBGH Educational Foundation.
- Feeley, M. M., & Simon, J. (1992). The new penology: Notes on the emerging strategy of corrections and its implications. *Criminology*, 30(4), 449-474.
- Flanagan, T. J. (1983). Correlates of institutional misconduct among state prisoners. *Criminology*, 21(1), 29-40.
- Gaes, G. G., & Camp, S. D. (2009). Unintended consequences: Experimental evidence for the criminogenic effect of prison security level placement on post-release recidivism. *Journal of Experimental Criminology*, 5(2), 139-162.
- Garland, D. (1990). *Punishment and modern society: A study in social theory*. Chicago, IL: University of Chicago Press.
- Gawande, A. (2009, March 30). Hellhole. The United States holds tens of thousands of inmates in long-term solitary confinement. Is this torture? *The New Yorker*. Retrieved from <http://www.newyorker.com>.
- Hallinan, J. (1995, December 10). Supermax prisons: They're supertough, superexpensive and supergood for poor communities. *The Sunday Patriot*, p. G1.
- Haney, C. (2008). A culture of harm: Taming the dynamics of cruelty in supermax prisons. *Criminal Justice and Behavior*, 35(8), 956-984.
- Haney, C., Banks, C., & Zimbardo, P. (1973). Interpersonal dynamics in a simulated prison. *International Journal of Criminology and Penology*, 1, 69-97.
- Huebner, B. M. (2003). Administrative determinants of inmate violence: A multilevel analysis. *Journal of Criminal Justice*, 31(2), 107-117.
- Human Rights Watch. (1997). *Cold storage: Supermaximum security confinement in Indiana*. New York, NY: Human Rights Watch.
- Irwin, J. (2004). *The warehouse prison: Disposal of the new dangerous class*. New York, NY: Oxford University Press.

- Irwin, J., & Austin, J. (1997). *It's about time: America's imprisonment binge* (2nd ed.). Belmont, CA: Wadsworth.
- Jacobs, J. B., & Retsky, H. G. (1975). Prison guard. *Journal of Contemporary Ethnography*, 4, 5-29.
- Jurik, N. C., Halemba, G. J., Musheno, M. C., & Boyle, B. V. (1987). Educational attainment, job satisfaction, and the professionalization of correctional officers. *Work and Occupations*, 14(1), 106-125.
- Kennealy, P. J., Skeem, J. L., Manchak, S. M., & Eno Louden, J. (2012). Firm, fair, and caring officer-offender relationships protect against supervision failure. *Law and Human Behavior*, 36(6), 496.
- King, K., Steiner, B., & Breach, S. R. (2008). Violence in the supermax: A self-fulfilling prophecy. *The Prison Journal*, 88(1), 144-168.
- King, R. D. (1999). The rise and rise of supermax: An American solution in search of a problem? *Punishment & Society*, 1(2), 163-186.
- King, R. D. (2005). The effects of supermax custody. In A. Liebling & S. Maruna (Eds.), *The effects of imprisonment* (pp. 118-145). Portland, OR: Willian Publishing.
- Kupers, T. A., Dronet, T., Winter, M., Austin, J., Kelly, L., Cartier, W., Morris, T.J., ... Vincent, L. C. (2009). Beyond supermax administrative segregation: Mississippi's experience rethinking prison classification and creating alternative mental health programs. *Criminal Justice and Behavior*, 36(10), 1037-1050.
- Kurki, L., & Morris, N. (2001). The purposes, practices, and problems of supermax prisons. *Crime and Justice*, 28, 385-424.
- Labrecque, R. M. (2015). *The effect of solitary confinement on institutional misconduct: A longitudinal evaluation* Doctoral dissertation, University of Cincinnati). Cincinnati. Retrieved from https://etd.ohiolink.edu/!etd.send_file?accession=ucin1439308329&disposition=inline.
- Latessa, E. J. (2004). The challenge of change: Correctional programs and evidence-based practices. *Criminology & Public Policy*, 3(4), 547-560.
- Liebling, A. (2004). *Prisons and their moral performance: A study of values, quality, and prison life*. New York, NY: Oxford University Press.
- Liebling, A. (2011). Moral performance, inhuman and degrading treatment and prison pain. *Punishment & Society*, 13(5), 530-550.
- Liman Program & Association of State Correctional Administrators. (2015). *Time-in-cell: ASCA-Liman 2014 National Survey of Administrative Segregation in Prison*. New Haven, CT: Yale Law School.

- Lombardo, L. X. (1981). *Guards imprisoned: Correctional officers at work*. New York, NY: Elsevier.
- Mears, D. P. (2008a). An assessment of supermax prisons using an evaluation research framework. *The Prison Journal*, 88(1), 43-68.
- Mears, D. P. (2008b). Accountability, efficiency, and effectiveness in corrections: Shining a light on the black box of prison systems. *Criminology & Public Policy*, 7(1), 143-152.
- Mears, D. P., & Reisig, M. D. (2006). The theory and practice of supermax prisons. *Punishment & Society*, 8(1), 33-57.
- Mears, D. P., & Watson, J. (2006). Towards a fair and balanced assessment of supermax prisons. *Justice Quarterly*, 23(2), 232-270.
- Metcalf, H., Morgan, J., Olikier-Friedland, S., Resnik, J., Spiegel, J., Tae, H., ... Holbrook, B. (2013). *Administrative segregation, degrees of isolation, and incarceration: A national overview of state and federal correctional policies*. Hartford, CT: Liman Public Interest Program, Yale Law School.
- Mohr, G. C. & Raemisch, R. (2015, February 13). Restrictive housing: Taking the lead. *Corrections Today*. Retrieved from www.aca.org.
- Morris, R. G. (2015). Exploring the effect of exposure to short-term solitary confinement among violent prison inmates. *Journal of Quantitative Criminology*, 32(1), 1-22.
- Porporino, F. J. (1986). Managing violent individuals in correctional settings. *Journal of Interpersonal Violence*, 1(2), 213-237.
- Pratt, T. C., Cullen, F. T., Blevins, K. R., Daigle, L. E., & Madensen, T. D. (2006). The empirical status of deterrence theory: A meta-analysis. In F. T. Cullen, J. P. Wright, & K. R. Blevins (Eds.), *Taking stock: The status of criminological theory*, Vol. 15, pp. 367-396.
- Prendergast, A. (2015, Dec. 7). Colorado supermax will build rec yards to settle prisoners' lawsuit. *Westword*. Retrieved from www.westword.com.
- Ralph, P. H., & Marquart, J. W. (1991). Gang violence in Texas prisons. *The Prison Journal*, 71(2), 38-49.
- Reiter, K. A. (2012). *The most restrictive alternative: The origins, functions, control, and ethical implications of the supermax prison, 1976-2010*. Doctoral dissertation, University of California, Berkeley. Retrieved from http://digitalassets.lib.berkeley.edu/etd/ucb/text/Reiter_berkeley_0028E_12273.pdf.

- Reiter, K. (2014). The Pelican Bay hunger strike: Resistance within the structural constraints of a U.S. supermax prison. *South Atlantic Quarterly*, 113(3), 579-611.
- Rhodes, L. A. (2004). *Total confinement: Madness and reason in the maximum security prison* (Vol. 7). Berkeley and Los Angeles, CA: University of California Press.
- Rhodes, L. A. (2007). Supermax as a technology of punishment. *Social Research*, 74(2), 547-566.
- Riveland, C. (1999a). Prison management trends, 1975-2025. *Crime and Justice*, 26, 163-203.
- Riveland, C. (1999b). *Supermax prisons: Overview and general considerations*. Washington, DC: National Institute of Corrections.
- Rothman, D. J. (1971). *The discovery of the asylum*. Piscataway, NJ: Transaction Publishers.
- Rubin, A. T. (2015). Resistance or friction: Understanding the significance of prisoners' secondary adjustments. *Theoretical Criminology*, 19(1), 23-42.
- Sherman, L. W. (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency*, 30(4), 445-473.
- Simon, J. (2014). *Mass incarceration on trial: The remarkable court decision and the future of prisons in America*. New York, NY: The New York Press.
- Schein, E. H. (1990). Organizational culture. *American Psychologist*, 45(2), 109-119.
- Skeem, J. L., Louden, J. E., Polaschek, D., & Camp, J. (2007). Assessing relationship quality in mandated community treatment: Blending care with control. *Psychological Assessment*, 19(4), 397-410.
- Smith, P., Schweitzer, M., Labrecque, R. M., & Latessa, E. J. (2012). Improving probation officers' supervision skills: An evaluation of the EPICS model. *Journal of Crime and Justice*, 35(2), 189-199.
- Sorensen, J. R., Cunningham, M. D., Vigen, M. P., & Woods, S. O. (2011). Serious assaults on prison staff: A descriptive analysis. *Journal of Criminal Justice*, 39(2), 143-150.
- Sparks, J. R., & Bottoms, A. E. (1995). Legitimacy and order in prisons. *British Journal of Sociology*, 46(1), 45-62.
- Stowell, J. I., & Byrne, J.M. (2008). Does what happens in prison stay in prison? Examining the reciprocal relationship between community and prison culture. In J. M. Byrne, D. Hummer, and F. S. Taxman (Eds.), *The culture of prison violence* (pp. 27-39). Boston, MA: Pearson.

- Suedfeld, P. (1974). Solitary confinement in the correctional setting: Goals, problems, and suggestions. *Corrective and Social Psychiatry and Journal of Behavior Technology, Methods and Therapy*, 20(3), 10-20.
- Sundt, J. L., Castellano, T. C., & Briggs, C. S. (2008). The sociopolitical context of prison violence and its control: A case study of supermax and its effect in Illinois. *The Prison Journal*, 88(1), 94-122.
- Sundt, J. L., Castellano, T. C., & Briggs, C. S. (2004). *Modern prison work: Organizational and contextual determinates of job quality*. Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Sykes, G. M. (1958). *The society of captives: A study of a maximum security prison*. Princeton, NJ: Princeton University Press.
- Taxman, F. S., & Belenko, S. (2012). *Implementation of evidence based community corrections and addiction treatment*. New York, NY: Springer.
- Toch, H. (1997). *Corrections: A humanistic approach*. Guilderland, NY: Harrow and Heston.
- Toch, H. (2001). The future of supermax confinement. *The Prison Journal*, 81(3), 376-388.
- Toch, H. (2003). The contemporary relevance of early experiments with supermax reform. *The Prison Journal*, 83(2), 221-228.
- Toch, H. (2007). Sequestering gang members, burning witches, and subverting due process. *Criminal Justice and Behavior*, 34(2), 274-288.
- Toch, H., & Adams, K. (1986). Pathology and disruptiveness among prison inmates. *Journal of Research in Crime and Delinquency*, 23(1), 7-21.
- Toch, H., & Kupers, T. A. (2007). Violence in prisons, revisited. *Journal of Offender Rehabilitation*, 45(3-4), 1-28.
- Travis, J., Western, B., & Redburn, F. S. (2014). *The growth of incarceration in the United States: Exploring causes and consequences*. Washington, DC: The National Academies Press.
- Tyler, T. R. (2003). Procedural justice, legitimacy, and the effective rule of law. *Crime and Justice*, 30, 283-357.
- United States Government Accountability Office. (2013). *Improvements needed in Bureau of Prisons' monitoring and evaluation of impact of segregated housing*. Washington, DC: Author.

Useem, B. (1985). Disorganization and the New Mexico prison riot of 1980. *American Sociological Review*, 50(5), 677-688.

Useem, B., & Piehl, A. M. (2006). Prison buildup and disorder. *Punishment & Society*, 8(1), 87-115.

Wall, A. T. (2016). Time-in-cell: A practitioner's perspective. *Yale Law Journal Forum*, 125, 246-252.

Wooldredge, J., & Steiner, B. (2015). A macro-level perspective on prison inmate deviance. *Punishment & Society*, 17(2), 230-257.