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CHAPTER 9

Toward an Understanding of “What Works” in Segregation: Implementing Correctional Programming and Re-Entry-Focused Services in Restrictive Housing Units

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CHAPTER 9

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Introduction

Issues related to prison management have been the topic of heated debate over the years (Gendreau & Keyes, 2001). Within this context, the use of “solitary confinement” — also known by terms such as *restrictive housing*, *administrative segregation*, and *disciplinary segregation* — has generated special attention and controversy, with repeated calls to abolish the practice. It is instructive, however, that such housing units have been used since the inception of the prison to isolate inmates from the general population of offenders for both punitive (i.e., disciplinary) and administrative (i.e., safety) purposes (Labrecque & Smith, 2013). In fact, as the incarceration rate increased dramatically between the 1970s and 2008 in the United States (Glaze & Kaeble, 2014; Simon, 2007), many

prison managers felt that they had few options for controlling the institutional environment but to place extreme limits on prisoners' activities (Mears & Watson, 2006; Pizarro & Stenius, 2004). Therefore, it is perhaps not surprising that several recent studies have indicated that the use of segregation has also increased over the past two decades in the United States (Haney, 2008; O'Keefe, 2008). Coupled with the fact that segregation is a more restrictive and very expensive option for housing inmates, it is critical to understand both the utility and efficacy of solitary confinement (Frost & Monteiro, 2016).

At the moment, there is an active debate about the constitutional and humanitarian concerns related to the use of segregation, as well as its effectiveness as a tool for managing prisons (Labrecque & Smith, 2013). On one side, corrections officials underscore the daily challenge of managing disruptive inmates in crowded prisons. They cite the very practical reality that segregation is a necessary tool in the continuum of placement options within correctional institutions, particularly for inmates who pose a threat to themselves or others. On the other side, critics assert that segregation is one of the most restrictive and stressful settings for offenders to experience (Arbour, 1996; Human Rights Watch, 2000). From this perspective, solitary confinement is held to violate basic human rights, with harsh conditions that are unduly severe and disproportionate to legitimate security and inmate management objectives (Human Rights Watch, 2000). For these reasons, advocates for prison inmates have characterized the practice as "cruel and unusual punishment" (Grassian, 1983), citing a lengthy list of objectionable conditions: lack of windows, 24-hour lighting, minimal opportunities for exercise and recreation, restricted interpersonal contact, removal of privileges, denial of personal items, and limited therapeutic services.

Support for finding alternatives to managing prisons safely and humanely has gained momentum. In fact, several recent legislative changes have been announced to limit the use of solitary confinement in adult inmate populations, and completely eliminate its use with juvenile inmate populations in the United States (e.g., Eilperin, 2016). Recently, the U.S. Department of Justice (2016) released a document entitled *Report and Recommendations Concerning the Use of Restrictive Housing* to delineate guidelines, or "best practices," for correctional agencies to consider. In general, there is renewed interest in developing and implementing theoretically informed and empirically valid approaches to support rehabilitation for inmates in restrictive housing units (Frost & Monteiro, 2016).

Given concerns over whether solitary confinement constitutes "cruel and unusual punishment," it is not surprising that the vast majority of empirical research conducted to date has focused on whether or not segregation produces any adverse physiological or psychological effects on inmates (see Gendreau & Labrecque, in press; Labrecque & Smith, 2013). Far less attention has been paid to the impact of segregation on subsequent institutional behavior and post-release recidivism, despite the considerable benefit that such knowledge would represent for correctional agencies worldwide (Labrecque & Smith, 2013).

Simply put, segregation has historically been viewed as a form of *punishment and incapacitation* within the prison system rather than as a mechanism for facilitating *rehabilitation*. Moreover, there are even fewer evaluations of offender rehabilitation programs or services in restrictive housing units. This neglect is especially consequential because those receiving what is typically an institution's most severe sanction are often the very inmates in critical need of services to support both their short-term compliance with institutional rules and long-term behavioral change. Furthermore, inmates admitted to restrictive housing facilities often possess certain characteristics (e.g., mental illness, gang affiliation, low self-control) that create significant barriers to managing them in the general population of offenders (Gendreau & Thériault, 2011).

Although some disagreement exists over the short-term effects of brief periods of isolation, there is a general consensus that solitary confinement for prolonged periods is inhumane and causes long-term harm. Some of the most vulnerable inmate populations (e.g., offenders with mental illness) are at the highest risk for lengthy periods of incarceration in restrictive housing units. Advocates of offender rehabilitation and prison reform contend that solitary confinement represents a passive correctional intervention that often reinforces short-term solutions to problems with inmates (Gendreau & Labrecque, in press). This is especially prescient when administrative policies, clinical assessment protocols, and treatment interventions are in place that can limit the use of segregation while maintaining institutional safety and promoting behavioral change (Gendreau & Thériault, 2011). In short, prisons cannot expect to rehabilitate offenders merely by confining and restricting them (Cullen & Gilbert, 1982). In fact, segregating inmates may ultimately undermine legitimate attempts to rehabilitate them (Rothman, 1980). Moreover, the results of research by Lovell, Johnson, and Cain (2007) suggest that inmates released directly from administrative segregation into the community have higher recidivism rates compared to offenders released from the general prison population. This finding is consistent with a handful of other studies that examine the post-release outcomes of inmates who are released directly from segregation (e.g., Mears & Bales, 2009; Seale, Atkinson, Grealish, Fitzgerald, Grassel, & Viscuso, 2011; Ward & Werlich, 2003).

For all of these reasons, the need for services to assist offenders in segregation cannot be understated. Several jurisdictions have applied evidence-based correctional practices within the context of administrative segregation to reduce subsequent institutional misconduct and post-release recidivism (e.g., North Dakota Department of Correction and Rehabilitation, Ohio Department of Rehabilitation and Correction, Washington State Department of Corrections). Many other prison authorities are engaged in similar initiatives (e.g., The Vera Institute of Justice; see Shames, Wilcox, & Subramanian, 2015).

Within this context, it is important to understand “what works” in solitary confinement to improve inmate behavioral outcomes. This white paper addresses the issue from an evidence-based perspective. The first section undertakes a brief review of what is known about the impact of segregation on inmate institutional adjustment.¹ The second section summarizes the principles of effective intervention and provides a framework for how correctional programming and re-entry-focused services might be integrated into restrictive housing units. The third section presents specific recommendations to guide the design and implementation of evidence-based services in segregation. It provides specific examples from select jurisdictions to demonstrate how some of these concepts are being implemented.

As a prelude to this discussion, it is important to define the terminology used in this white paper. Within correctional contexts, the terms used to describe segregation policies and practices vary greatly across jurisdictions (Frost & Monteiro, 2016; Labrecque & Smith, 2013). For example, it is difficult to separate the literature on *disciplinary segregation* from the literature on *administrative segregation*; the former refers to short-term confinement after a specific infraction, whereas the latter refers to long-term classification to a restrictive housing unit. Furthermore, researchers have tended to study *solitary confinement* without carefully distinguishing the various types of segregation (Frost & Monteiro, 2016). There is no universal definition of segregation, nor is there consensus about who should be placed in such settings (Frost & Monteiro, 2016; Riveland, 1999). Nevertheless, most of these units have enough distinctive features in common to be analyzed together. For this white paper, the use of the term *administrative segregation* has been avoided in favor of the more general term *segregation* or *restrictive housing units*.

The Effects of Solitary Confinement

As previously mentioned, whether segregation produces any harmful effects has been a longstanding debate in the field of corrections (Gendreau & Thériault, 2011). The literature reveals two very different perspectives. While some researchers have characterized segregation as psychologically harmful (Grassian, 1983; Grassian & Friedman, 1986; Haney, 2008, 2009; Jackson, 2001; Smith, 2006), others have argued that the empirical literature suggests that segregation produces minimal, if any, negative psychological effects *when used for relatively short periods and under reasonable conditions of confinement* (Bonta & Gendreau, 1995; Ecclestone, Gendreau, & Knox, 1974; Gendreau & Bonta, 1984; Gendreau & Thériault, 2011; Gendreau, Freedman, Wilde, & Scott, 1972; O’Keefe, 2008; O’Keefe, Klebe, Stucker, Sturm, & Leggett, 2010; Suedfeld, 1984; Zinger, Wichmann, & Andrews, 2001). It is important to emphasize here

¹ This topic is considered in detail by other contributions commissioned by the National Institute of Justice.

that both perspectives generally agree that prolonged periods of segregation should be avoided, and that inmates should be housed in the *least restrictive setting necessary* for maintaining the safety and security of the institution (U.S. Department of Justice, 2016).

It is critical that practitioners understand the short-term effects of segregation, as they have important implications for assessing, treating, and delivering services in restrictive housing units. If short-term placement in segregation does not produce dramatic adverse effects under certain conditions, then it seems reasonable to further investigate how this context might be used to deliver more individualized and intensive interventions to inmates in need. This white paper briefly reviews the available research on the effects of segregation (for a detailed review, see Frost & Monteiro, 2016; Gendreau & Labrecque, in press).

The empirical literature on restricted environmental stimulation (Suedfeld, 1980), or sensory deprivation, is relevant to the discussion here about the physiological and psychological effects of segregation (Zubek, 1969). The sensory deprivation literature was the first to suggest that such environments could be harmful. It also reveals a crucial methodological problem that is present when sensory deprivation is enforced.

Some of the first sensory-deprivation experiments were conducted at McGill University in the 1950s, and the researchers reported dramatic cognitive deterioration and perceptual impairment in samples of college students (e.g., Bexton, Heron, & Scott, 1954). However, subsequent studies failed to replicate these findings (e.g., Zubek, Bayer, & Shephard, 1969). The reason for this inconsistency was eventually recognized in a landmark study by Orne and Scheibe (1964); namely, a strong placebo effect occurred when care was not taken regarding how information was elicited from participants (see also Zubek, 1969; Hunt & Chefurka, 1976). Specifically, it was noted that, "... subjects' behavior can be differentially manipulated by altering the implicit and explicit clues in the experimental situation, and further (they) may react to social cues or demand characteristics in such a way as to confound experimental results" (Orne & Scheibe, 1964, p. 10).

In the early 1960s, researchers with the Canadian Penitentiary Service noted that solitary confinement cells had some physical resemblance to the conditions of sensory deprivation in previous experimental studies. As a result, the researchers were interested in how inmates responded to isolation in solitary confinement cells. Clearly, the policy implications of this research for the field of corrections would be profound. Gendreau, Freedman, Wilde, and Scott (1968, 1972) as well as Eccelstone and colleagues (1974) conducted a series of studies in which inmates spent between two and eight days in segregation. The results indicated that inmates in segregation exhibited lower EEG frequency as measured by visually evoked potentials (which is indicative of lowered sensory arousal and cortical activity as well as a need for sensory stimulation), and lower stress levels as indicated by plasma cortisol levels. Other studies by this group also failed

to find adverse effects on inmates' physical health, auditory functioning, and discrimination learning ability (for a review, see Bonta & Gendreau, 1990).

Subsequently, studies were conducted with greater ecological validity in which inmates were admitted to segregation involuntarily (Andersen, Sestoft, Lillebaek, Gabrielsen, & Hemmingsen, 2003; Suedfeld, Ramirez, Deaton, & Baker-Brown, 1982; Wormith, Tellier, & Gendreau, 1988; Zinger et al., 2001). Collectively, these studies involved longitudinal assessments, repeated measure comparison group designs, multisite replications, different forms of segregation, male and female samples, and standardized assessments. The strongest effects were reported for increases in hostility and depression, but the effect sizes were still rather small.

Two decades after the publication of Orne and Scheibe's (1964) critique of the sensory deprivation research, two studies commanded considerable attention in the prison literature. First, Grassian (1983) claimed that segregation produced psychological harm (e.g., hallucinations, overt psychotic disorganization, massive free-floating anxiety, primitive aggressive fantasies, paranoia, and lack of impulse control leading to random violence). His assessment protocol consisted of open-ended interviews and an interview style that actively encouraged disclosure and provided reassurance. Second, Haney (2003) generated similar results almost 20 years later in a sample of 100 inmates in a supermax prison. Again, data were collected through interviews, although it is unclear exactly what measures were used. Furthermore, there was no indication as to whether the prevalence of the symptoms reported by the sample existed prior to incarceration, or how long these effects persisted after the assessment.

More recently, other scholars have noted that the methodological shortcomings of the research reporting harmful effects (e.g., selection bias, response bias, inadequate or no control groups) has limited the credibility of the results (see Gendreau & Labrecque, *in press*; Labrecque & Smith, 2013; Suedfeld et al., 1982; Zinger et al., 2001). Several primary studies and two recent independent meta-analytic reviews on this topic have been completed (Smith, Gendreau, & Labrecque, 2015; Morgan, Van Horn, MacLean, Bolanos, Gray, Batastini, & Mills, 2014). Both meta-analytic reviews conclude that the mean effect size for psychological outcomes tends to be in the small to moderate range.

In short, if there are outliers in the empirical literature, they appear to be from studies that claim segregation produced dramatic adverse psychological effects (Gendreau & Labrecque, *in press*). The vast majority of the empirical studies on segregation point to a similar conclusion: the negative effects associated with relatively brief periods of segregation are not nearly as dramatic as once feared (Smith et al., 2015; Gendreau & Thériault, 2011; Morgan et al., 2014). At the same time, more empirical research is needed on the psychological effects of segregation. If the conditions of confinement are humane, however, there is good reason to support the idea that restrictive housing units can be managed in a

manner that allows for the delivery of intensive interventions to inmates in need of services for successful transition into the general population of offenders.

It is also important to note that a very limited number of studies have been conducted to examine the impact of segregation on behavioral outcomes.² Within this limited research base, there are three types of behavioral outcomes of interest: *institutional violence*, *post-release recidivism*, and *institutional misconduct*. Once again, two independent meta-analyses have summarized the available studies (Smith et al., 2015; Morgan et al., 2014), and small mean effect sizes were reported for behavioral outcomes. The paucity of research on this topic is rather alarming given that segregation is often described as an important tool in ensuring systemwide order in prison systems (Mears & Watson, 2006). These behavioral outcomes must be a priority for future research. This issue will be further discussed in a later section of this white paper.

The Principles of Effective Intervention

Correctional rehabilitation refers to *planned interventions* that target for change some characteristic of the offender that causes criminality (e.g., attitudes, cognitive processes, personality factors or mental health, social relationships, educational and vocational skills, and employment), and intend to make the offender less likely to recidivate (see Andrews & Bonta, 2010; Cullen & Gendreau, 2000).³ This requires the specification of *what* to target (i.e., dynamic risk factors, or criminogenic needs), *who* to target (i.e., higher-risk offenders), and *how* to target (i.e., cognitive-behavioral and social learning treatment modalities). Collectively, these fundamental concepts are referred to as the *principles of effective intervention*.

Setting the Stage for the Principles of Effective Intervention

The principles of effective intervention were established as a result of a three-stage research agenda. Initially, researchers conducted narrative literature reviews, and generated recommendations in consultation with colleagues who had conducted successful programs. Second, demonstration projects were conducted to evaluate the effectiveness of correctional treatments (e.g., Andrews, 1979, 1980; Andrews & Keissling, 1980; Gendreau & Ross, 1979, 1987; Ross & Fabiano, 1985). Finally, meta-analytic techniques were applied to the corrections

² See, for example, Briggs, Sundt, & Castellano, 2003; Butler, Steiner, Makarios, & Travis, in press; Huebner, 2003; Lovell et al., 2007; Labrecque, 2015; Mears & Bales, 2009; Mears & Castro, 2006; Morris, 2015; Seale et al., 2011; Sundt, Castellano, & Briggs, 2008; Ward & Werlich, 2003.

³ Correctional rehabilitation does not include interventions that seek to suppress criminal behavior through specific deterrence (i.e., use of punishment and sanctions).

literature to generate a more precise estimate of the empirical support for the principles of risk, need, and responsivity (RNR). Compared to narrative reviews, meta-analysis involves *the quantitative synthesis* of research, and thus yields a more precise estimate of the overall mean effect size (for a review, see Gendreau & Smith, 2007). Meta-analysis is the review method of choice for many disciplines, including corrections, which has more than 44 meta-analyses of correctional treatment effectiveness (see McGuire, 2004; Smith, Gendreau, & Swartz, 2009). Taken together, the results of these studies provide strong empirical support for the principle of effective intervention. This section presents the findings from three categories of meta-analyses: (1) those which affirm that, overall, correctional treatment programs reduce recidivism; (2) those that identify some general principles of “what works” in reducing offender recidivism; and (3) those that search for more specific clinically and psychologically relevant criteria (for a detailed review, see Smith, 2013).

Garrett (1985) and Davidson, Gottschalk, Gensheimer, and Mayer (1984) published the first meta-analyses in the field of corrections. Garrett (1985) synthesized 433 effect sizes from studies of 13,000 juvenile offenders and reports a mean effect size of $r = .12$. Furthermore, the results indicate that cognitive-behavioral interventions are associated with the largest mean effect size ($r = .22$). Davidson and colleagues (1984) produced similar results in that behavioral interventions (e.g., positive reinforcement, token economies, behavioral contracts) are associated with the greatest reductions in recidivism.

Subsequently, Lipsey (1992) analyzed the results of a large database of juvenile interventions (i.e., a total of 443 effect sizes). Sixty-four percent of these estimates are in the expected direction (i.e., reduced recidivism), and the average reduction in recidivism varies from 5 percent to 9 percent depending on statistical adjustments. Similarly, Lösel (1995) provides a comprehensive assessment of 13 meta-analyses of juvenile and adult offenders published between 1985 and 1995, and reports that mean effect sizes ranged from $r = .05$ to $.18$ with an overall mean of about $r = .10$. This basic pattern of results remains even after controlling for the effects of several other factors, including subject attrition, methodological quality, length of follow-up, and study publication status.

In summary, the meta-analyses referenced above identify the most effective treatment programs as those which are cognitive-behavioral in nature, have a high degree of structure, are demonstration programs (rather than “real world” or “routine” correctional programs), and are delivered in the community rather than in institutional settings (see also Cleland, Pearson, Lipton, & Yee, 1997; Izzo & Ross, 1990; Lipsey, 1999; Lipsey, Chapman, & Landenberger, 2001; Lösel, 1995; Redondo, Sanchez-Meca, & Garrido, 1999). Although skeptics might argue that the 10 percent reduction in recidivism found by Lösel (1995) is of little practical value, several authors have demonstrated that the finding represents a meaningful and cost-effective reduction in recidivism (Lipsey & Wilson, 1993;

Rosenthal & DiMatteo, 2001; Aos, Lieb, Mayfield, Miller, & Pennucci, 2004; Cohen, 1998; Welsh & Farrington, 2000).

Developing the Principles of Effective Intervention

The next series of meta-analyses searched for more specific “clinically relevant and psychologically informed” principles of effective offender treatment (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990). A meta-analysis conducted by the Andrews team (1990) coded the treatment literature (a total of 154 effect sizes) along various dimensions that provided the basis for developing the RNR framework. This database was subsequently extended to 374 effect sizes (see also Andrews & Bonta, 2010, pp. 365-369). In short, the results indicate that there was considerable heterogeneity in the effectiveness of correctional interventions; that is, correctional programs that have certain characteristics yield much larger effect sizes when compared to approaches that do not (Andrews et al., 1990). This section reviews the three main principles of effective intervention (for a detailed review of the meta-analytic evidence for the RNR framework, see Smith et al., 2009).

The Need Principle

To develop a comprehensive theoretical framework, it is necessary to first identify the *covariates* of crime — that is, the biological, personal, interpersonal, situational, and social variables that are statistically associated with antisocial behavior (Andrews & Bonta, 2010). These variables include both static predictors (e.g., criminal history) as well as dynamic factors (e.g., antisocial attitudes, pro-criminal peers, substance abuse). The latter *criminogenic needs* are the appropriate targets for intervention because they are amenable to change. Several meta-analyses have demonstrated that certain criminogenic needs are robust predictors of recidivism (Bonta, Law, & Hanson, 1998; Gendreau, Little, & Goggin, 1996; Hanson & Morton-Bourgon, 2004). These predictors include (1) an antisocial personality pattern (e.g., aggression, hostility, impulsivity, lack of self-control, poor emotion regulation); (2) antisocial attitudes, values, and beliefs; (3) the presence of antisocial peers and associates; (4) substance abuse; (5) problematic circumstances within family/marital relationships; (6) difficulties with education and employment; and (7) lack of prosocial leisure and recreation activities. Together with criminal history, the first three criminogenic needs identified are referred to as *first-tier predictors* because the predictive validities associated with these covariates are especially robust (Andrews & Bonta, 2010). The most effective treatment programs target criminogenic needs and prioritize the first-tier predictors in this regard — the *need principle* in the RNR framework. In fact, Andrews and Bonta (2010) report that treatment programs targeting criminogenic needs reduce recidivism by 20 percent more than programs that do not target them. Moreover, these meta-analyses also found that

other factors had weak predictive validities (e.g., low self-esteem, depression, anxiety, fear of official punishment) and should therefore not be the primary targets for intervention (for a detailed review, see Gendreau et al., 1996).

The predictors of institutional misconduct are very similar to the predictors of post-release recidivism (French & Gendreau, 2006). Furthermore, the same correctional interventions that are effective in decreasing post-release recidivism also lead to meaningful reductions in institutional misconduct (see French & Gendreau, 2006). This is particularly relevant for determining how to best implement programming in segregation, knowing that the appropriate treatment targets for improving institutional adjustment (and therefore post-release recidivism) can be identified and targeted through structured interventions (French & Gendreau, 2006).

The Risk Principle

Research consistently indicates that higher-risk offenders derive the most benefit from treatment (Andrews & Bonta, 2010). In fact, treatment programs that target higher-risk samples reduce recidivism by 7 percent more than programs that target lower-risk offenders. From a theoretical viewpoint, this finding makes sense; higher-risk offenders, by definition, are likely to have more criminogenic needs and therefore require more intense treatment. In contrast, participation in treatment services can increase the failure rates of lower-risk samples by disrupting protective factors and exposing them to their higher-risk counterparts (see Lowenkamp, Latessa, & Smith, 2006). This is referred to as the *risk principle*.

The Responsivity Principle

Finally, the *general responsivity principle* describes how to best target criminogenic needs. The meta-analyses of earlier studies have consistently found that the most effective interventions are those that were cognitive-behavioral in nature. In fact, Andrews and Bonta (2010) reported that cognitive-behavioral interventions produced 19 percent greater reductions in recidivism when compared to other models of offender treatment.

In addition to the general responsivity principle, Andrews and Bonta (2010) also underscore the importance of specific responsivity factors. This refers to the need for corrections practitioners to match the mode and style of service delivery with key offender characteristics (e.g., offenders with lower IQs derive more benefit from behavioral approaches than cognitive strategies; Cullen, Gendreau, Jarjoura, & Wright, 1997).

The Effectiveness of RNR Treatment Programs

Previous research demonstrates that adhering to the RNR framework has a cumulative effect (for a review, see Andrews & Bonta, 2010). When treatment

programs are categorized by whether they followed all three RNR principles in contrast to those that did not, Andrews and Bonta (2010) report a 23 percent difference in recidivism. These principles also apply to a variety of corrections populations, including female offenders, minority groups, youthful offenders, mentally disordered, violent, and sex offenders (Andrews, Dowden, & Rettinger, 2001; Dowden & Andrews, 2000).

Core Correctional Practices

The clinical skills related to effective service delivery with offender populations are referred to as *core correctional practices* (Andrews & Bonta, 2010; see also Gendreau, Andrews, & Thériault, 2010). They include effective reinforcement, disapproval, and use of authority; relationship practices; structured skill-building (including problem-solving); and cognitive restructuring. These therapeutic practices are consistent with the cognitive-behavioral model of treatment, and are associated with reductions in recidivism that range from 19 percent to 27 percent for programs that apply them versus those that do not (Andrews & Bonta, 2010). These competencies can be used by all front-line staff members — in the daily interactions between officers and inmates — and in clinical sessions, group interventions, and case-management meetings (Andrews & Bonta, 2010). Each of these competencies is briefly described below.

Corrections professionals must be capable of using *high-level social reinforcement* to encourage prosocial behaviors, as well as *effective disapproval* to discourage antisocial behaviors (Gendreau et al., 2010). Effective reinforcement involves providing specific praise and acknowledgment for desirable behaviors, and requires the offender to think about both the short-term and long-term benefits associated with its continued use. Effective disapproval involves providing statements of non-support for undesirable behaviors, and requires the offender to think about both the short-term and long-term costs associated with its continued use. Once the undesirable behavior has been corrected and the offender engages in an appropriate prosocial behavior, it is important that the staff member immediately terminate disapproval and provide social reinforcement for the change.

Most corrections professionals are in positions of power relative to the offender, and must use their authority to *respectfully guide the offender toward compliance* (Gendreau et al., 2010). Staff members are encouraged to focus their message on the behavior exhibited (and not on the person performing it), to be direct and specific concerning their demands, and to specify the offender's choices and attendant consequences in any given situation. The guidelines associated with the effective use of authority are particularly important in segregation units where inmates are often not compliant with rules and staff requests.

In addition, staff should adopt several important *relationship practices* to help them develop a collaborative working relationship (also referred to as the

therapeutic alliance in the clinical counseling literature) with the offender (Gendreau et al., 2010). From this perspective, the most effective front-line staff members are open, warm, respectful, nonjudgmental, empathic, flexible, enthusiastic, and engaging. Furthermore, it is important for corrections professionals to use humor and express optimism, and to be solution-focused, structured, and directive. Moreover, front-line staff members should avoid arguments and power struggles with offenders, and instead work to enhance internal motivation and self-efficacy within the offender (Gendreau et al., 2010).

Another core correctional practice involves *structured skill building* (Gendreau et al., 2010). Goldstein (1986) identified five main components of this process:

1. Define the skill to be learned by describing it in discrete steps.
2. Model or demonstrate the skill for the client.
3. Have the client practice the new skill by role playing it, and provide corrective feedback.
4. Use homework assignments to generalize use of the skill beyond the treatment setting.
5. Have the offender practice the skill in increasingly difficult situations, and provide feedback (i.e., graduated rehearsal).

Previous research has underscored the importance of *problem solving* as a specific social skill that should be taught to offenders because, once mastered, they can apply it to a wide variety of high-risk situations (see Trotter, 1999).

Finally, corrections professionals should be thoroughly trained in *cognitive restructuring*. Front-line staff members should be able to teach clients how to generate descriptions of problematic situations, as well as the associated thoughts and feelings that accompany them. Corrections professionals must then help offenders identify risky thinking and practice replacing this self-talk with more prosocial alternatives. Many correctional programs use thinking reports (e.g., Bush, Bilodeau, & Kornick, 1995) to assist clients in identifying risky thoughts and feelings and how these affect their behavior.

In summary, it is important to acknowledge that beyond a theoretical understanding of the variation in criminal behavior and the principles of effective intervention is a need for a pragmatic “how to do it” that they can teach offenders in order to change offenders’ behaviors. Research on the principles of effective intervention has led to the development of numerous composite offender risk and need assessments, structured treatment interventions, and program evaluation instruments. Many of these same tools can be adapted for use in restrictive housing units, and will be further discussed in the recommendations provided later in this document.

Understanding the Limits of Deterrence and Punishment

Despite a plethora of research on the principles of effective intervention, corrections practitioners continue to implement strategies that are ineffective — and that might even cause greater harm to offenders than good (Latessa, Cullen, & Gendreau, 2002).⁴ The term *correctional quackery* describes programs that are developed without considering the principles of effective intervention, and instead rely on common sense, personal experience, and conventional wisdom (Latessa et al., 2002). For example, punishment-oriented strategies (i.e., intermediate sanctions such as intensive supervision, house arrest, electronic monitoring, boot camps, Scared Straight programs) have not been determined to be effective in reducing recidivism, and yet continue to be frequently implemented (Gendreau, Goggin, Cullen, & Andrews, 2000).

An increasing amount of research has also challenged the notion that incarceration functions as an effective deterrent. To illustrate, the empirical literature on offender re-entry has documented high levels of parole failure for inmates released from prison (see Hughes, Wilson, & Beck, 2001; Langan & Levin, 2002; Petersilia, 2003; Pew Center on the States, 2011). Furthermore, a number of methodologically rigorous studies with diverse samples have demonstrated that the effect of prison is, if anything, a slight to moderate increase in post-release recidivism (Cid, 2009; Jonson, 2010; Nagin, Cullen, & Jonson, 2009; Nieuwebeerta, Nagin, & Blokland, 2009; Sampson & Laub, 1993; Spohn & Holleran, 2002; Villettaz, Killias, & Zoder, 2006). Perhaps even more relevant to the segregation debate is a smaller amount of literature that has examined the relationship between the conditions of confinement and recidivism. Chen and Shapiro (2007) measured the harshness of prison conditions by level of security (e.g., minimum versus maximum). Controlling for offender risk level, they find that harsher prison conditions do not lead to higher levels of deterrence and, “if anything . . . may lead to more post-release crime” (Chen & Shapiro, 2007, p. 1). Gaes and Camp (2009) report similar results with a sample of offenders randomly assigned to higher- versus lower-security correctional institutions. Inmates in the higher classification had a hazard rate of reincarceration that was 31 percent higher than that for inmates in the lower classification. A handful of other studies also find results that are consistent with this general pattern that harsher prison conditions are associated with higher post-release recidivism rates (Drago, Galbiati, & Vertova, 2008; Listwan, Sullivan, Agnew, Cullen, & Colvin, 2013; Windzio, 2006).

How does this research relate to the restrictive housing units? It can be argued that segregation routinely involves two separate but interrelated components: (1) isolation (e.g., confinement in a single cell, restriction of social interaction); and (2) deprivation (e.g., removal of personal items, denial of privileges).

⁴ Several reasons have been offered to explain why ineffective programs are so frequently implemented in the field of corrections. See Gendreau, Goggin, and Smith (2001) for a more detailed consideration of the topic.

Corrections officials often contend that both conditions are necessary to maintain the safety and security of the institution. Although this is a legitimate consideration in certain cases (e.g., threat of suicide or extreme violence), the deprivation inherent in many segregation settings is more often intended as punishment (see Mears & Castro, 2006). In other words, the harsh conditions introduced in segregation are intended to be aversive, and therefore produce a greater deterrent effect.⁵ In many cases, however, isolated confinement could be accomplished with far less deprivation. This is an important point because the introduction of deprivation and harsh conditions of confinement might even undermine legitimate attempts at rehabilitation, in much the same way that institutional climate can create barriers to effective service delivery in the general population of inmates (Rothman, 1980).

Translating Research into Practical Recommendations

As previously discussed, there is a well-developed literature base on “what works” to reduce offender recidivism. The principles of effective intervention have now been extensively applied in both institutional and community-based settings, and with diverse samples of offenders (for a review, see Andrews & Bonta, 2010). Similarly, there is also a substantial literature base on “what doesn’t work” to rehabilitate offenders (Gendreau et al., 2000). Taken together, the “what works” and “what doesn’t work” discoveries lead to a better solution — the RNR framework, which provides a blueprint for how services should be designed and delivered in correctional settings. However, attempts to systematically use this information to inform policies and practices within restrictive housing units have been far less frequent. In fact, it is obvious from this review of the literature that the integration of evidence-based practices within the context of segregation is still in the very early stages of development, and published outcome evaluations of treatment programs based on RNR principles are virtually nonexistent. Instead, this section considers how the principles of effective intervention might be applied to inmates in restrictive housing units.⁶ This does not constitute a list of “best practices” given the lack of empirical evidence on the topic, but it offers 10 recommendations that are theoretically relevant and grounded in the “what works” literature. The recommendations included in this section have implications for both research and practice. The reader should note that a handful of these guidelines are based on those previously discussed by Gendreau and Thériault (2011). Furthermore, all of these recommendations are consistent with the recently published guiding principles issued by the U.S. Department of Justice (2016) concerning the contemporary use of segregation.

⁵ This is further underscored by the term *restrictive* housing unit, implying the removal of privileges and liberties.

⁶ Examples of innovative programs that have piloted components of the recommendations included in this section are highlighted. In most cases, formal process and outcome evaluations are ongoing, and the results have not been published.

Recommendation 1: Adopt a meta-analytic perspective to encourage knowledge cumulation.

It is difficult to achieve clarity in a field where scholars are divided (Hunt, 1997). This is certainly true in the empirical literature on the short-term effects of segregation. Moreover, conflicts within civil rights, moral, and political agendas can lead to further confusion (Gendreau & Thériault, 2011; Jackson, 2002; Mears & Watson, 2006). Gendreau and Thériault (2011) note that debates and literature reviews in the field of corrections have frequently been framed in narrow — and often ideological — frames of reference, and convergent validity is compromised (see also Gendreau, 1996; Gendreau & Ross, 1979). The discourse that follows from this state of affairs is often antithetical to systematic attempts at knowledge cumulation (Hunt, 1997).

The previous section referred to *meta-analysis* as a quantitative review of the literature that is the review method of choice in most disciplines, including corrections (Smith et al., 2009). Single studies offer limited information; useful policies in the social sciences are based on replication with diverse samples in multiple jurisdictions before sound conclusions are reached (Hunter & Schmidt, 1996; Schmidt, 1992). The importance of meta-analysis in this regard cannot be overstated; the results of systematic quantitative reviews can have a significant impact on policy and practice. The principles of effective intervention presented in the previous section are based on the results of meta-analysis, and the main findings have been replicated with remarkable consistency (Smith et al., 2009). In comparison, the literature on the effects of segregation has only recently been summarized using meta-analytic techniques (see Smith et al., 2015; Morgan et al., 2014), and the conclusions drawn were limited by the fact that relatively few studies were eligible for inclusion. Furthermore, information on important moderators could not be systematically analyzed due to small sample sizes and missing data.

There is an urgent need for research to investigate segregation as a correctional policy and rehabilitative practice. Future studies should examine the effects of segregation on behavioral outcomes (i.e., institutional violence, post-release recidivism, institutional misconduct) and for special populations of offenders (e.g., those with mental illness, juvenile offenders) to determine the traits of offenders who do not respond well to segregation. Precious few evaluations of correctional treatment services in restrictive housing units have been published to date (see Batastini, 2015; Pizarro, Zgoba, & Haugebrook, 2014). As the field accrues more primary research, it will be exceedingly important to continue to support knowledge cumulation and meta-analyses of the empirical literature (Gendreau & Thériault, 2011; Labrecque & Smith, 2013). Meta-analysis has another important advantage — it allows academics to systematically document gaps in the literature to recommend future priorities for research. In short, a meta-analytic perspective on topics related to segregation can inform priorities for both research and practice.

Recommendation 2: Monitor the prison environment and institutional climate to prevent misconduct and reduce the need for segregation.

Crime prevention strategies that originate in community settings also can be applied to correctional institutions (Gendreau & Thériault, 2011). For example, structural features of a prison (e.g., pod designs, lighting, camera surveillance) can be used to analyze patterns in the time and location of institutional misconduct — to be proactive about the situations and environments where incidents are most likely to occur. For example, the systematic analysis of data on institutional misconduct might reveal that incidents are more likely to occur in certain locations within the prison or during specific shifts under the supervision of particular front-line staff members. This information can then provide prison administrators with the knowledge they need to prevent these incidents. From the perspective of the cognitive-behavioral model, these data allow corrections professionals to better understand the *risky situations* that inmates will likely encounter while incarcerated. Specific skills can then be taught to offenders to equip them to make prosocial choices.

Similarly, information gained from analyzing aggregate statistics like inmate and staff turnover rates can be used to understand fluctuations in institutional misconduct (French & Gendreau, 2006; Porporino, 1986; Wortley, 2002). With this information, prison administrators can identify when their institutions might be particularly vulnerable to fluctuations in the rate of institutional misconducts, and then implement measures to counteract predicted increases in incidents. For example, prison administrators might use this information to strategically inform staff assignments and inmate placements.

Perhaps even more significant is the observation that institutional misconduct and the use of segregation cannot be understood without considering the institutional climate and behavior management practices of the correctional facility at large. A correctional institution with a therapeutic environment and high-quality programs is much more likely to have lower rates of institutional misconduct because its offenders are actively engaged in learning skills that they can apply to avoid and manage risky situations (Andrews & Bonta, 2010; French & Gendreau, 2006). Similarly, offenders who have privileges and other incentives in the general population will be more motivated to comply with institutional rules and progress in their treatment — and less motivated to spend time in segregation settings. Therefore, prison administrators are advised to design their institution's schedules in a manner that ensures that inmates are consistently engaged in meaningful, prosocial activities. For example, it is generally recommended that inmates participate in therapeutic tasks for at least 35 hours each week, and have access to a wide range of reinforcers to encourage program participation and prosocial behavior (Gendreau et al., 2010).

Recommendation 3: Screen inmates at intake to determine risk for placement in segregation.

Efforts to prevent or divert offenders from segregation can be greatly enhanced by identifying offenders who are at risk of placement in segregation. Although there has been little research on the topic, the available literature examining individual-level and institutional-level predictors generally suggests that the predictors of segregation may be similar to the predictors of other outcomes, including institutional misconduct and post-release recidivism. Institutions use many different types of risk measures or scales to predict institutional adjustment. Some of the noteworthy scales include the Static Factor Assessment (SFA; Motiuk, 1993), the Dynamic Factors Identification and Analysis (DFIA/DFIA-R), the Custody Rating Scale (CRS; Solicitor General Canada, 1987), and the Statistical Information on Recidivism-Revised (SIR-R1) scale (Nafekh & Motiuk, 2002).

The construction of a new actuarial assessment scale for predicting placement in segregation merits special comment here. Using data from the Offender Management System maintained by the Correctional Service of Canada, Helmus (2015) developed an instrument, the Risk of Administrative Segregation Tool (RAST), specifically to predict placement in administrative segregation. The study includes both a development sample ($n = 11,110$) and a validation sample ($n = 5,591$) of offenders incarcerated in Canadian federal institutions. The tool contains six static items (age, prior convictions, prior segregation placement, sentence length, criminal versatility, and prior violence) with scores ranging from 0 to 13. Results indicate that the RAST scale can predict placement in administrative segregation for both security concerns and protective custody, as well as placements in segregation within periods of one and two years after admission. Additionally, the instrument has adequate predictive accuracy for both non-Aboriginal and Aboriginal men and women ($AUC = 0.80$). The tool also exhibits superior performance when compared to other risk scales used by the Correctional Service of Canada for similar purposes (Helmus, 2015).

In the process of developing and validating the RAST scale, Helmus (2015) provides several options for practitioners to use to designate nominal risk categories (e.g., low, moderate, high). The options available depend on the agency's goals or criteria, but the selection of risk categories should be clearly articulated, not arbitrary, and related to how the scale will be used in practice (Helmus, 2015). Helmus also notes that the RAST scale is useful to correctional agencies because all of the information required to score the items is available at admission to the institution, and it does not require a significant investment of time or resources to administer.

An important cautionary note is warranted here. The RAST scale is undoubtedly an important contribution to the empirical literature because it identifies offenders at higher risk for placement in segregation; however, it is a static

instrument. Therefore, it cannot be used to measure reductions in risk over time. Although it can be applied as a screening tool, research into dynamic predictors should continue to help prison officials further understand the criminogenic needs that should take priority.

Recommendation 4: Implement programs and services based on RNR principles to prevent misconduct.

By identifying inmates who are at higher risk for placement in segregation, corrections administrators can provide interventions to teach offenders skills that might prevent them from engaging in institutional misconduct, and therefore reduce subsequent placements in administrative segregation. It is critical that such programming and services have a solid basis in the RNR principles — integrating cognitive-behavioral and social learning approaches to target the known predictors of institutional misconduct. For example, a brief intervention module is being developed for this purpose (Smith, 2016a). Through structured sessions, inmates learn skills they can use to establish a prosocial support network within the correctional institution. They also learn how to interact with peers and staff members (including how to deal with authority and avoid negative peer pressure). Additional sessions are also included to help offenders learn to regulate their emotions (e.g., frustration tolerance) and solve problems.

Compelling meta-analytic evidence now shows that participation in general cognitive-behavioral treatment reduces prison misconduct in addition to post-release recidivism (French & Gendreau, 2006). Specifically, cognitive-behavioral interventions that teach prosocial skills for addressing high-risk situations in the community can also be used to enhance skills that offenders can apply in correctional institutions. This also underscores the importance of the timing of correctional programming, particularly for inmates with an elevated risk for placement in segregation.

Recommendation 5: Transform segregation from a deprivation environment to a therapeutic environment.

As discussed earlier, restrictive housing units have historically been defined as environments involving both isolation and deprivation. However, previous research has called into question the conventional wisdom that the harshness of the prison condition functions as an effective deterrent (for a review, see Listwan et al., 2013). Except in circumstances where the removal of personal items is demonstrated to be necessary, there is good reason to believe that such conditions of deprivation interfere with the delivery of effective correctional programs (see Smith & Schweitzer, 2013). Arguably, the instances where there is a legitimate concern that requires extreme restriction are relatively rare.

While most previous evaluations focused on the *content of treatment*, it is also important to consider the *context of the intervention* (Smith & Schweitzer, 2013). Correctional officials must devote significant attention to transforming segregation from a deprivation environment to a therapeutic environment. Previous studies have underscored the importance of normalization within the prison setting to create a more humanized environment (e.g., Centen & Sampson, 1991). Although this will be challenging for many jurisdictions, such efforts can create a context that is more conducive to offender rehabilitation. Such initiatives should consider the aspects of the physical milieu, the availability of correctional programming and rehabilitative services, access to meaningful social interactions and other activities, access to privileges, and the content of interactions between staff and inmates. Some departments (e.g., the North Dakota Department of Corrections and Rehabilitation) are addressing this issue in numerous innovative ways within restrictive housing units. Some of these strategies will be discussed in conjunction with later recommendations.

Recommendation 6: Select the least restrictive option and limit the use of segregation for prolonged periods.

Inmates should be housed in the least restrictive setting necessary to ensure safety and security (U.S. Department of Justice, 2016). Correctional agencies must be capable of articulating the specific reasons for an inmate's placement and retention in segregation (U.S. Department of Justice, 2016). Furthermore, the development of a detailed case plan and regular reviews of inmate progress should occur to ensure that this setting remains the most appropriate placement option over time. Such reviews should be objective and based on documented, observable behaviors.

In some cases, inmates may spend months or years in restrictive housing units without the opportunity to engage in correctional programming or other services. These inmates are deprived of human interaction, with the exception of limited interaction with correctional officers and other corrections personnel (e.g., mental health and medical professionals). To reiterate, there is little debate that segregation for prolonged periods is inhumane, counterproductive, and should be avoided (see Pizarro et al., 2014). One such initiative to limit the use of segregation deserves particular comment here. The Vera Institute of Justice is dedicated to developing a fairer, more humane, and more effective criminal justice system (Browne, Cambier, & Agha, 2011). One of its efforts working toward this goal is the Segregation Reduction Project and the Safe Alternative to Segregation Initiative. As part of this initiative, the Vera Institute of Justice partners with state departments of corrections to (1) reduce the number of inmates in segregation, (2) improve the conditions of confinement in segregation, and (3) enhance programming and support for safe transitions back to the general prison population. Several recent partnerships have led to

the implementation of policies and strategies that have dramatically reduced reliance on prolonged periods of segregation.⁷ Specific strategies include using alternative sanctions for minor rule violations, reducing segregation time for certain types of rule violations, reducing segregation time as an incentive for sustained good behavior, and introducing step-down programs to facilitate the inmate's reintegration into the general population (Browne et al., 2011). Such initiatives are critical because they can examine both system-level factors as well as individual service delivery variables.

Recommendation 7: Divert inmates who cannot cope with segregation to other placement options to reduce harmful effects.

Very little is known about the specific traits of inmates who cannot tolerate segregation. Although the results are tentative, some examples of offender characteristics associated with poor patterns of adjustment include high stimulation seeking, impulsivity, low conceptual level, and low adrenal functioning (Gendreau & Bonta, 1984; Gendreau & Thériault, 2011; Zubek, 1969). Collecting this type of data should not be onerous, as most prison systems should have considerable information available in client files to determine the types of inmates who have exhibited problems in the past (Gendreau & Thériault, 2011). These data are critical to identifying the specific types of offenders who should be diverted from restrictive housing units to other placement options within the system (e.g., secure prison hospital wards).

Inmates with mental health needs merit special consideration here. Correctional institutions should use psychiatric screening measures to identify offenders with mental health needs (Gendreau & Thériault, 2011). The specific measures selected should have demonstrated adequate reliability and validity. Inmates with serious mental illness pose unique challenges for restrictive housing units, and services must be made available to prevent critical incidents, including self-harm and suicide (Gendreau & Thériault, 2011).

Two views exist as to how inmates with mental illness might react to segregation. The traditional criminological perspective (e.g., Mears & Watson, 2006) suggests that such inmates are adversely affected by periods of isolation. On the other hand, the psychiatric literature suggests that some inmates with mental illness might react positively to solitary confinement because of the need for less stimulation (Grassian & Friedman, 1986). In fact, corrections professionals frequently observe that inmates with mental illness seek out solitary confinement (see Scott & Gendreau, 1969). Similarly, previous studies have demonstrated that offenders with mental illness often respond best to environments with reduced

⁷ Browne et al. (2011) describe partnerships with agencies in Illinois, Maryland, and Washington that have implemented changes to reduce the use of segregation.

sensory input (Smith, Gendreau, & Goggin, 2008). An understanding of how inmates with mental illness respond to segregation can inform the delivery of rehabilitation programs and re-entry-focused services. Although more research is needed in this area, it remains clear that assessment and services are critical considerations for offenders with mental illness who are placed in restrictive housing units.

Recommendation 8: Ensure that all front-line staff members are trained and skilled in core correctional practices to facilitate both short-term compliance with rules and long-term behavioral change.

Restrictive housing units are often populated with inmates who are prone to behavioral infractions (i.e., misconduct) and institutional violence. Given their propensity for rule violations, many are sent to segregation where some will continue to exhibit antisocial behaviors. The practical reality is that some inmates can be very difficult to manage, and often test the patience of front-line staff members (Gendreau & Thériault, 2011). Nevertheless, advocates of offender rehabilitation underscore that, "... the guiding principle of any human service enterprise is to treat individuals with respect and humane care" (Gendreau & Thériault, 2011, p. 7). It is therefore crucial for the front-line staff members who work in restrictive housing units to be skilled in core correctional practices related to effective service delivery with offender populations. Ideally, corrections professionals would be equipped to deliver structured interventions to modify target behaviors in a relatively short time. These front-line staff members could also take advantage of teachable moments to reinforce and extend inmates' coping skills and prosocial behaviors. For this reason, it is advisable for prison authorities to assign dedicated staff (e.g., correctional officers, case managers, clinicians, supervisors, and others) to restrictive housing units to ensure better communication, consistency, stability, and on-site supervision for implementing services and interventions.

Finally, cross training should be provided in mental health, substance abuse, and criminogenic needs for correctional officers working in segregation. Corrections professionals who can balance the dual roles of security and rehabilitation are particularly valuable in working with offenders (see Skeem, Eno, Loudon, Polaschek, & Camp, 2007; Soderstrom, 2007). At an even more basic level, all correctional staff should receive formal training on restrictive housing policies. Furthermore, data on compliance with these policies should be collected and analyzed, and the information should be reflected on employee performance evaluations, as appropriate (U.S. Department of Justice, 2016).

Recommendation 9: Develop an individualized treatment plan and measure inmate progress.

Among the more common (and rational) recommendations made for segregation settings are improving assessment protocols (Bottos, 2007; Gendreau & Thériault, 2011; Human Rights Watch, 2000; Lanes, 2011; Wormith et al., 1988) and adding more rehabilitative services (Arrigo & Bullock, 2008; Lovell, 2008; O’Keefe, 2008; Scott & Gendreau, 1969). Although the field does not have established criteria for “best practices” in segregation, scholars and correctional officials have started to contemplate these issues in an attempt to design and implement evidence-based services. This work must involve close partnerships between practitioners and researchers.

In addition to the obvious involvement of psychologists in intervention activities in segregation, these professionals could also provide useful contributions to several of the research/program evaluations noted in other recommendations (Gendreau & Thériault, 2011). One area where this is particularly relevant involves the application of applied behavior analysis (ABA) within segregation, which involves applying learning theories and behavioral interventions to change specific target behaviors (Cooper, Heron, & Heward, 2007). Specifically, it is an individualized approach to behavior modification that requires identifying individual target behaviors, maintaining conditions to elicit those specific behaviors, developing a schedule of reinforcement and punishment, and then following that schedule to elicit the desired changes.⁸ The North Dakota Department of Corrections and Rehabilitation recently initiated a pilot ABA program in one restrictive housing unit to provide a focused, structured treatment program to target discrete problem behaviors under the close supervision of licensed psychologists. Although preliminary, the initial results are very promising (personal communication, K. Wolfer, November 20, 2015). A more comprehensive empirical evaluation of the program is currently in progress.

In addition to using ABA (particularly in the early stages of segregation), corrections officials are advised to consider a combination of treatment strategies to target the criminogenic needs of offenders by using evidence-based strategies, and particularly for those dynamic factors that are linked to problems with institutional adjustment. The RNR framework provides clear guidance about the approaches most likely to be beneficial in this regard: (1) *radical behavioral approaches* that are based on the principles of classical and operant conditioning; (2) *social learning approaches* that involve modeling and behavioral rehearsal techniques that engender self-efficacy; and (3) *cognitive approaches* that include cognitive skills training, problem-solving therapy, self-control procedures, self-instructional training, and stress inoculation training (Gendreau & Thériault, 2011).

⁸ The term *maintaining conditions* refers to the specific antecedents and consequences that cause a person to perform a behavior (see Spiegler & Guevremont, 2010, for a detailed discussion).

In terms of radical behavioral approaches (including contingency management), correctional agencies should develop a range of appropriate reinforcers that include, at a minimum, tangible, token, and social reinforcers and activities (see Spiegler & Guevremont, 2010).⁹ It is also advisable for correctional programs to identify reinforcers that are most meaningful to offenders by surveying inmates. Furthermore, prisons should develop a detailed written protocol to ensure that reinforcers and punishers are administered consistently and immediately. Similarly, it is important to identify a range of consequences such as fines, loss of tokens or points, time out from generalized reinforcers, and social disapproval (for a detailed review, see Spiegler & Guevremont, 2010). Finally, front-line staff members should assess whether the punishment produces any negative effects after administration, including emotional reactions (e.g., anxiety, anger), withdrawal or avoidance behaviors, and perpetuation effects (i.e., when an inmate learns to use punishment to control others' behaviors). Punishment should never interfere with new learning, lead to response substitution, or disrupt social relationships. Although research has suggested that the number of reinforcers should far outweigh the number of punishers, it is very common for most correctional programs to spend more time and effort on developing protocols related to sanctions. It is important to emphasize that the use of reinforcers and sanctions applies to both the general population and within the context of segregation.

Group interventions can also be used to teach specific skills to small groups of inmates in segregation. In most cases, this treatment involves some form of special restraint apparatus to limit physical interactions between inmates. Adaptations of structured curricula have also been used in several jurisdictions (e.g., Washington State Department of Corrections) to expose inmates to treatment concepts prior to increased congregate time and transition back into the general population of offenders. Another structured curriculum for use in this specific manner is being developed by researchers in collaboration with practitioners in the field (e.g., Smith, 2016b).

Ideally, structured interventions are combined with treatment packages to address the individual needs of inmates. The interventions also may be organized into a phase or level system in which inmates can progressively earn privileges and advance through treatment by demonstrating desired behaviors. For example, two correctional institutions operated by the Washington State Department of Corrections have developed a contingency management system for inmates in segregation to encourage prosocial behaviors in preparation for re-entry into the general population of inmates. The phases are then tied to the curriculum content and the types of reinforcers that inmates can earn.

⁹ A simple definition of reinforcement is the application of a stimulus to increase the likelihood that a behavior will occur again. Reinforcers can take several forms, including tangible items and intangible incentives (e.g., activities or special privileges). The reader is referred to Spiegler and Guevremont (2010) for a comprehensive discussion of the selection and application of reinforcers.

Preliminary results provide evidence that the contingency management system is an important component of motivating offenders to learn the skills they need for successful adjustment in the general population.

Recommendation 10: Implement aftercare and re-entry-focused services to improve outcomes for inmates post-release.

Inmates released directly from segregation into the community have a higher risk for recidivism compared to those released from the general population (Lovell et al., 2007). For this reason, policies and practices should be developed to gradually introduce segregated offenders back into the general population before they are released from custody. This finding is consistent with other research in the area of corrections that has underscored the importance of re-entry-focused services and phase systems that transition offenders from higher levels of supervision and structure to lower levels based on demonstrated progress. Developing, implementing, and evaluating such programs in restrictive housing settings specifically should be a priority for the field of corrections to improve outcomes for inmates.

Meta-analyses of the treatment literature have found that institutional programs consistently produce smaller effect sizes in comparison with community-based programs (see Andrews & Bonta, 2010). This is attributable, at least in part, to the fact that community-based programs have the distinct advantage of offering interventions *in vivo*, that is, in more naturalistic environments where offenders can immediately practice new skills. Prisons, however, are by definition artificial environments where inmates have more limited opportunities to use skills in their own high-risk situations. Relapse-prevention plans are useful as offenders consider how they might immediately apply these skills within the prison context (e.g., interactions with staff members and other inmates) as well as post-release. To be successfully discharged from the institution, therefore, offenders should meet clearly defined completion criteria and be trained to observe and manage problem situations. The rehearsal of alternative, prosocial behaviors should include initial practice in a safe environment (e.g., treatment group session) using relatively simple scenarios. Eventually, offenders should practice their newly acquired skills in increasingly difficult situations (e.g., in the housing unit with peers). When clients demonstrate a new behavior, their improved competency should be rewarded to encourage them to exhibit the response again. Participating in aftercare and booster sessions can also improve treatment outcomes. For all of these reasons, it is critical for inmates who are nearing the end of their sentence and are still in segregation to be re-socialized, whenever possible, into the general prison population prior to release into the community. Pizarro et al. (2014) followed a sample of inmates released from supermax institutions to compare the characteristics of offenders who were successful with offenders who recidivated. The results suggest that successful inmates were more

likely to have been released on parole, and were more likely to have completed behavioral and psychological treatment while incarcerated (Pizarro et al., 2014).

In North Dakota, inmates in segregation are moved into a transition unit where they participate in daily activities with the general population of offenders, but then return to the secure unit in the evening. Special group sessions are held to discuss and troubleshoot risky situations that might have occurred during the day. This allows inmates a more gradual transition back into the general population. After inmates have been released from segregation, they are placed on a specialized caseload for a period to ensure that adequate services and resources are available to them in the general prison population. Such efforts are expected to reduce subsequent placements in segregation. Data collection is ongoing, but the preliminary results suggest that there is remarkable, measurable change in target behaviors (personal communication, K. Wolfer, November 20, 2015).

Conclusion

The use of segregation remains a controversial issue in prison management literature. It is common practice in prisons nationwide, but significant gaps in the empirical literature remain. Future research should further investigate the effects of segregation to ensure that correctional institutions are managed safely and humanely. Furthermore, the implementation of treatment programs within the context of restrictive housing units can be an important component of efforts to reduce institutional misconduct and enhance post-release behavioral outcomes. Many of the strategies discussed in the recommendations of this white paper attempt to reconfigure restrictive housing units into placement options that can support the goals of offender rehabilitation.

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