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# Restrictive Housing in the U.S.

Issues, Challenges, and Future Directions

## CHAPTER 6

Mental Health Effects of Restrictive Housing

Reena Kapoor, M.D.

Robert Trestman, M.D., Ph.D.

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**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

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## CHAPTER 6

# Mental Health Effects of Restrictive Housing

Reena Kapoor, M.D.  
Yale School of Medicine

Robert Trestman, M.D., Ph.D.  
University of Connecticut School of Medicine

### Introduction

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

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

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

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

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

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

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

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

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

## **Method of Review**

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

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

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

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

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

## Research and Data Limitations

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

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

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

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

- ***There are no standard definitions in the literature for terms such as mental illness, harm, benefit, short term, and long term.*** For example, when one study concludes there is no evidence of harm from short-term isolation to inmates with mental illness, another could conclude just the opposite, depending on the definitions used. Unfortunately, most of the published studies do not define the terms they use, leaving the reader to speculate on the authors' intended meaning. When the terms are defined, the definitions vary. For example, some studies base inclusion criteria on psychiatric symptoms or diagnosis, while others include any prisoner who receives mental health services in the correctional institution. Similarly, "short term" might refer to seven days, or it might refer to periods as long as three months. Finally, harm can be conceptualized broadly — the development of any new psychological symptoms — or narrowly, such as psychiatric hospitalization or serious suicide attempts.
- ***In many cases, study designs are limited.*** Many studies of restrictive housing have small sample sizes (Suedfeld & Roy, 1975; Brodsky & Scogin, 1988), high attrition rates (Zinger et al., 2001; Miller, 1994), and use volunteer prisoners (Gendreau, Freedman, Wilde, & Scott, 1972). Some studies do not include control groups (Jackson, 1983; Grassian, 1983), which prevents comparison to the potential effects of other relevant conditions of confinement. Other studies were conducted on prisoners involved in class-action litigation against the prison at the time of examination (Grassian, 1983), posing inevitable concerns about report bias. While none of these limitations render the studies' conclusions invalid, they do necessitate the use of caution when generalizing their results.
- ***Correlation can be confused with causation.*** Studies that use a cross-sectional design or do not include control groups have the potential to conflate correlation and causation. For example, if a study finds that individuals with lung cancer own cigarette lighters at a much higher rate than those without lung cancer, this does not mean that lighters cause lung cancer. In the case of restrictive housing, if individuals in restrictive settings exhibit higher rates of mental illness, this does not necessarily mean that the housing placement itself caused the symptoms. To reach that conclusion, symptom rates in control groups must be compared, and intervening factors must be considered.
- ***Prisons and mental health treatment have both changed substantially over the relevant period of study.*** Many of the relevant studies about restrictive housing were conducted from the 1980s to 2010s, a period when American prisons experienced massive growth (Bureau of Justice Statistics, 2014). At the

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

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

## Literature Review

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

### ***Prevalence of Persons With Mental Illness in Restrictive Housing***

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

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

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

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

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

## ***Effect of Particular Characteristics of Confinement***

### **Purpose of Confinement**

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

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

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

## Duration of Confinement

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

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

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

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

## Degree of Social Isolation

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

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

## Physical Plant Characteristics

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

## Degree of In-Cell Activity

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

## Access to Mental Health or Other Programming

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

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

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

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

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

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

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

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

## Relationship Between Staff and Prisoners

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

## ***Effect of Individual Characteristics***

### Individuals Without Pre-Existing Mental Illness

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

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

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

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

## Individuals With Pre-Existing Mental Illness

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

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

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

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

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

## Age

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

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

## Gender

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

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

## Intelligence and Cognitive Functioning

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

## Prior Experience in Restrictive Housing

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

## ***Behavioral Outcomes***

### Self-Injury and Suicide

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

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

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

## Psychiatric Hospitalization

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

## **Institutional Misconduct**

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

## ***Long-Term Psychological Effects***

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

## ***Consensus of Mental Health Professional Organizations***

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

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

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

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

- ***Mental health professionals should have input into the prison disciplinary process.*** ACCP (2013) and APA (2016) agree that prisoners should not be placed in isolation as a punishment for behavior that is solely the result of mental illness. Mental health professionals can inform the disciplinary process about mitigating factors and, in some cases, divert prisoners from entering disciplinary segregation by referring them instead to mental health housing or other therapeutic settings.
- ***All prisoners being considered for restrictive housing placement should be screened for mental health conditions that contraindicate placement or require accommodation.*** The NCCHC takes somewhat contradictory positions on this issue. The mental health standards it published in 2015 recommend reviewing the prisoner's medical record prior to placement in restrictive housing. However, a more recent position statement from the organization indicates that "health staff must not be involved in determining whether adults or juveniles are physically or psychologically able to be placed

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

- ***Individuals with serious mental illness should be excluded from prolonged confinement in restrictive housing.*** Of the mental health organizations, APHA and NCCHC take the most expansive position, with both calling for exclusion of individuals with a serious mental illness from solitary confinement. APA and ACCP are more restrained, allowing for some individuals with a serious mental illness to be placed in restrictive housing but stating that, except in rare cases, they should not be kept in that setting beyond four weeks. ACCP (2013) and APA (2016) define serious mental illness to include prisoners with all psychotic disorders (schizophrenia, schizoaffective disorder, delusional disorder, brief psychotic disorder, schizophreniform disorder, substance-induced psychotic disorder, and unspecified schizophrenia-spectrum disorder), bipolar disorders, and major depressive disorder. Other illnesses, such as PTSD, dementia, and personality disorders, may be considered serious if they cause significant functional impairment.
- ***Individuals with intellectual disabilities should be excluded from prolonged confinement in restrictive housing.*** ACCP (2013) includes intellectual disability (called by its older name, “mental retardation”) in its list of conditions that should exclude an inmate from restrictive housing longer than four weeks. The other organizations do not specifically comment on this population.
- ***Juveniles should be categorically excluded from prolonged restrictive housing.*** NCCHC, APHA, and AACAP (2012) recommend that individuals younger than age 18 should not be placed in restrictive housing. The other organizations do not comment on this population.
- ***Individuals in restrictive housing should have access to necessary mental health treatment.*** APA and NCCHC make clear that correctional facilities remain responsible for meeting the serious medical and mental health needs of prisoners held in restrictive housing. This includes access to medication, psychiatric assessments, and counseling. NCCHC provides guidelines (2015) about how significant mental health findings should be documented and conveyed to custody officials (when necessary). If prisoners with a serious mental illness are kept in restrictive housing, APA (2016) recommends that they be provided with 10 hours a week of unstructured activity in addition to the necessary out-of-cell therapeutic activities. The NCCHC position statement (2016) indicates that inmates in isolation are entitled to health care that is consistent with community standards.
- ***All individuals in restrictive housing should be monitored closely by mental health professionals.*** APA (2016) recommends regular rounds by a qualified

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

- ***Restrictive housing policies and procedures should allow prisoners with acute mental health needs to be transferred to an appropriate treatment setting.*** NCCHC (2015, 2016) and APA (2016) recommend that, when mental health professionals identify signs of deteriorating mental health in prisoners, they should communicate these findings to custody officials promptly. They should also take steps to meet the prisoner’s therapeutic needs, including transfer to a different setting if necessary.
- ***Correctional systems should develop alternatives to prolonged restrictive housing.*** APA (2016) recognizes that alternatives to restrictive housing are limited at this time, and the scientific data about its psychological effects are rapidly evolving. NCCHC (2015) recommends that mental health professionals should keep custody officials informed about the latest scientific information and work with them to develop and evaluate alternatives to restrictive housing, particularly for prisoners with a serious mental illness.

## Knowledge Gaps

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

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

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

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

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

## **Policy Implications: Reconciling Research With Real Life**

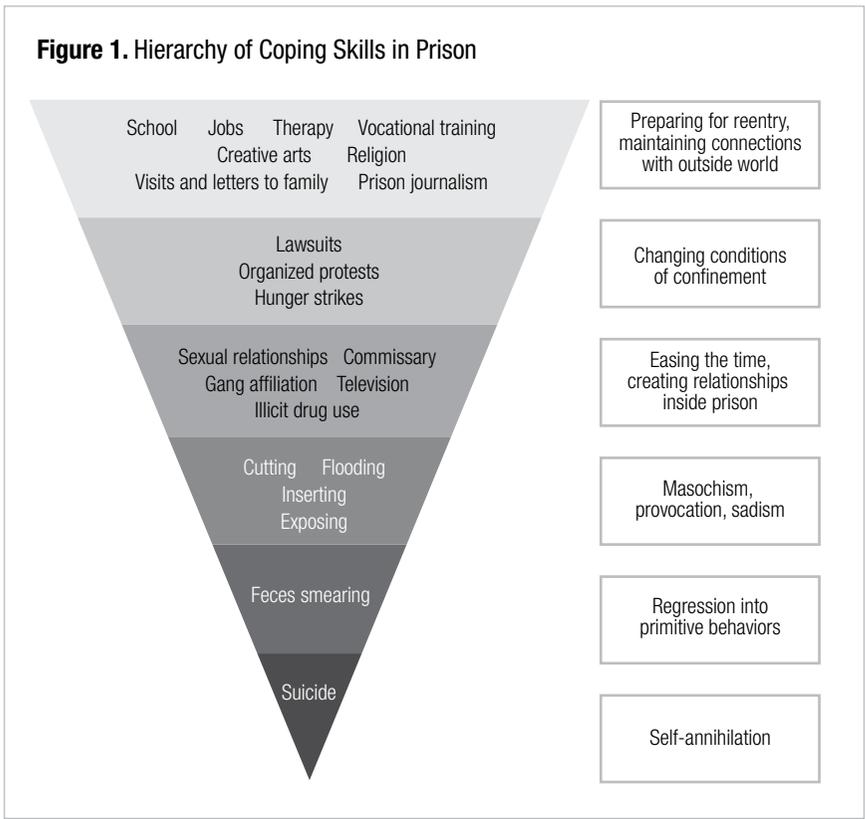
The national debate about the psychological effects of solitary confinement is sometimes framed as a “chicken and egg” question: Are people with mental illness preferentially placed in solitary confinement, or does solitary confinement cause mental illness? This question does not necessarily have one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

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

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

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

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



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

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

### ***Research Directions***

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

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

### ***Clinical Practice***

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

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

## ***Systems Change***

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

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

## **Conclusion**

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

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

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