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FINAL SUMMARY OVERVIEW

Altering Administrative Segregation for Prisoners and Staff:
A Mixed-Methods Analysis of the Effects of Living and Working in Restrictive Housing

Grantee Organization: Arizona State University

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PURPOSE

Whether it be called administrative segregation, restrictive housing, or solitary confinement, it is clear that the effects of isolation are at the forefront of national discussions on crime and punishment. The National Institute of Justice has given significant attention to the issue (Frost & Monteiro, 2016), as has the Vera Institute of Justice (Shames et al., 2015), and even the Association of State Correctional Administrators has supported efforts to limit the use of extended isolation (ASCA, 2015). The attention is well-deserved, as some have argued that the practice leads to significant harm to the mental health of prisoners (Cloud et al., 2015). It is important to note, however, that not all research documents negative outcomes associated with the practice (O’Keefe et al., 2013). It is likely that individual characteristics of prisoners impact the level of distress experienced by isolation. Further, administrative segregation varies in terms of its rationale and frequency of use, duration, and facility conditions (Beck, 2015; Morris, 2015). With estimates of up to 100,000 prisoners being held in segregated units in 2014 (Liman Project & ASCA, 2015), this absence of reliable information is a significant problem.

Consistent with the solicitation, the purpose of this project was to understand the impact of restrictive housing on the mental health of prisoners and staff in prison, and how working in restrictive housing varies from working in the general population. A Department of Justice report on restrictive housing noted, “We do not believe that the humane treatment of prisoners and the safety of correctional staff are mutually exclusive; indeed, neither is possible without the other” (U.S. Department of Justice, 2016: 2). To that end, the goal of this project was to assess the impact of 1) living in restrictive housing on prisoner mental health and 2) working in restrictive housing on staff mental health. A third aim, to determine the aggregate level effects of a policy change in prisoner management, was not completed due to data availability.
SUBJECTS

**Prisoners.** The sample used to determine the impact of living in restrictive housing on prisoner mental health included 326 men sentenced to either medium, close, or maximum custody at 8 prison units within 3 prison complexes. The average age of the sample was 33.4 years (s.d. = 10.3, range 18-76), with the men serving an average of 2.7 prison terms (s.d. = 1.8, range 1-20) accumulating an average of 7.1 years served in prison since turning 18 years old (s.d. = 7.0, range 0-34). The men identified as Hispanic (34.7%), White (29.1%), Other (16.3%), African American (14.7%), American Indian/Alaska Native (4.6%), and Native Hawaiian/Other Pacific Islander (.6%). The highest level of education achieved was High School Diploma/GED (39.9%), Some College/Associates Degree (25.5%), Some High School (25.5%), 8th Grade or Less (6.7%), College Degree (1.8%), and Graduate Degree (.6%). The men identified as parents to an average of 1.7 children (s.d. = 2.2., range 0-23), 68.4% had a juvenile arrest, 73.9% had been to prison previously, 33.7% identified as being a member of a street or prison gang, and 51.5% reported that a mental health professional had told them that they have a mental illness or emotional problem.

**Staff.** The sample used to determine the impact of working in restrictive housing on staff mental health included 225 men and women working security positions across medium, close, and maximum security custody in the same 8 prison units across 3 prison complexes as the prisoner sample. The average age of the sample was 36.3 years old (s.d. = 11.2, range 20-71), with the staff working an average of 84.8 months (s.d. = 75.1, range 4-303) in the Arizona Department of Corrections Rehabilitation and Reentry (ADCRR) and 37.4 months (s.d. = 28.5, range 2-190) at their current unit. The staff had an average of 9.7 hours (s.d. = 2.6, range 0-6) of prisoner contact per day. The staff identified as Hispanic (43.1%), White (39.6%), African American (6.7%), Other (4.9%), Native Hawaiian/Other Pacific Islander (3.1%), and American Indian/Alaska Native
(.9%). The highest level of education achieved was Some College/Associates Degree (59.6%), High School Diploma/GED (30.7%), College Degree (6.2%), Graduate Degree (1.8%) and Some High School (.4%). The sample was 81.4% male and 18.6% female.

**DESIGN AND METHODS**

**Custody Level.** Conditions of confinement, for purposes of this study, are measured through custody level placements. The ADCRR custody levels are broken down into minimum, medium, close, and maximum. *Minimum custody* is used for individuals who pose a low risk to the facility and public, who do not require controlled movement and reside in open-style housing, and who are permitted to go to and from meals, programs, recreation and other activities on their own throughout the day. *Medium custody* is used for individuals who pose a moderate risk to the facility and public, who are not permitted to work outside the facility, and who require limited controlled movement and open-style housing. *Close custody* is used for individuals who pose a high risk to the facility and public, who are not permitted to work outside the facility, and who require controlled movement and cell-style housing. *Close custody* individuals live in two-man cells, alongside another individual with the same classification. *Maximum custody* is used for individuals who pose the highest risk to the facility and public, who are not permitted to work outside the facility and have limited access to work opportunities that require supervision, and who require controlled movement, often in restraints, throughout the facility. Max custody in Arizona at the time of study represents what most scholars and practitioners identify as restrictive housing.

**Prisoners.** Three waves of data collection produced the data used to determine the impact of living in restrictive housing on prisoner mental health. Men included in the study sample were all within 1-3 weeks of permanent housing placement in ADCRR. In order to obtain the sample of incarcerated men for this project, the research team received intake lists, every week from
September 2017 through August 2018, to develop a pool of eligible respondents. The original intake lists came from three complexes reporting all prisoners who were placed for a new sentence (either new or repeat), a parole violation, or a reclassification to maximum custody. Men were qualified for the study if they had a minimum of one year left to serve and had arrived at their permanent housing location within three weeks prior to the interview. Once the screening process was complete, researchers visited each complex on a weekly basis and entered the units with a list of qualifying prisoners. ADCRR staff brought prisoners up to the visitation area in their respective units and prisoners were approached by an interview team member. Prisoners who consented to be interviewed sat down with the interviewer for thirty to sixty minutes to conduct the survey.

Upon completion of the baseline surveys, the men were advised that the team would return again in six months and twelve months to follow-up and reassess their experiences. The same process for approach and consent was used at both follow-up waves of data collection. The baseline sample included a total of 326 respondents, a 67.5 percent participation rate beginning with an eligible sample of 483 prisoners. At 6 months, 288 of the original 326 participated (88.3%), and at 12 months, 266 of the original 326 participated (81.6%).

The prisoner interview tool was guided by the literature and the research questions set forth in the proposal. The baseline instrument measured mental health, stress and coping, procedural justice and legitimacy, and personality traits. The 6 and 12-month follow-up instruments repeated several of the critical scales from baseline and included other important measures such as the pains of imprisonment, the prisoner code, and future outlook. The most critical measure in answering the main research question is the Symptom Checklist-90 Revised (SCL-90-R) (Derogatis, 1994). The SCL-90-R includes 90 questions regarding psychological symptoms and respondents are asked to rate how intensely they have been bothered by each symptom over the previous week.
The tool measures 9 primary symptom dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideations, and psychoticism) and the Global Severity Index (GSI) is a summary assessment of the whole measure.

**Staff:** Proctored surveys at one time point produced the data used to determine the impact of working in restrictive housing on staff mental health. The goal of this sampling strategy was to collect 75 officer surveys at each of the three custody levels for a total of 225 surveys. The number of surveys collected at each unit was determined based on the proportion of officers at each unit relative to the total number of officers at each custody level. Two inclusion criteria were established with the intention of surveying officers with the most contact with prisoners within their respective custody levels. First, to be eligible for participation, officers had to hold the rank of a security officer, who run the day-to-day operations of the unit. Second, officers had to work either a day shift or swing shift. The graveyard or night shift was excluded, as these officers had significantly fewer hours of direct prisoner contact. Officers were not eligible if they held a rank other than security officer, worked an overnight shift, participated in the focus groups discussed below, or were on military, medical, or personal leave at the time of data collection.

In order to develop the list of officers to sample, ADCRR sent the research team a list of all staff working at each unit and a member of the research team went through each list with the inclusion criteria to determine eligible officers for each unit. Stratified random sampling was then used to generate lists of officers at each unit to be approached for survey administration. The research team entered the units on scheduled days and presented the list to the shift commander. Officers present at the unit were invited to the interview room and a member of the research team consented each officer individually. A total of 231 officers were approached by the research team and 225 consented to participate, resulting in a 97.4% participation rate.
The staff survey instrument was guided by the literature and research questions set forth in the initial proposal. Focus groups were also conducted to inform the instrument. These semi-structured focus groups included 51 correctional staff members across 8 units within 3 complexes in the state of Arizona. The focus groups intentionally included correctional staff of various ranks and job positions in order to capture a wide range of experiences and information. Focus groups ran between 1 and 2 hours and were conducted by two members of the research team. The final survey instrument included 10 scales informed by the literature and the focus groups. The scales covered emotional and physical impacts of the job, psychosomatic symptoms, organizational commitment, and social support.

DATA ANALYSIS AND PROJECT FINDINGS

Prisoners. One-way Analysis of Variance (ANOVA) tests and two-tailed \( t \)-tests were run to measure mean differences in mental health, measured with the Global Severity Index (GSI), for each custody level. As shown in Table 1, one-way ANOVA tests indicate significant variation between custody levels with respect to GSI scores. In particular, maximum custody prisoners showed the highest (i.e. most severe) average GSI score across all three waves. Two-tailed \( t \)-tests indicate that the difference in means comparing maximum custody prisoners to close custody and medium custody prisoners was significantly different from zero for all three waves.

<table>
<thead>
<tr>
<th>Table 1. Prisoner Global Severity Index Mean Score by Custody Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Severity Index Mean (Transformed)</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>6-Month</td>
</tr>
<tr>
<td>12-Month</td>
</tr>
</tbody>
</table>

***p<0.001, **p<0.01, *p<0.05
While the results above indicate that maximum custody prisoners consistently report more severe mental health, according to their GSI score, comparing within-group changes over the study period did not reveal any meaningful differences. Specifically, Table 2 shows the change scores for the GSI by custody level and between the study waves. Table 2 also shows two-tailed $t$-tests for the hypothesis that the difference of means between waves within each custody level is zero. For each comparison by custody level and by wave, results fail to reject the null hypothesis that there is no change in GSI scores between measurement occasions. Overall, Tables 1 and 2 show that maximum custody prisoners consistently show more severe GSI scores, but there is no evidence that everyone who is in maximum custody experiences declines in mental health as results are unable to reject the hypothesis that the average change is zero.

<table>
<thead>
<tr>
<th>Table 2. Prisoner Global Severity Index Mean Score Change Across Waves</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Severity Index (GSI) Mean</strong></td>
</tr>
<tr>
<td><strong>Maximum Custody</strong></td>
</tr>
<tr>
<td>Baseline to 6-Month Change</td>
</tr>
<tr>
<td>6-Month to 12-Month Change</td>
</tr>
</tbody>
</table>

***p<0.001, **p<0.01, *p<0.05

**Staff.** Chi-square and ANOVA tests were run to measure differences in staff responses across custody levels. The relationships between custody level and a series of attitudinal questions assessing organizational challenges were examined through chi-square tests. Significant relationships emerged between custody level and **challenges created by overtime**, where 73% of medium, 62% of max, and 51% of close said it was either occasionally or frequently a problem (Chi-Square = 15.30, p <.05; Cramer’s V = .19); **challenges created by cross-leveling** (i.e., working at a different custody level than assigned), where 97% of medium, 82% of max, and 78%
of close said it was either occasionally or frequently a problem (Chi-Square = 35.56, p <.001; Cramer’s V = .28); and assaults at unit, where 70% of max, 45% of medium, and 38% of close answered “Yes” that they had been assaulted (Chi-Square = 16.49, p <.001; Cramer’s V = .27).

ANOVA tests were run to measure differences in means of the 10 physical and mental health scales across officer custody levels. Table 3 shows significant relationships emerged between custody level and job satisfaction, measured by five items such as “Most days I am enthusiastic about my job” and where higher scores represent greater job satisfaction; organizational commitment, measured by six items such as “I am proud to tell others that I work at the department of corrections” and where higher scores represent greater organizational commitment; and social support, measured by three items such as “I can tell my supervisor when things are wrong” and where higher scores represent greater social support. On each of these measures, officers working in close custody reported, on average, greater levels than medium or close custody.

Table 3. Staff Outcomes by Custody Level

<table>
<thead>
<tr>
<th>Measure</th>
<th>Maximum Custody</th>
<th>Close Custody</th>
<th>Medium Custody</th>
<th>F</th>
<th>ANOVA Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-Stress</td>
<td>23.3</td>
<td>22.5</td>
<td>23.6</td>
<td>1.12</td>
<td>.327</td>
</tr>
<tr>
<td>Life-Stress</td>
<td>31.9</td>
<td>30.9</td>
<td>32.9</td>
<td>1.63</td>
<td>.198</td>
</tr>
<tr>
<td>Depression</td>
<td>14.6</td>
<td>13.2</td>
<td>14.4</td>
<td>1.66</td>
<td>.193</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
<td>21.4</td>
<td>19.7</td>
<td>20.1</td>
<td>1.40</td>
<td>.250</td>
</tr>
<tr>
<td>Depersonalization/ Disengagement</td>
<td>22.1</td>
<td>20.1</td>
<td>22.7</td>
<td>1.43</td>
<td>.242</td>
</tr>
<tr>
<td>Psychosomatic Symptoms</td>
<td>19.4</td>
<td>18.2</td>
<td>19.6</td>
<td>0.97</td>
<td>.381</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>16.7</td>
<td>18.0</td>
<td>16.3</td>
<td>3.64*</td>
<td>.028</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>19.2</td>
<td>21.4</td>
<td>18.0</td>
<td>7.39***</td>
<td>.001</td>
</tr>
<tr>
<td>Turnover Intent</td>
<td>13.1</td>
<td>12.8</td>
<td>13.6</td>
<td>0.59</td>
<td>.552</td>
</tr>
<tr>
<td>Social Support</td>
<td>17.5</td>
<td>18.3</td>
<td>15.8</td>
<td>7.14***</td>
<td>.001</td>
</tr>
</tbody>
</table>

***p<0.001, **p<0.01, *p<0.05
IMPLICATIONS FOR POLICY AND PRACTICE

Living in restrictive status housing means fewer opportunities to recreate, program, and socialize with others. The work here found that prisoners in restrictive housing reported, on average, higher levels of psychosomatic symptoms experienced as compared to prisoners in close or medium custody. The symptoms did not, however, worsen as more time was spent in restrictive status housing. The results should not be taken to mean that living in restrictive housing is good or bad, but rather that the impact is more nuanced than blanket statements regarding solitary confinement in the United States. A number of methodological difficulties complicate this picture further, such as the considerable movement of prisoners within and across security levels and variation in conditions of confinements within and across security levels. This work can inform practice on who is likely to get worse in restrictive housing, who might stay the same, and who might get better, with attention given to prisoners who could be expected to worsen in isolation.

Working in restrictive housing means supervising prisoners who have committed serious crimes or have engaged in institutional misconduct through controlled movements. The work here found that officers working in restrictive housing were more likely to have been assaulted in their work. Aside from this important finding, no clear patterns emerged with regard to whether working in restrictive status housing significantly impacted officers beyond their close and medium custody counterparts, particularly when it comes to mental health. There were no significant differences across custody level when it came to work-stress, life-stress, depression, emotional exhaustion, or psychosomatic symptoms. There were, however, high levels of all these negative experiences across all security levels. The implication here is that all officers are significantly impacted by working in prison settings, and that well-being programming should be offered to officers who are likely to experience significant stress and health concerns no matter where they work.
REFERENCES


