The Impact of Recent and Cumulative Conditions of Confinement on Recidivism

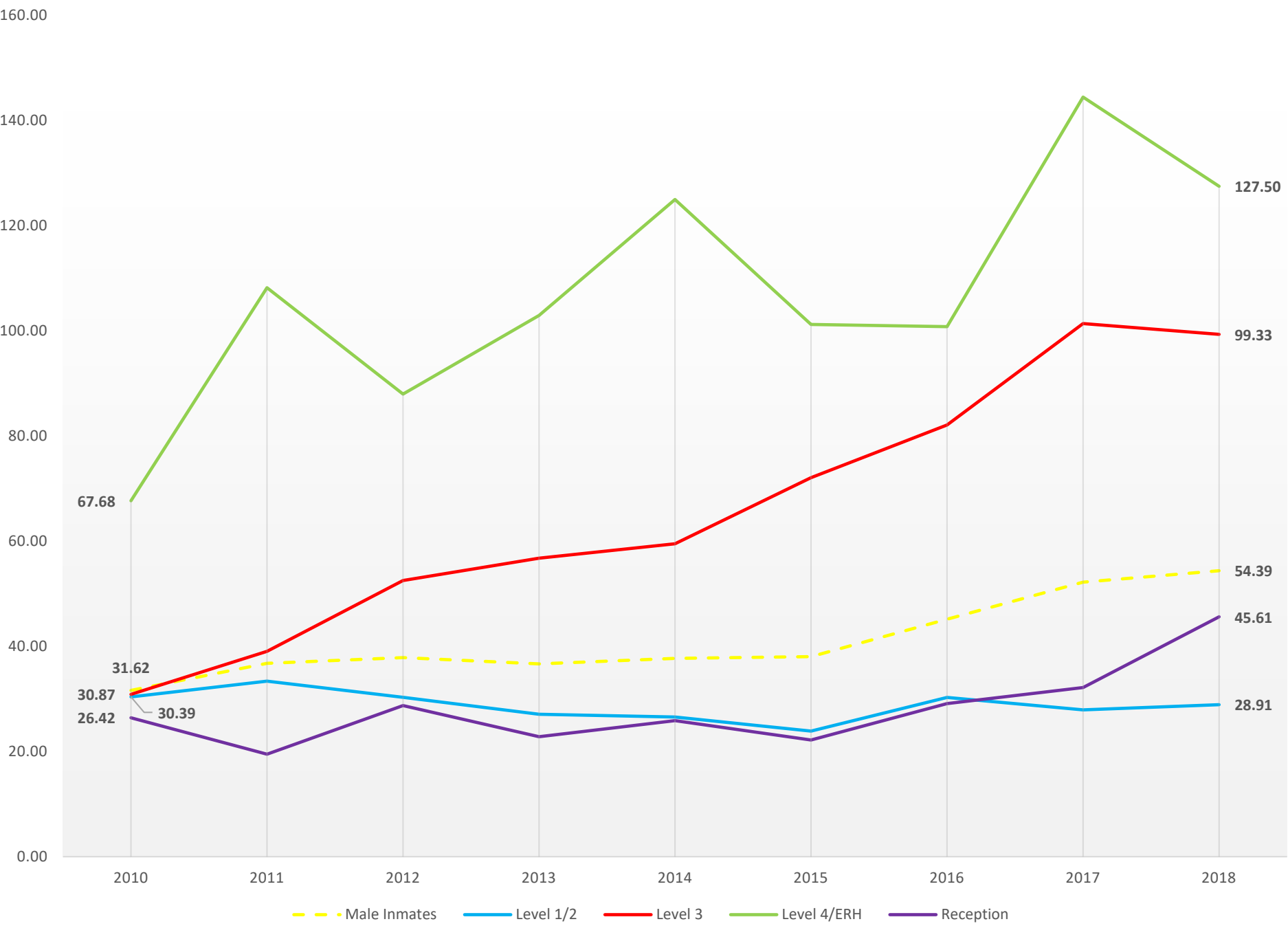**Brian R. Kowalski, Ph.D.**

Bureau of Research and Evaluation

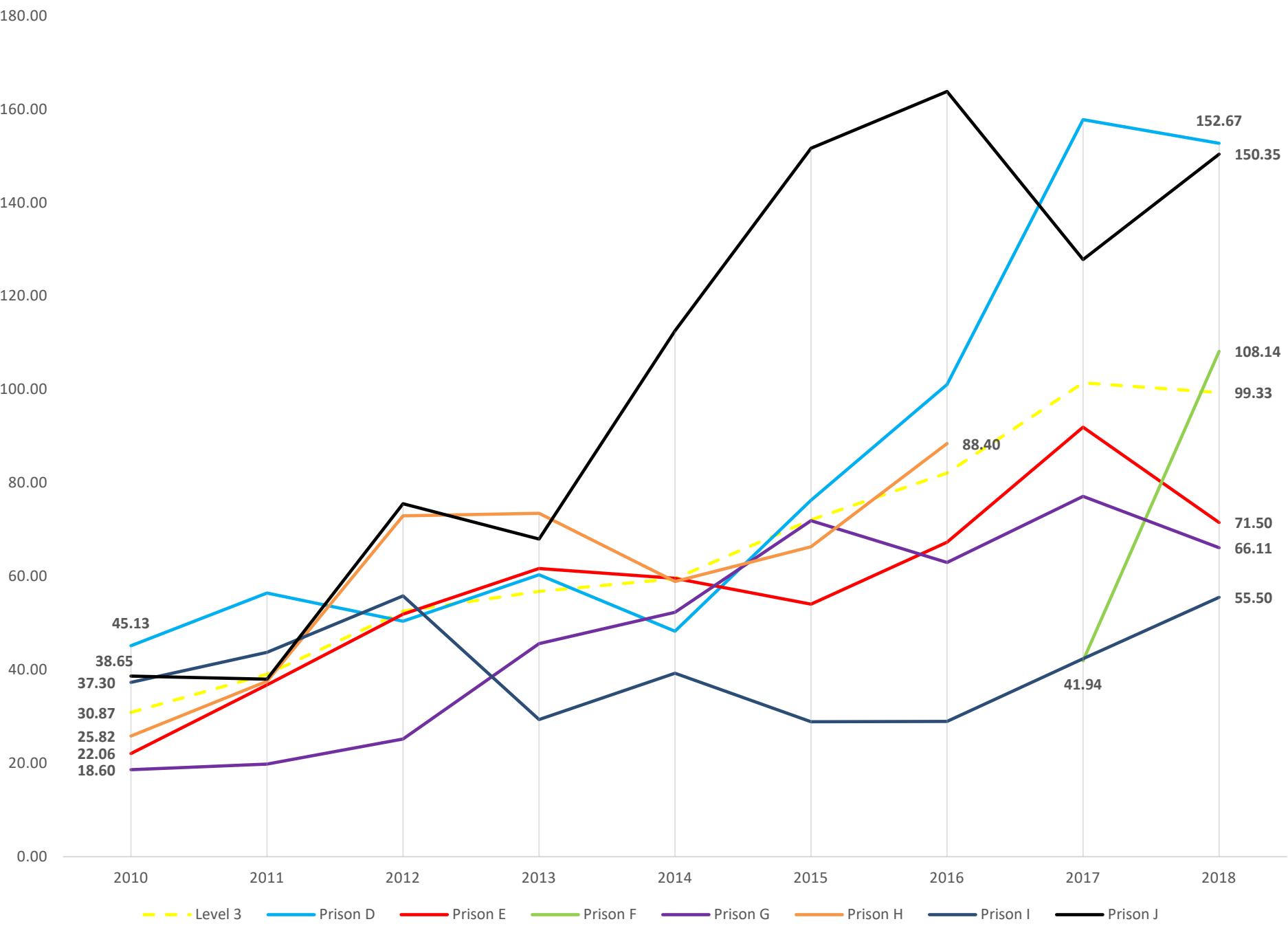Ohio Department of Rehabilitation and Correction

Introduction

Some recent studies examining institutional misconduct and recidivism have started to include measures of prison context within various empirical analyses.

In general, the majority of this work has operationalized these prison-level factors by measuring aggregate inmate characteristics, facility security level, and broad conceptions of architectural design.

Annual Rates of Physical and Sexual Assault RIB Rule Infractions per 1,000 Inmates (Male Prison Categories)

Legend: Male Inmates, Level 1/2, Level 3, Level 4/ERH, Reception

Data labels: 67.68, 31.62, 30.87, 26.42, 30.39, 127.50, 99.33, 54.39, 45.61, 28.91

Annual Rates of Physical and Sexual Assault RIB Rule Infractions per 1,000 Inmates (Level 3 Male Prisons)

Legend: Level 3, Prison D, Prison E, Prison F, Prison G, Prison H, Prison I, Prison J

Data labels:
- 45.13
- 38.65
- 37.30
- 30.87
- 25.82
- 22.06
- 18.60
- 88.40
- 152.67
- 150.35
- 108.14
- 99.33
- 71.50
- 66.11
- 55.50
- 41.94

Study Background and Key Metrics

Population Count (September 2019): **48,890**

Ohio Prisons: **28**

Ohio Prisons with a High Security Focus: **10**

      Level 3 Prisons: **7**

      Level 4 Prisons: **2**

      ERH (Level 5) Prisons: **1**

Restrictive Housing Population Count (September 2019): **1972**

Rates of assaultive misconduct are consistently highest at Level 4 and ERH security (Level 5), while the rate of assaults at Level 3 security has steadily increased over the last 9 years.

Study Background and Key Metrics

The recent increase in violence has led to a host agency-wide reform efforts aimed at curtailing institutional violence.

One of the primary strategies has been to concentrate violent offenders and active/disruptive gang members into higher security "control" prisons with various conditions of confinement.

Why Prison Context and Conditions of Confinement Matter

Prior research has moved beyond a focus on individual-level (importation) variables as predictors of inmate behavior to include contextual factors as well.

Ecological Deprivation: The relationship between deprivation and both increased misconduct and increased recidivism has been found in a number of studies (Kigerl and Hamilton, 2016; Listwan et al., 2013; Morris et al., 2012; Steiner and Wooldredge, 2008).

Prison Climate: Other work has found that sophisticated measures of organizational climate (Lugo 2016) and staffing can condition the impact of inmate population on misconduct (Griffin and Hepburn 2013).

Conditions of Confinement: Given the national exposure towards disciplinary and segregation reform, more recent work has begun to examine the impact of restrictive housing on both misconduct (Labrecque, 2015) and recidivism (Clark and Duwe 2018; Lovell et al., 2007; Mears and Bales, 2009; see also Gaes and Camp, 2009).

Research and Study Design Questions

What is the most appropriate way to conceptualize high security incarceration history (i.e., conditions of confinement) and movements into and out of restrictive housing settings?

What is the effect of high security incarceration history measures on recidivism net of important individual-level controls?

Do prison-level factors, such as ecological deprivation and prison climate measures, that contextualize the immediate environment prior to release impact recidivism?

Do the cumulative conditions of confinement vary in their effects across these facility-level measures?

Prison Security Levels in Ohio

Level 1/2: least secure setting, mostly dorm-style environment, and free range of movement.

Level 3: more secure setting, cellular environment (with cellmate), limited out-of-cell time (4 to 6 hours), and controlled movement.

Level 4: secure setting, cellular environment (without cellmate), limited out-of-cell time (3 to 4 hours) with some congregate activity.

ERH: most secure setting, confinement to a cell 23 hours a day for more than 30 days (with a cellmate in segregation area and alone with ERH as security level), and no congregate activity.

Variation within Security Level

*age of facility (light, moisture, cameras, TV reception)

*housing unit design (podular cells, linear cells, dorms, tanks, mixed, etc.)

*surveillance and supervision (obstructed versus unobstructed views)

*command post location

*movement differences (checkpoints, corridors, outside/inside)

*multi-tiered housing units

*availability day space, programming space, specialty housing, RH space

*mass movement

*specific housing units used as alternatives to restrictive housing

*cameras, control centers, door controls, cell fronts

Data, Key Measures and Analytic Strategy

The broader sample population consists of the entire release cohort of male inmates in 2014 that served at least six months in prison before release (and excluding early release or technical return cases).

The sample **does not** include reception centers or private prisons.

The offender data is joined with facility-level data (**from 19 prisons**) from prior work examining the impact of various prison-level factors on institutional misconduct (Kowalski and Martin, 2014, 2017; Lamb, Kowalski, and Martin, 2016).

Prison allocation is determined by the releasing institution and having served **at least 70% of time** at the releasing institution in the last year before release. (n = 8,253).

Data, Key Measures and Analytic Strategy

High Security History Measures

Percent segregation history: this includes time spent in segregation housing unit (for disciplinary reasons, administrative reasons, etc.) across entire sentence.

ERH or Level 3/4 security (with ERH): ERH exposure over 30% **or** Level 3/4 security exposure over 30% (**with some ERH**) across entire sentence.

Level 3/4 security (with no ERH): Level 3/4 security exposure over 30% (**with no ERH**) across entire sentence.

Outcome Measure

Recidivism: reincarceration for any reason over a 2-year follow-up time period.

Descriptive Statistics for Outcome Measures and Individual-Level Control Variables. *

Variables	Mean	s.d.	Min	Max
Outcome Measure				
Overall reincarceration outcome (2 year follow-up)	.236	.424	0	1
Individual-Level Controls				
Age at release	35.040	10.769	18	84
Two or more prior prison terms [1]	.312	.463	0	1
One prior prison term [1]	.225	.418	0	1
Threat-related conviction offense [2]	.291	.454	0	1
Rate of prison misconduct (per month)	.098	.198	0	3.586
In-prison GED attainment [2]	.110	.313	0	1
Recovery service program completion [2]	.074	.261	0	1
Released to supervision [2]	.630	.483	0	1

* Male inmates released in 2014 that served at least six months in prison. Prison-level characteristics are based on serving at least 70% of time at the release institution in the last year (n = 8,253).
[1] Reference category is no prior prison terms.
[2] Dummy coded variables.

Descriptive Statistics for High Security History, Ecological Deprivation Factors, and Prison Climate Measures. *

Variables	Mean	s.d.	Min	Max
High Security History				
Percent segregation history	3.563	7.107	0	78.144
ERH or Level 3/4 security (with ERH) [1]	.022	.148	0	1
Level 3/4 security (with no ERH) [1]	.201	.401	0	1
Ecological Deprivation Factors				
Percent of population age 24 and under	15.960	6.872	5.044	27.155
Percent of active/disruptive gang population	2.674	4.026	.190	33.530
Rate of physical/sexual assault rule violations	36.241	25.468	7.509	140.882
Weighted average of total housing square footage	26.961	5.068	20.600	58.800
Prison Climate Measures				
Rate of inmate informal complaints	711.837	414.871	347.082	3394.138
Ratio of corrections officers to unit staff	10.991	2.578	7.906	29.194

* Male inmates released in 2014 that served at least six months in prison. Prison-level characteristics are based on serving at least 70% of time at the release institution in the last year (n = 8,253).
[1] Reference category is primarily Level 1/2 security.

Cox Proportional Hazards Models Predicting the Risk of Overall Reincarceration. [#]

Variables	Model 1	
Age at release	-.054	***
Two or more prior prison terms [1]	1.060	***
One prior prison term [1]	.587	***
Threat-related conviction offense [2]	-.006	
Rate of prison misconduct (per month)	.820	***
In-prison GED attainment [2]	-.190	**
Recovery service program completion [2]	-.097	
Released to supervision [2]	.680	***

*$p \le .05$, **$p \le .01$, ***$p \le .001$ (two-tailed)
[#] Male inmates released in 2014 that served at least six months in prison. Prison-level characteristics are based on serving at least 70% of time at the release institution in the last year (n = 8,253).
[1] Reference category is no prior prison terms.
[2] Dummy coded variables.

Cox Proportional Hazards Models Predicting the Risk of Overall Reincarceration. [#]

Variables	Model 2		Model 3	Model 4	
High Security History					
Percent segregation history	.014	***		.014	***
ERH or Level 3/4 security (with ERH) [1]	.516	***		.380	*
Level 3/4 security (with no ERH) [1]	.264	***		.307	***
Ecological Deprivation Factors					
Percent of population age 24 and under			.003	-.005	
Percent of active/disruptive gang population			.001	-.003	
Rate of physical/sexual assault rule violations			.003 **	.003	**
Weighted average of total housing square footage			.004	.013	***
Prison Climate Measures					
Rate of inmate informal complaints			.000	-.000	
Ratio of corrections officers to unit staff			.019	-.001	

$*p \leq .05$, $**p \leq .01$, $***p \leq .001$ (two-tailed)

* Male inmates released in 2014 that served at least six months in prison. Prison-level characteristics are based on serving at least 70% of time at the release institution in the last year (n = 8,253). Models control for age at release, prior prison terms, conviction offense, prison misconduct, prison programming, and post-release supervision. The findings for these controls are identical to Model 1 and are not presented.

[1] Reference category is primarily Level 1/2 security.

Preliminary Conclusions

Regardless of the ambiguous nature between restrictive housing and mental health, this study demonstrates that the effects of cumulative exposure to high security settings have pronounced and persistent effects on recidivism despite the more recent environmental prison context.

The findings suggest that restrictive housing should perhaps be conceptualized as a continuum. This compels an examination of the conditions that are present in other high security settings that don't meet the threshold for restrictive housing.

These less restrictive, yet high control, settings act as potentially independent sources of poor adjustment.

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