Examining Race and Gender Disparities in Restrictive Housing Placements

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W.E.B. Du Bois Program of Research on Race and Crime

Project Summary

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EXECUTIVE SUMMARY

Placement into restrictive housing is a controversial practice experienced by some inmates during incarceration. Nevertheless, little is known about who is placed in restrictive housing and under what conditions. Although this correctional management tool is used to isolate inmates who pose a risk to the operation and security of an institution, assessments underlying placement decisions are often racialized and gendered. Coupled with the seclusion of prisons from public scrutiny and the wide discretion afforded to prison officials, there are ample opportunities for extralegal factors to influence treatment. In an effort to generate a broader understanding of racial and gender disparities in conditions of confinement, this study—supported through NIJ's W.E.B. DuBois Research Fellowship Program—examined restrictive housing placement decisions.

Using administrative records on all inmates released from prison in one large state between 2011 and 2014 (N = 33,143), this study assessed racial and ethnic disparities in men and women's: 1) placements into any segregation; 2) placements into particular types of segregation (i.e. administrative segregation, disciplinary and mental health segregation); 3) the length of time spent there; and 4) the reasons provided for these placements. Descriptive, bivariate, and multivariate analyses were estimated to assess these relationships. Given that multiple housing placements were recorded for each inmate (N = 124,942), multilevel modeling procedures were used (i.e. hierarchical logistic regression, hierarchical negative binomial regression).

Overall, results indicated significant racial and ethnic disparities in restrictive housing placements among men and women, net of legally- and administratively-relevant factors and other inmate characteristics. To be sure, Native American men were more likely than Whites to experience placements into any segregation, disciplinary segregation, and administrative segregation (ad-seg). Latinos and Black men had lower odds of placement into any segregation and also disciplinary segregation relative to Whites. At the same time, Native American men and Latinos spent more days in any segregation and ad-seg when placed there compared to Whites. Latinos in disciplinary segregation also experienced longer placements, while Blacks' disciplinary segregation placements were shorter than Whites. For women, racial disparities were observed in placements into ad-seg and mental health segregation. Native American, Latina, and Black women had increased odds of placement into administrative segregation relative to their White counterparts. Latinas were less likely than Whites to experience placement into mental health segregation. Routine operations (e.g., custody reclassification, lateral transfers, inmate population adjustments) was the most commonly cited reason for restrictive housing placements across race/ethnicity and sex.

This project informs research and policy alike. First, this study extends empirical knowledge on disparities in criminal justice decision-making to the correctional setting. Second, this project responded directly to calls for research regarding the use of segregation and whether it is applied fairly. Our work offers insight into the experiences of diverse and understudied groups, particularly Native Americans. And finally, this work can be useful for correctional departments when navigating and implementing decisions and practices pertaining to restrictive housing.

BACKGROUND

A significant body of literature is devoted to understanding disparities in crime and punishment. A major takeaway from this work is the differential treatment of people of color and women by the criminal justice system (Spohn, 2015; Tonry, 2012). These patterns are particularly pronounced in incarceration. Despite evidence of slight declines in inmate populations in some jurisdictions, rates of female imprisonment continue to climb and the disproportionate number of racial and ethnic minorities cycling through our prison systems remains alarmingly high (Blumstein, 2015; Carson, 2018). Inmates' experiences—particularly how they are managed and their conditions of confinement—is an underexplored area of inquiry, however. This is a significant gap in knowledge given incarceration experiences can profoundly affect people's lives (National Research Council, 2014).

A controversial correctional management tool involves placement into restrictive housing. This practice alters conditions of confinement by limiting inmates' access to programming, education, recreation, and opportunities for social contact (Butler & Steiner, 2017; O'Keefe et al., 2013). Restrictive housing has direct implications for inmate wellbeing, behavior, and reentry (Frost & Montiero, 2016; Labrecque, 2015; Kaba et al., 2014; Reiter, 2015; Pizarro et al., 2014). Yet, little is known about who is placed in restrictive housing, for what reasons, and under what conditions (Frost & Monteiro, 2016; Mears & Bales, 2010).

Restrictive housing is intended to separate inmates who pose a risk or threat to the operation and security of a correctional institution from the general population (Beck, 2015; Browne et al., 2011; Kane et al., 2014). How this is defined and applied in practice, however, is far from straightforward (Baumgartel et al., 2015; Lanes, 2010; Mears & Watson, 2006). Assessments of "risk" and "dangerousness" underlying placement decisions are inextricably linked to race and gender (Arrigo & Bullock, 2008; Cochran et al., In Press; Reiter, 2012). Common stereotypes of Blacks, Latinos, and Native Americans as prone to crime, violence, and gang involvement, and women as overly emotional and needing to be controlled, can contribute to disparate patterns in correctional punishment (Haney, 2003; Hannah-Moffat, 2005; Toch, 2001; Wright et al., 2012). In addition, prison staff and administrators have wide discretion in sanctioning and segregating inmates and prisons are largely secluded from public scrutiny (Arrigo & Bullock, 2008; Lanes, 2010; Waquant, 2002). While discretion is necessary in unpredictable and dynamic environments such as prisons, it can also open the door to discriminatory practices (Lipsky, 1980; Olson, 2016).

There are growing calls to better understand how segregation is used on a policy front as well. In 2016, the U.S. Department of Justice developed a set of guiding principles emphasizing that "this practice should be used rarely, applied fairly, subjected to reasonable constraints, and never used as a default solution" (p. 1). With this in mind, through NIJ's W.E.B. DuBois Research Fellowship Program, we examined restrictive housing placement decisions to further knowledge on race differences in conditions of confinement among men and women.

CURRENT RESEARCH

Guided by recent calls to better understand restrictive housing practices, and to advance research on racial, ethnic, and gender disparities in conditions of confinement, this research addressed the following four broad questions:

1. Does the likelihood of being placed in restrictive housing vary by men and women's race and ethnicity?

2. Does the likelihood of being placed in a particular type of restrictive housing (i.e. administrative segregation, disciplinary segregation, mental health segregation) differ according to men and women's race/ethnicity?

3. Does the length of time spent in restrictive housing vary according to men and women's race/ethnicity?

4. Are the reasons documented by correctional staff for placing men and women in various forms of restrictive housing linked to race/ethnicity?

METHODOLOGY

Setting

The setting for this study is one state prison system that is characterized by a diverse and rising prison population (Carson, 2018). At the time of data collection, this DOC housed more than 40,000 inmates across 15 institutions (14 men's facilities; 1 women's facility). A unit-based custody system comprised of four security classifications (minimum, medium, close, and maximum) is used in this state. The data contain information on inmates' placements into 204 different housing units across all 15 state prison complexes. Of the 204 housing units, 45 are designated maximum security, restrictive housing units. All maximum custody inmates are held in what is known as "restrictive housing." Maximum security inmates are in lockdown the majority of the day, have limited work opportunities, and are closely monitored. These inmates are also escorted in full restraints within the institution. They experience little recreational time, visitation and phone privileges, and few interactions with other inmates.

As with all units in this prison system, each maximum custody unit (which will also be referred to as a restrictive housing or segregation unit) serves a particular purpose. These include: 1) disciplinary segregation, 2) administrative segregation, and 3) mental health segregation. This DOC also has designated units for protective custody and medical segregation; however, these forms of restrictive housing placements were excluded from the data due to limited cases available across gender and racial/ethnic groups.

There are numerous criteria that govern inmates' placements into restrictive housing in this state. Inmates can be placed into restrictive housing through the standard classification process that determines custody risk using a one-to-five scale. Inmates undergo the classification process every six months. Risk criteria that determine custody level (i.e. placement into a minimum, medium, close, or maximum-security unit) include factors such as type of current offense, institutional misconduct history, gang affiliation, age, and other needs (e.g., mental health, substance abuse). In addition, inmates can be transferred to segregation units from lower custody levels for reasons such as committing or leading others to commit disruptive behaviors, engaging in serious behavior, and when deemed a threat to the

security of the institution. Correctional officers make initial recommendations for placement and these recommendations are elevated through an administrative chain of command for final approval.

It is important to note, however, that inmates are placed into segregation immediately following the initial recommendation of officers and held in segregation throughout the administrative review process. If a reversal of the placement decision does occur, inmates are then transferred out of restrictive housing. When a decision to place an inmate into restrictive housing is upheld, an inmate's length of stay is determined by a variety of factors, depending upon the type of segregation.

For instance, inmates who have engaged in institutional misconduct can be placed into disciplinary segregation for up to 30 days. However, stays can last longer if there are pending investigations or if additional violations are committed while in disciplinary segregation. With respect to administrative segregation, there are a multitude of reasons for placement into these particular units. Validated gang members are held in this form of restrictive housing indefinitely unless they choose to engage in a debriefing process and formally renounce their gang membership. Inmates may also be held in ad-seg pending investigations or while awaiting decisions or transfers to other types of restrictive housing units (e.g., protection-related concerns). Lastly, mental health segregation is used for mentally ill inmates who have demonstrated signs or behaviors that suggest they pose an imminent risk of self-harm or harm to staff or fellow inmates. Length of placement into mental health segregation is determined by the recommendations of mental health professionals who conduct ongoing assessments of these segregated inmates. Taken together, there are many pathways into restrictive housing and there is considerable discretion afforded to correctional officials when making these placements.

Data

The data for this project were obtained from the Inmate Management System in the state, which contains information on all movements in and out of prison, institutional misconduct, inmate risk factors, inmates' demographic characteristics, and criminal history and offense information. Unique among most correctional data sources, these data provide detailed information on every housing placement for each inmate, including the date and time of each housing placement, the specific unit/type of housing placement, and reasons documented by correctional staff for placing inmates in each housing unit.

The data used contain information on all housing placements since 2010 for all White, Black, Latino/a, and Native American inmates in the state with release dates between July 1st, 2010 and June 30th, 2014 (N = 33,143). Roughly 86.5% of inmates were male and 13.5% were female. Since there are multiple housing placements recorded for each inmate across multiple prison complexes, the data have a cross-classified hierarchical structure, and are measured at the person-placement level (N = 124,942 placements). Descriptive statistics for all measures are presented in Table 1.

Dependent Variables

Consistent with the four objectives of the study, we examined four dependent variables: 1) placement into any segregation, 2) the type of segregation, 3) the length of time spent in segregation, and 4) the reason for placement into segregation. Inmates can be placed into restrictive housing multiple times, for various lengths of time, and for various reasons. To ensure that important variation was not masked within inmates, all dependent variables were measured at the person-placement level.

First, *any segregation* is a dichotomous variable that reflects placement into a restrictive housing unit for at least 22 hours (1 = yes, 0 = no). This measure is consistent with guiding principles put forth by the U.S. Department of Justice (2016). Each housing unit in the data has its own unique code from which we can determine whether inmates were placed into a restrictive housing unit. Since housing units are not mixed-use, only inmates placed within particular units are subject to restrictive housing conditions. Approximately 16% of all inmate placements were into some form of segregation.

Second, three distinct types of restrictive housing were captured: *administrative segregation*, *disciplinary segregation*, and *mental health segregation*. Among total inmate placements, 10% were into disciplinary segregation, which was the most common form of restrictive housing. Slightly less than 3% of all placements were into administrative segregation (2.6%) as well as mental health segregation (2.9%).

Third, we measured the *days spent* in restrictive housing. We measured *days spent in any segregation* (Mean = 53.8 days), as well as *days spent in each type of restrictive housing*, including disciplinary segregation (Mean = 27.4 days), administrative segregation (Mean = 194.1 days), and mental health segregation (Mean = 23.5 days).

Fourth, and lastly, we examined the *reasons for restrictive housing placement* that were recorded by correctional staff. We grouped specific reasons into meaningful categories. Categories include: routine operations (55.8%), protection-related (27.6%), security management (8%), mental health (8%), and medical (0.6%) reasons. Specific reasons for placement by correctional personnel were captured in the administrative dataset in shorthand text. Common reasons that were coded under routine operations included "reclassification," "lateral transfer" (i.e. moving from one unit to another of the same level of custody) and "population adjustment." Common reasons grouped under the protection-related category included terms like "protection" and/or policy numbers linked to protective custody guidelines. Reasons that were coded under security-management included terms such as "disciplinary problem" and "pending investigation." The mental health category was almost entirely comprised of language that specifically cited mental health in the text, with a small number citing "suicide attempt" or "72-hour evaluation." Finally, all text grouped under the medical needs category explicitly noted the term "medical." The inclusion of correctional staff's reasoning for placements is important in that it can reveal disparities in how inmates are housed, beyond just examining the type of restrictive housing that they are placed into.

Independent Variables

Our key independent variable is *race/ethnicity*. Race/ethnicity was captured using mutually exclusive indicators of White (non-Hispanic) (45.1%), Black (13.9%), Latino/a (33.7%), and Native American (7.3%).

Several important covariates were incorporated into analyses that include additional demographics and legally- and administratively-relevant factors. Covariates were measured at the inmate level (level 2) and at the placement level (level 1) of the data.

At the placement level (level 1) we included an indicator for *time since admission in months* (Mean = 17.5 months). At the inmate level (level 2) we included measures for *age*, *offense type*, *inmate risk*, and *institutional misconduct*. Forty-seven percent of inmates were younger than 30 years of age. Inmates were mostly incarcerated for non-violent offenses (67.8% versus 32.2%) and 61.2% of all inmates had incurred at least one disciplinary infraction during their current incarceration term. Inmate risk was measured as a composite score that captured inmates' substance abuse treatment needs, mental health treatment needs, prior incarceration history, gang affiliation, and low educational attainment (i.e. no high school diploma or equivalent) that were assessed at intake. The composite score is a five-point scale in which the mean inmate risk score was 1.63. These covariates are reflective of factors used in the inmate classification process that determine inmates' housing placements, as explained in the previous section.

Table 1. Descriptive Statistics.

	Mean (SD) or %	Range	*N* Placements	*N* Inmates
Dependent Variables (Placement-Level)				
Restrictive Housing Placements				
Any Segregation	15.9%	0-1	124,942	33,143
Disciplinary Segregation	10.4%	0-1	124,942	33,143
Administrative Segregation	2.6%	0-1	124,942	33,143
Mental Health Segregation	2.9%	0-1	124,942	33,143
Days Spent in Restrictive Housing				
Days in Any Segregation	53.8 (125.2)	0-3,540	19,834	7,415
Days in Disciplinary Segregation	27.4 (38.4)	0-650	12,962	5,768
Days in Administrative Segregation	194.1 (249.9)	0-3,540	3,215	1,892
Days in Mental Health Segregation	23.5 (65.2)	0-1,687	3,657	2,087
Reasons for Restrictive Housing Placement				
Routine Operations	55.8%	0-1	19,834	7,415
Protection-Related	27.6%	0-1	19,834	7,415
Security Management	8.0%	0-1	19,834	7,415
Mental Health Needs	8.0%	0-1	19,834	7,415
Medical Needs	0.6%	0-1	19,834	7,415
Independent Variables (Placement-Level)				
Time Since Admission (months)	17.5 (27.0)	0-359	124,942	33,143
Independent Variables (Inmate-Level)				
Inmate Sex				
Male	86.5%	0-1	124,942	33,143
Female	13.5%	0-1	124,942	33,143
Inmate Race				
White	45.1%	0-1	124,942	33,143
Black	13.9%	0-1	124,942	33,143
Latino/a	33.7%	0-1	124,942	33,143
Native American	7.3%	0-1	124,942	33,143
Age in Years				
18-24	26.7%	0-1	124,942	33,143
25-29	20.5%	0-1	124,942	33,143
30-39	27.8%	0-1	124,942	33,143
40-49	17.8%	0-1	124,942	33,143
50+	7.2%	0-1	124,942	33,143
Offense Type				
Violent	32.2%	0-1	124,942	33,143
Non-Violent	67.8%	0-1	124,942	33,143
Inmate Risk[a]	1.63 (1.08)	0-5	124,942	33,143
Institutional Misconduct	61.2%	0-1	124,942	33,143

Notes: The data have a cross-classified hierarchical structure, such that placements are nested within inmates and prison complexes ($N_{\text{Placements}}$ = 124,942; N_{Inmates} = 33,143; N_{Prisons} = 15).

[a] Inmate risk is a composite score based on inmates' substance abuse treatment needs, mental health treatment needs, prior incarceration history, gang affiliation, and low educational attainment. These measures were assessed at intake.

Statistical Procedures

We conducted descriptive, bivariate, and multivariate analyses that reflected the research objectives and the characteristics of the data. The study began with a variety of descriptive analyses to assess the distributional characteristics of the dependent variables and each of the covariates (Table 1 and Table 4). Second, bivariate statistics (i.e., Pearson chi-square tests and one-way ANOVAs) were used to assess the relationships between race/ethnicity and the dependent variables for men and women (Figures 1 and 2). Third, multivariate analyses established whether any racial/ethnic disparities in restrictive housing placements that existed at the bivariate level could be explained by legally- and administratively-relevant factors and/or other demographic characteristics.

We used multilevel modeling (MLM) procedures designed to account for the nested nature of our data. This modeling strategy is appropriate given that our data contain a hierarchical structure. MLM allows for the simultaneous investigation of statistical relationships within hierarchical units (i.e., within each inmate) and between hierarchical units (i.e., between inmates). When using nested data, the assumptions in normal ordinary least-squares regression—that observations are independent, and that error terms are uncorrelated—are violated (Hox, 2010; Raudenbush & Bryk, 2002). These issues can result in artificially narrow confidence intervals and shrunken standard errors—problems that bias the results in favor of statistical significance. MLM techniques resolve these issues by incorporating into the statistical model a unique random effect for each organizational unit (i.e., for each inmate). In doing so, these models can account for shared variance in level 1 observations (i.e., characteristics of housing placements) both within and between inmates. MLM techniques are well-documented in the literature, and MLM is frequently used in fields of education, economics, health, and social sciences (see, e.g., Raudenbush & Bryk, 2002).

The multivariate analyses proceeded in the following stages. Beginning with our first research objective, hierarchical logistic regression models were estimated to determine whether inmate race/ethnicity was significantly associated with placements into restrictive housing for men and women, net of covariates (Table 2).[1]

For our second research objective, we examined whether race/ethnicity was related to specific types of restrictive housing placements for men and women (i.e. disciplinary segregation, administrative segregation, and mental health segregation) using hierarchical logistic regression models and controlling for all covariates (Table 2).

Our third research objective was to assess whether there were racial and ethnic differences in the length of time male and female inmates spent in restrictive housing. We examined length of time spent in any segregation, as well as length of time spent in each type of segregation. Only inmates who had been placed in restrictive housing during their incarceration were included in these analyses. These models were estimated using hierarchical negative binomial regression and included all covariates (Table 3).

Finally, as stated in our final research objective, we explored whether there were racial and ethnic disparities in the various reasons provided for male and female inmates' placements into restrictive housing. Frequency distributions are provided to show patterns of reasons for restrictive housing placements (i.e. routine operations, protection-related, security management, mental health needs, medical needs) across race/ethnicity and sex (Table 4).

[1] Cross-classified hierarchical logistic regression models were estimated for male inmates since there were multiple placements recorded for each inmate, and men can serve time in several different prison complexes throughout the state. Cross-classified hierarchical models were not needed for female inmates since there was only one women's prison complex in the state.

FINDINGS

Research Objective 1: *Determine whether there are racial and ethnic disparities in men and women's placements into restrictive housing.*

Figure 1 depicts placements into restrictive housing by race and sex. Each bar represents the percentage of restrictive housing placements within each racial/ethnic group. With respect to any form of segregation, there were statistically significant race differences for both men and women at the bivariate-level.

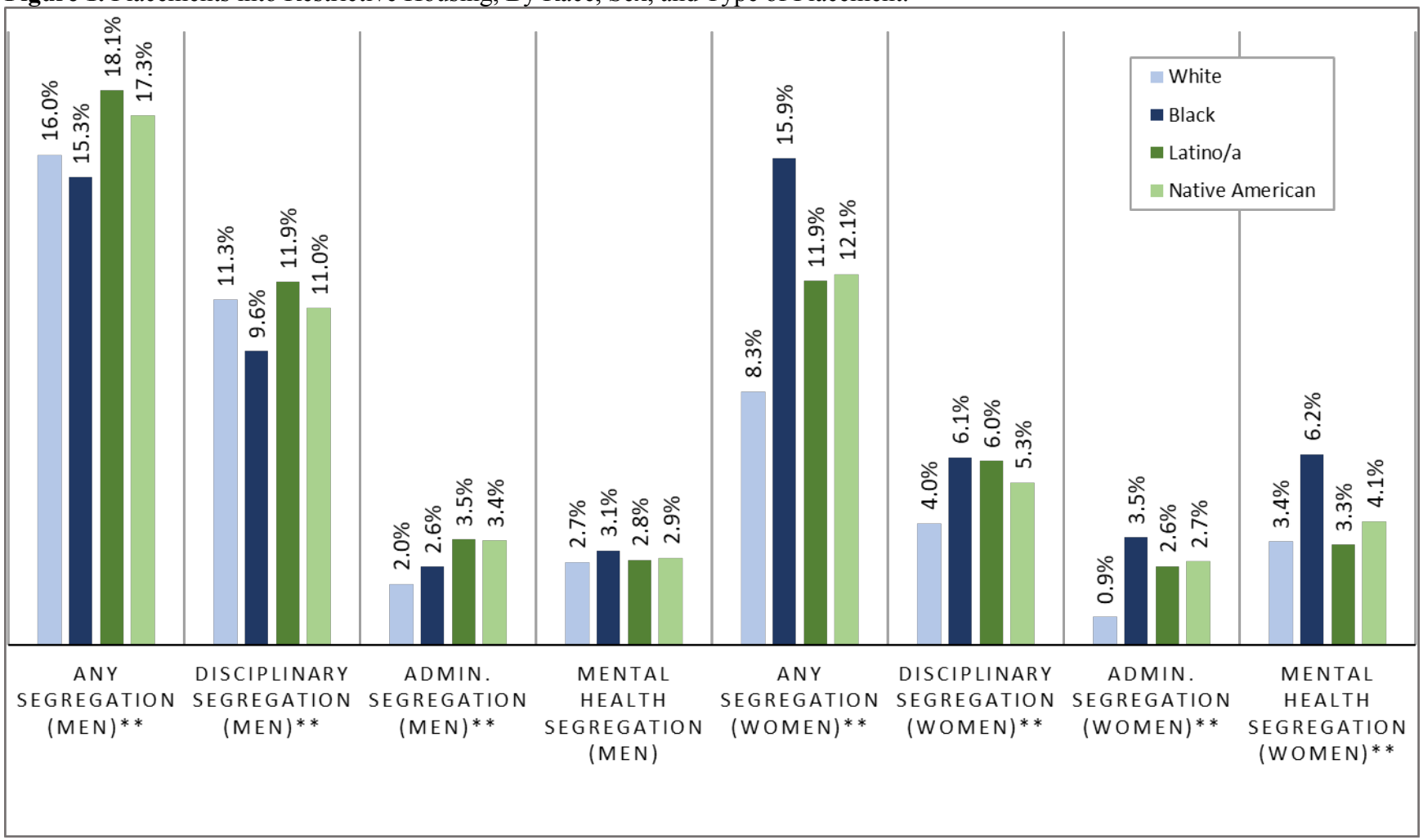
Beginning with the male sample, Figure 1 shows that placements into any form of restrictive housing were highest among Latinos (18.1%), followed by Native Americans (17.3%), Whites (16%), and then Blacks (15.3%).

Turning to the female sample, placements into any form of restrictive housing were highest among Blacks (15.9%), followed by Native Americans (12.1%), Latinas (11.9%), and lowest among Whites (8.3%).

Table 2 provides results from multivariate hierarchical logistic regression models that assess racial disparities in placements into any segregation for male and female inmates. These models determine whether race differences persist after taking into account legally- and administratively-relevant covariates and additional demographic factors (i.e., time since admission, inmate age, offense type, inmate risk, and institutional misconduct).

The results showed that significant racial and ethnic disparities remained among men. To be sure, after controlling for covariates, Native Americans (b = .102; odds ratio [OR] = 1.107)) were more likely than Whites to have placements into any form of segregation. On the other hand, Blacks (b = -.223; OR = .800) and Latinos (b = -.115; OR = .891) were less likely to have placements into any segregation compared to Whites. There were no significant racial and ethnic differences in any restrictive housing placements for women in the multivariate analysis.

Figure 1. Placements into Restrictive Housing, By Race, Sex, and Type of Placement.



Note: Chi-square tests indicate statistically significant race differences across all types of restrictive housing placements ($p < .01$), with the exception of mental health segregation (men).
** $p < .01$.

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Table 2. Select Parameter Estimates from Hierarchical Logistic Regression Models Assessing Racial Disparities in Placements into Restrictive Housing.

	Any Segregation		Disciplinary Segregation		Administrative Segregation		Mental Health Segregation	
	b	(SE)	*b*	(SE)	*b*	(SE)	*b*	(SE)
Male Inmates								
Black	-.223**	(.037)	-.258**	(.042)	-.134	(.096)		
Latino/a	-.115**	(.028)	-.129**	(.031)	.079	(.071)		
Native American	.102*	(.048)	.118*	(.054)	.457**	(.121)		
Inmate-level variance component	1.585**		1.205**		1.858*			
Prison-level variance component	2.349**		3.684**		4.851***			
Between-inmate variance explained	.525		.531		.585			
Between-prison variance explained	.102		.137		.159			
Female Inmates								
Black	.172	(.127)	.124	(.113)	.683*	(.297)	.065	(.183)
Latino/a	.018	(.094)	.164	(.086)	.558*	(.240)	-.386**	(.147)
Native American	.040	(.136)	.103	(.124)	.689*	(.313)	-.370	(.215)
Inmate-level variance component	1.276**		1.343**		2.131**		1.712**	
Between-inmate variance explained	.373		.340		.483		.227	

Note: Unstandardized coefficients (*b*) and robust standard errors (SE) are presented. Analyses for male inmates are estimated using cross-classified hierarchical logistic regression models, where placements (N = 108,131) are nested within inmates (N = 28,078) and prison complexes (N = 14). Analyses for female inmates are estimated using hierarchical logistic regression models, where placements (N = 16,811) are nested within inmates (N = 5,065). Analyses are not presented for male placements into mental health segregation since no race differences existed at the bivariate level. All models adjust for time since admission, and include controls for inmate age, offense type, inmate risk, and institutional misconduct.
**$p < .01$; *$p < .05$ (two-tailed test).

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Research Objective 2: *Determine whether there are racial and ethnic disparities in men and women's placements into particular types of restrictive housing.*

Figure 1 presents placements into disciplinary, administrative, and mental health segregation by race and sex. Bivariate analyses revealed that there were significant racial and ethnic differences in placements across all types of restrictive housing, with the exception of mental health segregation placements among males.

Beginning with men, Latinos had the highest proportion of placements into disciplinary segregation (11.9%), followed by Native Americans (11%) and Whites (11.3%), and the lowest proportion was among Blacks (9.6%). Latinos also represented the highest proportion of administrative segregation placements (3.5%), followed closely by Native Americans (3.4%) and Blacks (2.6%), with the lowest proportion among Whites (2%).

With respect to women, disciplinary segregation placements were highest among Blacks (6.1%) and Latinas (6%), followed by Native Americans (5.3%), and then Whites (4%). Women's administrative segregation placements were also highest among Blacks (3.5%), Native Americans (2.7%), and Latinas (2.6%), and lowest among Whites (0.9%). The proportion of placements into mental health segregation were highest among Black women (6.2%), and then Native Americans (4.1%), followed by Whites (3.4%), and lowest among Latinas (3.3%).

Table 2 shows estimates from multivariate hierarchical logistic regression models examining the effect of race on placements into different types of restrictive housing by men and women, controlling for key covariates (i.e., time since admission, inmate age, offense type, inmate risk, and institutional misconduct).

Results revealed that there were no longer race differences in disciplinary segregation placements among women in the multivariate analyses, but racial disparities persisted in disciplinary segregation among men. Native American men were significantly more likely than their White counterparts to be placed into disciplinary segregation (b = .118; OR = 1.125). Blacks (b = -.258; OR = .773) and Latinos (b = -.129; OR = .889) were less likely than White men to experience disciplinary segregation placement.

There also continued to be significant racial and ethnic disparities in administrative segregation placements for both men and women once covariates were included in the models. Native American men (b = .457; OR = 1.579) had greater odds of placement into administrative segregation (ad-seg) compared to Whites. For women, Native Americans (b = .689; OR = 1.992), Blacks (b = .683; OR = 1.980), and Latinas (b = .558; OR = 1.747) were more likely to experience ad-seg placements than Whites.

Finally, race effects remained in mental health segregation placements of women. In particular, Latinas (b = -.386) had significantly lower odds of such placements relative to Whites.

Research Objective 3: *Determine whether there are racial and ethnic disparities in the length of time men and women spend in restrictive housing.*

Figure 2 portrays the average number of days spent in any restrictive housing, as well as different types of restrictive housing (i.e. disciplinary, administrative, and mental health segregation) by race and sex. Bivariate analyses indicated significant race differences among men's placements into any restrictive housing, disciplinary segregation, and administrative segregation, but not mental health segregation. Among women's placements, significant racial disparities emerged among placements into any segregation and administrative segregation only.

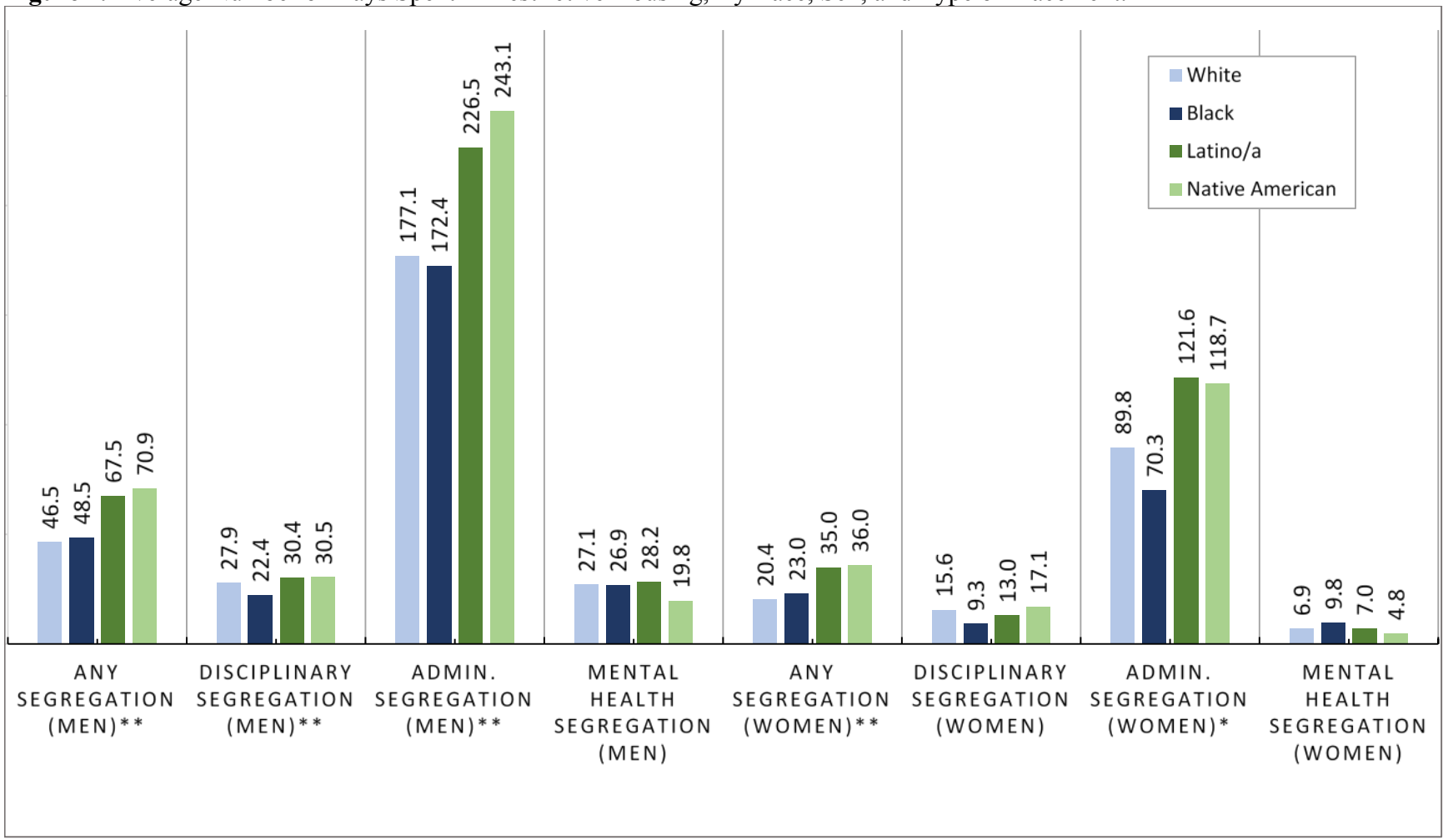
Turning first to the male sample, Native Americans spent the most days in any form of segregation (Mean = 70.9 days), followed by an average of 67.5 days among Latinos, 48.5 days among Blacks, and 46.5 days among Whites. The longest placements in disciplinary segregation were experienced by Latino and Native American men (who averaged 30.4 and 30.5 days in disciplinary segregation), followed by Whites (Mean = 27.9 days), and then Blacks (Mean = 22.4 days). A similar pattern emerged for length of stay in administrative segregation. Native Americans spent the most time in ad-seg, with average placements of 243.1 days. This was followed by Latinos (Mean = 226.5 days), Whites (Mean = 177.1 days), and then Blacks (Mean = 172.4 days).

Focusing next on the female sample, Native Americans served an average of 36 days in any form of segregation, while Latinas served average stays of 35 days. Blacks served an average of 23 days, and Whites served an average of 20.4 days. There were significant race differences in the length of time spent in administrative segregation as well, with Latinas spending the longest time in these placements (Mean = 121.6 days), followed by Native Americans (Mean = 118.7 days), Whites (Mean = 89.8 days), and then Blacks (Mean = 70.3 days).

Table 3 provides results from hierarchical negative binomial regression models assessing racial disparities in days spent in any segregation, disciplinary segregation, and administrative segregation for men and women, net of controls.

Significant racial differences observed in the bivariate analyses remained in the multivariate models among males, while racial disparities disappeared in the female models. Native American men (b = .255) and Latinos (b = .212) spent more time in any form of restrictive housing placement relative to White men. Similarly, Native Americans (b = .194) and Latinos (b = .167) were housed in ad-seg longer than Whites as well. Latinos (b = .068) also spent more time in disciplinary segregation placements than Whites, while Black men spent less time in disciplinary segregation.

Figure 2. Average Number of Days Spent in Restrictive Housing, By Race, Sex, and Type of Placement.



Note: One-way ANOVAs indicate statistically significant race differences in the number of days spent in restrictive housing for all placements ($p < .05$), with the exception of mental health segregation (men), disciplinary segregation (women), and mental health segregation (women).
**$p < .01$; *$p < .05$.

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Table 3. Select Parameter Estimates from Hierarchical Negative Binomial Regression Models Assessing Racial Disparities in Days Spent in Restrictive Housing**.**

	Days in Any Segregation		Days in Disciplinary Segregation		Days in Admin. Segregation	
	b	(SE)	*b*	(SE)	*b*	(SE)
Male Inmates						
Black	-.073	(.051)	-.224**	(.042)	-.030	(.075)
Latino/a	.212**	(.036)	.068*	(.029)	.167**	(.053)
Native American	.255**	(.060)	.047	(.049)	.194*	(.081)
Inmate-level variance component	.695**		.320**		.350**	
Prison-level variance component	.154**		.093**		.086**	
Between-inmate variance explained	.607		.603		.620	
Between-prison variance explained	.109		.093		.111	
$N_{\text{Placements}}$	18,051		12,128		2,896	
N_{Inmates}	6,597		5,130		1,789	
N_{Prisons}	14		13		11	
Female Inmates						
Black	-.110	(.173)			.182	(.238)
Latino/a	.195	(.134)			-.261	(.271)
Native American	.301	(.189)			.102	(.304)
Inmate-level variance component	1.020**				.221*	
Between-inmate variance explained	.357				.276	
$N_{\text{Placements}}$	1,763				319	
N_{Inmates}	818				153	

Note: Unstandardized coefficients (*b*) and robust standard errors (SE) are presented. Analyses for male inmates are estimated using cross-classified hierarchical negative binomial regression models, where placements are nested within inmates and prison complexes. Analyses for female inmates are estimated using hierarchical negative binomial regression models, where placements are nested within inmates. Analyses are not presented for women's time spent in disciplinary segregation, or men's and women's time spent in mental health segregation, since no race differences existed at the bivariate level. All models adjust for time since admission, and include controls for inmate age, offense type, inmate risk, and institutional misconduct.

**$p < .01$; *$p < .05$ (two-tailed test).

Research Objective 4: *Determine whether there are racial and ethnic disparities in the various reasons provided for male and female inmates' placements into restrictive housing.*

Table 4 presents frequency distributions of reasons for placement into any form of restrictive housing across race/ethnicity and sex. Reasons for placement provided by correctional personnel were broken down into five categories, as detailed in the methodology section: 1) routine operations (which were primarily comprised of specific terms noted by correctional staff as "reclassification," "lateral transfer," and "population adjustment"); 2) protection-related; 3) security management (specific terms most commonly noted by personnel in the data grouped under this category included "pending investigation" and "disciplinary concerns"); 4) mental health needs; and 5) medical needs.

The most commonly cited reason for placement into restrictive housing by correctional staff for men and women, across race, was routine operations. More than 60% of Native American men's segregation placements were explained by reasons tied to routine operations. This was also the case for 58.5% of Black men's placements, 56.7% of Latinos' placements, and about half of White men's placements (48%). In addition, 82.6% of Native American women's restrictive housing placements were noted as due to routine operations. The majority of other women's placements were explained by routine operations as well (i.e. White women: 80%; Latinas: 79.8%; Black women: 75.2%).

For men, the second most common reason noted for segregation was for protection-related purposes. Protection was cited the most often for White men (35.3%), followed by Latinos (27.1%), Black men (25%), and the least often for Native American men (23.2%). Security management concerns were most often cited for the restrictive housing placements of Latinos (8.9%) and least often for Black men (6.8%). In contrast, mental health was more commonly reported as a reason for the segregation of Black men (9.2%) and least common among Latinos (6.9%). The least reported reason for segregation among all men was medical needs. Medical reasons were documented the most often for White men (0.8%) and the least often for Latinos (0.4%).

For women, following routine operations, the second most frequently cited reason for segregation was mental health needs. Mental health was cited more often for Black women (18.3%) than for other racial groups (i.e. Latinas: 14.8%; White women: 13.5%; Native American women: 12.3%). Similarly, Black women also comprised the largest proportion of restrictive housing placements explained by security management (5.5%), while White women represented the smallest portion of the security management category (2.1%). Among placements noted as protection-related, like men, protection was most commonly documented for Whites (4.4%). Medical needs, also like men, were the least often cited reason for women's segregation placements. The highest proportion of placements due to medical needs were among Native American women (0.5%) and none of the placements of White women were explained by medical needs.

Table 4. Administrative Reasons for Inmate Placements into Restrictive Housing, By Race and Sex.

	Routine Operations	Protection-Related	Security Management	Mental Health Needs	Medical Needs	*N* Placements
Male Inmates						
White Men	48.0%	35.3%	8.7%	7.3%	0.8%	7,697
Black Men	58.5%	25.0%	6.8%	9.2%	0.6%	2,350
Latino Men	56.7%	27.1%	8.9%	6.9%	0.4%	6,727
Native American Men	60.6%	23.2%	8.6%	7.1%	0.5%	1,277
			$\chi^2 = 239.39$**			
Female Inmates						
White Women	80.0%	4.4%	2.1%	13.5%	0.0%	680
Black Women	75.2%	0.6%	5.5%	18.3%	0.3%	311
Latina Women	79.8%	2.2%	2.9%	14.8%	0.2%	580
Native American Women	82.6%	1.9%	2.8%	12.3%	0.5%	212
			$\chi^2 = 29.26$**			

$N_{\text{Placements}} = 124{,}942$.
$N_{\text{Inmates}} = 33{,}143$.
**$p < .01$.

CONCLUSIONS

With support through NIJ's W.E.B. DuBois Research Fellowship Program, we aimed to increase empirical knowledge on racial, ethnic, and gender differences in restrictive housing—a controversial, yet poorly understood practice commonly used in correctional settings. Compared to other areas of criminal justice, little empirical research exists on disparities in correctional decision-making, particularly regarding the use of segregation. As such, four objectives were addressed in this study, including whether there were race differences in men's and women's placements into 1) any form of segregation; 2) specific types of segregation (i.e. disciplinary, administrative, mental health); 3) the length of time spent there; and 4) documented reasons for placement.

On the whole, findings showed significant race effects in restrictive housing placements among men and women, net of key covariates (e.g., legal and administrative factors, inmate characteristics) that are used in the risk classification process of inmates in this state. Among men, Native Americans were more likely to experience placement into any restrictive housing and disciplinary segregation compared to Whites, whereas Latinos and Blacks were less likely to experience these placements. While Latinos had lower odds of placement into disciplinary segregation relative to Whites, they did spend longer periods of time in these units when placed there, however. Blacks spent less time in disciplinary segregation than Whites. Native Americans had greater odds of ad-seg placements as well, and both Native Americans and Latinos who experienced any form of restrictive housing or administrative segregation, spent more time in these placements than Whites. Among women, different (and fewer) race effects emerged. Specifically, Native American, Latina, and Black women were significantly more likely to experience placement into administrative segregation than White women. And, Latinas had lower odds of placement into mental health segregation than their White counterparts. The most frequently documented reason for placement into restrictive housing for both men and women, across racial and ethnic groups, was routine operations (most commonly recorded reasons grouped under this category included "reclassification," "lateral transfer," and "population adjustment").

Together, these findings show that inmates of color experience different treatment from their White counterparts when it comes to segregation, even after accounting for important factors like institutional behavior and other combined risks (e.g., gang affiliation, prior incarceration history, mental health, substance abuse, and education attainment). These decisions are rooted in assessments of risk, which may or may not be based on actual behavior (Bench & Allen, 2003; Haney, 2003; 2008). Risk perceptions can be influenced by racial and gender stereotypes to predict dangerousness and threat (Grekul & LaBoucane-Benson, 2008; Hannah-Moffat, 2005; Poole & Regoli, 1980; Tonry, 2012; Zatz & Portillos, 2000). Prison officials exercise broad discretion in how inmates are managed and placed. This level of discretion is afforded to these professionals because their jobs are challenging and often unpredictable. Since correctional staff are responsible for managing large numbers of inmates in hostile and dangerous settings, it isn't necessarily feasible or practical to craft a uniform response for every situation that might arise (Olson, 2016). Combined, however, these conditions can open the door to differential treatment and outcomes, like some of the findings observed in our work here.

A pattern noteworthy of further discussion from our overall findings pertains to the restrictive housing placements of Native Americans, particularly men. It may be that distinctive cultural perceptions of this group drive their disparate placements into segregation and their lengths of stay while there. Our results differ from typical expectations regarding racially disparate treatment in that African American men tend to be most often overrepresented in prisons and in the criminal justice system more broadly. To our knowledge, no other study to date has examined restrictive housing

placements of Native Americans. Additional research is needed that explores the correctional experiences of diverse groups as there are significant gaps in the existing knowledge base, especially with respect to the Native American population. Future research should also examine racial and gender differences in segregation in other jurisdictions as we cannot speak to whether our findings are generalizable to other systems. Qualitative interviews with correctional officers and administrators may also be needed to delve more deeply into reasons underlying disparities in placements. While reasons for placements are noted in the data analyzed in our study, they are limited to short-hand text and are quite general in nature. Given that there is significant variation in placements into restrictive housing across institutions, future work may also benefit from assessing the contextual predictors of placements at the facility level.

Importantly, incarceration experiences have consequences. When inmates are placed into restrictive housing, this affects access to programming (e.g., education, treatment), the nature and extent of contact they can have with family and friends, and can even impact terms of community supervision (Haney, 2008; Lanes, 2010; Rhodes, 2005). Given its potential for producing ill effects, it is critical that this correctional practice is reserved for the "worst of the worst" (Butler et al., 2013). After all, under certain circumstances, restrictive housing is necessary. At the same time, our findings suggest that segregation is not reserved for only the most dangerous or high-risk of inmates in practice. Correctional policies allow for inmates to be segregated for a broad range of reasons and there is significant discretion in how these decisions are made. This is evidenced by our finding that even after controlling for risk factors used by this system, race/ethnicity still predicts placements into segregation.

Identifying disparities in the use of this correctional management tool is an important first step toward improved decision-making processes that can balance both institutional safety and security, with the fair administration of justice. Recently, states have begun to make reforms to their restrictive housing policies and practices. One particular example involves increased reliance on close custody units by some systems for managing disruptive or high-need inmates instead of automatically locking down these individuals in traditional segregation. Another example of reforms includes the use of step-down programs for gang members and other inmates with a history of violence. While step-down programs are promising for giving inmates the opportunity for getting out of segregation, they do not necessarily help reduce the overuse of this practice upfront. Still, these reforms illustrate some of the promising ways correctional systems are attempting to reduce overreliance on segregation that can disproportionately impact certain groups. Refinements to policies in all correctional systems on how risk should be defined and handled in practice coupled with officer training is also needed to ensure that segregation is applied fairly and used only when less restrictive options have been exhausted.

In the end, our goals were to respond to calls for research regarding the use of segregation and to inform both research and policy on disparities in the conditions of confinement. We encourage additional scholarship on this timely topic to further build the evidence base that can be fruitful for correctional departments in carrying out their challenging work.

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