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Predicting Use of Restraints and Perceptions of Safety Using Staff Demographic Characteristics

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Summary

We used staff demographic characteristics to predict two important issues in juvenile confinement facilities: (1) the use of restraints during behavioral incidents and (2) staff perceptions of safety. Specifically, we investigated whether individuals who belong to racial and ethnic groups that have experienced systematic and individual oppression (referred to as minoritized staff) differ in their use of restraints during incidents than non-minoritized staff. Then, we investigated whether the proportion of female staff predicts staff perceptions of safety in the facility.

1) We hypothesized that a higher proportion of minoritized staff would be associated with a lower proportion of incidents being handled with restraints based on research related to staff cultural sensitivity. **We found that the proportion of minoritized staff did not predict the proportion of restraints used in the facilities. The findings may mean that there is no relationship between minoritized staff and proportion of restraints used in the facility, or that we failed to find a relationship. Additional research on the individual level (i.e., understanding the demographics of staff who used restraints) would help parse out this relationship more clearly.**

2) We assessed whether the handling of incidents by minoritized staff depended on racial and ethnic characteristics of the youth population in the facility. **The interaction between minoritized staff and minoritized youth did not significantly predict proportion of incidents with restraints. Again, the findings may mean that there is no relationship between minoritized staff and proportion of restraints used in the facility, or that we failed to find a relationship.**

3) We measured whether staff gender was associated with staff reports of safety through two measures: proportion of staff that reported fearing for their safety and the proportion of staff that reported the facility felt very unsafe or dangerous. **We found that as the proportion of female staff went up, the proportion of staff that reported the facility felt very unsafe or dangerous went down. The present study cannot speak to the reason or reasons underlying this association. Based on related research, we hypothesize that it may be related to how staff of different gender identities handle incidents (e.g., male staff may be more likely to use physical restraints than women).**

The present study contributes to the understanding of the predictors of restraint and staff safety in juvenile confinement facilities. We do not intend for the present study's focus on demographic characteristics to be used to discriminate against staff. To the extent that differences in restraints or safety relate to demographic characteristics, we suggest culturally responsive training is appropriate.

Staff perceptions of safety and their use of restraints with juveniles when incidents occur are two critical and costly issues in juvenile confinement facilities. Correctional officers' concern over their safety has been shown to influence their decision to resign (Mikytuck & Clearly, 2016), and can cost facilities $10,000 to $20,000 per employee (Finn, 2000). Furthermore, using physical force on aggressive and violent young people can injure youth or staff, which can lead to further disruption in the facility (Smith & Bowman, 2009). Research on demographic differences suggests that safety concerns and handling of incidents may differ for female and minoritized (i.e., individuals with racial and ethnic identities that have experienced systematic and individual oppression; Milner & Jumbe, 2020) staff compared to male and non-minoritized staff, respectively. Thus, we explore the influence of demographic differences in staff perceptions of safety and use of restraints in juvenile confinement facilities.

Gender is one demographic characteristic that may influence staff perceptions of safety at work. Research from adult corrections has found that females consistently reported an increased fear of victimization at work (Gordon et al, 2013). In juvenile facilities, there is some evidence that female staff perceived a greater need for services that focused on staff stress and safety compared to male staff (Dembo & Dertke, 1986); however, that research is dated, and the youth population now has more high-risk, high service needs youth (Mikytuck et al., 2019). The limited literature from current juvenile facilities on the relationship between staff gender and safety prompts questions about the generalizability of existing findings to current facility environments.

For the use of restraints, research suggests that staff race and ethnicity is one demographic characteristic that may be predictive of how staff handle behavioral incidents. In a qualitative study at a Midwest facility, some staff reported they did not see how youth’s cultural

differences were significant or how they should address cultural differences (Feinstein & Magidson, 2017). For example, a white correctional officer shared on a research survey that they did not "realize how racial it is up in the cities" (Feinstein & Magidson, 2017, p. 143), so when youth came into the facility the staff may not have responded with culturally sensitive practices. Another correctional officer respondent stated that depending on the race of the youth "there are ways you approach them" to avoid conflict between staff and youth (Feinstein & Magidson, 2017, p. 149). The previous correctional officer continued to explain that most of the African American and Native American youth had preconceptions before entering the facility that all white staff were out to get them, which created a lack of trust (Feinstein & Magidson, 2017). Researchers concluded that having more staff of color in a facility may reduce disruptive youth behavior (Feinstein & Magidson, 2017). Relatedly, research has found that youth connect better with staff that have the same background (Lee & Chen, 2017).

Present Study

We investigated whether staff characteristics predicted the use of restraints during behavioral incidents and whether staff characteristics predicted staff perceptions of safety. Specifically, we measured whether minoritized race/ethnicity status was associated with the use of restraints during incidents at a facility level. We hypothesized that a higher proportion of minoritized staff would be associated with a lower proportion of incidents being handled with restraints. We also investigated the interaction between the proportion of minoritized staff and minoritized youth in a facility on proportion of incidents with restraint to see if the handling of incidents depended on demographic characteristics of the youth population in the facility. Additionally, we measured if staff gender was associated with staff reports of safety. We

predicted that as the proportion of female-identifying staff increased, a higher proportion of staff would report fearing for their safety.

Methods

Predictor Variables

Minoritized Population. Each facility recorded the number of staff and youth in racial and ethnic categories that we collapsed into: (1) African American, Non-Hispanic, (2) White, Non-Hispanic and, (3) Hispanic, alone and (4) other which included Asian, Pacific Islander, and American Indian/Alaska Native categories. We then created a variable that indicated if most of the staff belonged to a minoritized racial and ethnic identity. In other words, minoritized = 1 if the facility contained more than 50% of staff who identified as 1) African American, Non-Hispanic, (2) Hispanic, alone or (3) other. This process was repeated for the youth population as well to create a minoritized youth variable.

Staff Gender. Staff self-reported their gender identity as male or female. Based on the total number of unique staff members in a facility, we created a variable that indicated the proportion of staff that identified as female.

Outcome Variables

Unique Incidents. Facilities reported the type of incidents that occurred during the recall period. Given that one incident record could contain multiple types of incidents (e.g., a situation involving assault and confinement), we summed the number of unique records (so that a record involving assault and confinement incidents was only recorded as one incident). The variable used in analysis was the proportion of unique incidents that involved the use of restraints.

Staff Safety. Facilities randomly selected staff members to take a self-reported survey on their experiences in the facilities. We looked at two questions that assessed staff perceptions of safety. First, we examined whether staff reported they feared for their safety (yes = 1, no = 0). Second, we examined whether staff reported the facility felt unsafe or dangerous (unsafe or very dangerous= 1, very safe/safe = 0).

Controls

Gender of Population. We controlled for the gender of the youth facility with a categorical variable that measured whether the facility contained: (1) only female, (2) only male, or (3) both male and female youth in the facility. We created this variable from the presence of male and/or female identifying youth in the facility.

Type of Facility. We included a categorical variable that measured the facility as a (1) detention (2) correctional, or (3) assessment facility.

Location of Facility. We controlled the location of facilities with a categorical variable that measured facility location as (1) rural (2) urban, or (3) suburban.

Results

Of the 121 facilities, most held only male youth (57%) or male and female youth (35.5%). Most facilities housed youth from minoritized racial and ethnic identities, and approximately 45% of facilities employed staff that mostly came from minoritized racial and ethnic backgrounds. Few staff reported fearing their safety (20%; see Table 1 for descriptive statistics of all variables used in analysis).

Predicting Incidents with Restraints. We did not find a significant difference in the use of restraints between facilities with a majority of minoritized staff and facilities without a majority of minoritized staff ($p > 0.05$; Table 2). Further, the interaction between the proportion of minoritized staff and minoritized youth was not significantly associated with the proportionate of incidents involving restraints ($p > 0.05$). We found that the type of facility significantly predicted the proportion of incidents involving restraints. Correction (B= 0.30, $p = .03$) and detention (B= 0.34, $p = .02$) facilities were more likely than assessment facilities to have incidents that involved restraints.

Staff Perception of Safety

We assessed the influence of staff gender on safety and found that the proportion of female staff in a facility was not significantly related to staff reports of fearing for their safety in the facility, (B = 0.27, $p > .05$). However, as the proportion of female staff in the facility increased, staff were significantly, although modestly, less likely to report the facility felt very unsafe/dangerous. (B= -0.01, $p = .05$).

Table 1

Descriptive statistics

	M	*SD*
Staff reports of fearing for safety (%)	0.20	0.17
Facility dangerous or unsafe (%)	0.19	0.20
Proportion of incidents with restraints	0.39	0.34
	N	%
Most staff from minoritized races/ethnicities	54	44.6
Most youth from minoritized races/ethnicities	95	78.5
Facility Population		
Only male	69	57.0
Only female	9	7.4
Both male and female	43	35.5
Facility location		
Urban	47	38.8
Rural	47	38.8
Suburban	27	22.3

Table 2

Regression Predicting Proportion of Incidents with Restraints

	Estimate	SE	95% CI		*p*
			LL	UL	
Intercept	-0.05	0.16	-0.36	0.26	0.76
Facility Location[a]					
Suburban	0.06	0.10	-0.13	0.25	0.51
Urban	-0.06	0.08	-0.22	0.10	0.44
Facility Type[b]					
Correction	0.30	0.14	0.03	0.57	0.03
Detention	0.34	0.143	0.06	0.62	0.02
Facility Population[c]					
Only Male	0.09	0.08	-0.07	0.25	0.28
Only Female	-0.07	0.15	-0.36	0.23	0.66
Minoritized Staff[d]	0.57	0.35	-0.12	1.26	0.10
Minoritized Youth[d]	0.15	0.09	-0.03	0.32	0.10
Minoritized Youth x Minoritized Staff	-0.59	0.35	-1.29	0.11	0.10

Note. *SE*= standard deviation, *CI*= confidence interval; LL= lower limit; UL= upper limit. [a]Reference category is rural facilities, [b]Reference category is assessment facilities, [c]Reference category is facilities with male and female youth. [d]Indicates that most staff or youth, respectively, belong to racial and ethnic identities that have experienced systematic and individual oppression.

Table 3

Regression Predicting Proportion of Staff Who Report Fearing for Their Safety

Effect	Estimate	SE	95% CI		p
			LL	UL	
Intercept	0.27	0.01	0.13	0.40	<.001
Facility Location[a]					
Suburban	0.05	0.04	-0.04	0.13	0.27
Urban	-0.01	0.04	-0.08	0.06	0.80
Facility Type[b]					
Correction	-0.02	0.06	-0.14	0.11	0.79
Detention	-0.02	0.07	-0.16	0.12	0.75
Facility Population[c]					
Only Male	-0.02	0.04	-0.12	0.04	0.35
Only Female	-0.02	0.07	-0.15	0.12	0.82
Proportion of female staff	-0.01	0.01	-0.02	0.01	0.41

Note. *SE*= standard deviation, *CI*= confidence interval; LL= lower limit; UL= upper limit

[a]Reference category is rural facilities, [b]Reference category is assessment facilities, [c]Reference category is facilities with male and female youth.

Table 4

Regression Predicting Proportion of Staff Reporting the Facility as Very Unsafe/Dangerous

	Estimate	SE	95% CI		p
			LL	UL	
Intercept	0.23	0.08	0.07	0.39	0.01
Facility Location[a]					
Suburban	0.06	0.05	-0.04	0.16	0.21
Urban	0.01	0.04	-0.08	0.09	0.96
Facility Type[b]					
Correction	-0.01	0.07	-0.16	0.14	0.86
Detention	-0.02	0.08	-0.18	0.14	0.82
Facility Population[c]					
Only Male	0.01	0.05	-0.16	0.15	0.95
Only Female	-0.01	0.08	-0.16	0.15	0.96
Proportion of female staff	-0.01	0.01	-0.02	7.50	0.05

Note. *SE*= standard deviation, *CI*= confidence interval; LL= lower limit; UL= upper limit

[a]Reference category is rural facilities, [b]Reference category is assessment facilities, [c]Reference category is facilities with male and female youth.

Discussion

We had two main aims: (1) to assess whether staff gender predicted staff perceptions of safety and (2) to investigate whether staff race and ethnicity predicted the proportion of incidents involving restraints. We found mixed support for the gender and safety hypotheses. We failed to find a significant difference between the proportion of female staff in a facility and staff reports of safety. However, we found that a higher proportion of female staff in the facility was modestly linked to fewer reports of the facility as very unsafe/dangerous. Given that other research has found that male staff use more direct and physical ways of deescalating a situation (Sonderman et al, 2021), it could be that staff handling of incidents influence perceptions of the facility as unsafe or dangerous. We did not measure staff handling of incidents as they related to staff perceptions of safety, but future research should replicate and extend this work by exploring reasons underlying the association between staff perceptions of safety and gender. It is also important to note that comfort in stating that one feels safe or unsafe may differ by gender. Although the surveys were anonymous and voluntary, respondents may answer self-report items in what they perceive to be socially desirable ways.

Next, we investigated the proportion of incidents involving restraints in the facilities. The results did not support the hypothesis that the proportion of incidents involving restraints was associated with the proportion of minoritized staff. Further, the interaction between minoritized staff and youth was not significantly associated with the proportion of restraints used in facilities. The only factors we found to be significantly associated with the proportion of incidents with restraints was the type of facility. Detention and corrections facilities were more likely to use restraints than assessment facilities. This makes intuitive sense given the different facilities' missions. Juvenile detention and correction facilities house youth who are awaiting adjudicated

or have been adjudicated (Clark, 2022) whereas assessment facilities offer a more therapeutic focus (Giordano, 2019).

The study is not without limitations. We focused on staff and youth characteristics at a facility level and were not able to directly link individual staff or youth characteristics to incidents. Thus, we cannot directly link staff race and ethnicity to their handling of incidents, nor can we link staff gender to individual perceptions of safety. We recommend future data collection on incidents in the facility include these demographic characteristics at an individual level so that they can be directly linked. We do not intend for this research to be used to discriminate based on protected characteristics. To the extent that differences are found based on demographic characteristics, they suggest culturally sensitive training and/or culturally responsive is appropriate. This type of training could open the dialogue on cultural humiliation, so that people are able to honor diverse experiences.

Future research would benefit from assessing other youth characteristics, such as mental illness, in relation to the likelihood that incidents use restraints and/or relate to staff perceptions of safety. Youth with mental health disorders are incarcerated at a much higher rate than youth without a psychological disorder, and many correctional officers do not have proper training or fully understand specific mood states that could occur with a variety of disorders (Lockwood et al, 2021; Underwood et al, 2006). With proper training for staff, such as de-escalation training based on youth's mental health and cultural characteristics, facilities may be able to reduce the use of restraints.

To summarize, we investigated the relationship between staff gender and staff safety as well as staff race and ethnicity relate and handling of behavioral incidents. We focused on these characteristics at a facility level during one recall period, so additional research is needed at the

individual level and at different times. The findings of research on demographic differences and safety/use of restraints holds implications for staff training and turnover in juvenile facilities.

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