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# Restoring Promise: A randomized control trial examining the impact of an innovative young adult housing on reducing violence

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## Summary of the Project

The Vera Institute of Justice (Vera) conducted a rigorous evaluation of Restoring Promise, an initiative of Vera and the MILPA Collective (MILPA). Restoring Promise creates prison housing units grounded in human dignity for young adults (ages 18-25). The housing units operate with re-trained staff, trained mentors (older adults serving long or life sentences), and developmentally appropriate activities, workshops, and opportunities for young adults.

*Major goals and objectives*

The study has three main goals contributing to an overall evaluation of Restoring Promise. The first is to evaluate the impact Restoring Promise has on violence and misconduct among young adults in a large and challenging correctional system—the South Carolina Department of Corrections (SCDC). The second is to examine whether the impact of Restoring Promise can be generalized to all young adults in SCDC. The third is to understand how Restoring Promise is implemented and experienced across diverse correctional environments including rural and urban settings, jails and prisons, and facilities housing men and women.

*Research questions*

The study is organized around three research questions:

1) Does Restoring Promise reduce violence/misconduct and improve perceptions of safety for young adults exposed to the new approach, and by how much?
2) Do outcomes for young adults who volunteer to participate in Restoring Promise differ in important ways from those who do not elect to participate?
3) How is Restoring Promise implemented across diverse correctional environments (jails and prisons) and populations (rural and urban, men and women)?

*Research Design, Methods, and Analytical and Data Techniques*

This project reflects two studies: (1) a study of Restoring Promise in partnership with the South Carolina Department of Corrections (SCDC) and (2) a study of Restoring Promise across five housing units in partnership with three corrections agencies.

The first study of Restoring Promise in partnership with SCDC is anchored in a Randomized Control Trial (RCT) to understand whether and by how much Restoring Promise reduces young adults' incidences of violence and misconduct —comparing outcomes for two groups of young adults who applied to live on a Restoring Promise housing unit: those randomly selected to live on the unit and those randomly selected to stay in general population. To understand if outcomes for young adults who volunteer to participate in Restoring Promise differ in important ways from those who do not elect to participate, the project also includes a Propensity Score Matching (PSM) component—comparing outcomes for two groups of young adults: the control group from the RCT and a matched group from general population.

The second study of Restoring Promise across the five housing units uses Latent Class Analysis (LCA) to compare responses to the Restoring Promise Prison Culture Survey (PCS) from young adults incarcerated in three different corrections agencies living across five Restoring Promise housing units.

The Intervention: Restoring Promise young adult housing units

Restoring Promise creates young adult housing units, in partnership with corrections agencies. The housing units are rooted in four key pillars based on research on practices in juvenile justice and international experience about what works to reduce violence: safety, family engagement, fairness, and purpose. The housing units are led by trained correctional professionals and mentors -incarcerated adults over the age of 25 who are serving long, often life, sentences that live on the unit with the young adults. Mentors are selected through a rigorous application and

interview process. Participation includes living in a designated housing unit for young adults, being connected to mentors, developing leadership skills, enhancing connections to family and community, and designing and participating in specialized programs and activities.

At the time of this study, Restoring Promise supported the opening of five young adult housing units: two in Connecticut, two in South Carolina, and one in a jail in Massachusetts. Since the study began, Restoring Promise expanded to open young adult housing units in partnership with the department of corrections in Colorado and North Dakota.

Table 1 compares general prison operations in an average maximum-security prison in the United States to the operative elements in Restoring Promise young adult housing units.[1] All Restoring Promise units differ—reflections of the agency's staffing capacity and resources as well as the physical space available in the prison housing the Restoring Promise unit. Listed here are the components that are most consistent across the five Restoring Promise housing units that are the focus of this study.

*Table 1: Comparison of General Population in Prisons and Restoring Promise Young Adult Housing Units*

| | Generic General Population | Restoring Promise Units |
|---|---|---|
| Out-of-cell Time | There is a wide range, but with no job or school, many maximum-security prisons reduce out-of-cell time to 2-5 hours | 15 hours out-of-cell time |
| Staffing Ratio | There is a wide range, 1:16 to 1:120 | There is a range, 1:8 to 1:20 |
| Family Engagement | Visits twice a month if they are not restricted due to lockdowns or disciplinary sanctions. Often visits are no-contact (no/limited physical contact). | Orientation sessions for families; meetings between corrections professionals, mentors, and families; and meaningful time with family to discuss goals and progress. Visits at least 4 times a month. |
| Unit Responsibilities | Incarcerated people are assigned cleaning tasks. | Everyone contributes to the unit—chores are assigned to distribute the responsibility of keeping the unit clean across everyone who lives there |

[1] As of 2022, all Restoring Promise units are placed in medium and maximum-security facilities. All Restoring Promise units differ—reflections of the agency's staffing capacity and resources as well as the physical space available in the prison housing the Restoring Promise unit. Listed here are the components that are most consistent across the five Restoring Promise housing units that are the focus of this study.

| | | |
|---|---|---|
| Recreation Spaces | None or limited to one general communal space (day room) | Units create community spaces (designed by the incarcerated people). Examples include refurbished cells to rooms for: meditation and religion, computers, library, self-expression / conflict resolution, barbering, and laundry. |
| Outdoor space | Outdoor space restricted to recreation time | Unlimited or extended access to outdoor space during out-of-cell time |
| Access to Workshops and Learning | Limited slots available for facility-wide programming or education classes | Unlimited slots for programs designed by staff, mentors, and young adults or offered by outside volunteers. Examples of workshops designed and run by people living or working on the unit: Personal Finances, Business Planning, Art & Culture, Conflict Resolution, Emotion Regulation, Life Choices, and Parenting |
| Mentorship | Informal mentorship, if any | Mentors live and work on the unit |
| Community Building | N/A | 2x/day "check-ins" to celebrate accomplishments, monitor people's mental and emotional wellbeing, and intervene in a crisis. |
| Discipline & Accountability | Typically, highly punitive processes that lead to sanctions that can include loss of good time, loss of phone calls and visits, and solitary confinement. | When an infraction is committed, a restorative circle is held. Sanctions are replaced by restorative justice responses and do not include solitary confinement or loss of family contact (phone calls & visits) |

*Expected applicability of the research*

The primary value of this study lies in the rich evidence generated through rigorous methods about working with young adults in prison, especially related to reducing violence. The process of conducting the research also provided insights into running an effective and rigorous RCT in a correctional setting. The finding that changing prison culture led to a reduction in violence fills a gap in the field and provides evidence to support a new, replicable model for improving safety in correctional settings.

By combining experimental and quasi-experimental methods, and by tracking outcomes for those who did not elect to participate in the initiative, this study provided important insights into the extent to which recruitment bias, or the self-selection of certain groups into corrections-based programming, may limit the generalizability of studies on prison programming. The study also showed that the results of the RCT are potentially applicable to all young adults—as the PSM

demonstrated that young adults who applied to the unit (control group participants from the RCT) have similar outcomes to a matched group of young adult non-applicants in general population. The PSM strengthens the implications of the RCT.

Additionally, we confidently can say that the approach Restoring Promise uses, while unique to each prison setting, has several fundamental components that are consistent across locations *and* that young adults and staff, regardless of location, report similarly positive experiences because of the changes to prison culture implemented by Restoring Promise.

## Study Background: Randomized Control Trial and Propensity Score Matching

To understand whether Restoring Promise reduces incidences of violence and misconduct for young adults exposed to the new approach the research team conducted a RCT of applicants to Restoring Promise units. To evaluate the extent to which self-selection into the study may limit generalizability, the research team used propensity score matching (PSM) with administrative data from SCDC to create a quasi-experimental comparison group. The research team used the PSM to evaluate whether outcomes for young adults who volunteer to participate in Restoring Promise differ in important ways from those who do not elect to participate.

This section describes the correctional setting and implementation of Restoring Promise in South Carolina.

### *Setting and Implementation*

The RCT and PSM studies took place in two SCDC prisons. **Turbeville Correctional Institution (Turbeville)** is a medium security prison that houses young men sentenced under the South Carolina's *Youthful Offender Act* (YOA). The statue provides for a maximum sentence of four years with conditional release or six years with unconditional release *if* the sentenced person

participates in various carceral programs. YOA also mandates an Intensive Supervision Officer that works with the sentenced person throughout their time in prison to help plan for reentry and continues supervision once released to the community. Judges can sentence people between 18 and 25 years old who are convicted of a first-time, non-violent offense to YOA. **Lee Correctional Institution (Lee)** houses young men serving long sentences, typically for violent crimes. It is a maximum-security prison that has historically reported higher rates of violence than other facilities in the SCDC system and has extremely limited staffing, programming, and educational and vocational opportunities.[2]

There are three broad areas related to the implementation of Restoring Promise young adult housing units in Turbeville and Lee:

1. Young adults are supported by trained staff, mentors, and their families.
2. Young adults learn about and practice restorative justice.
3. Young adults participate in a daily routine that is structured and organized with meaningful activities that help them navigate success in prison and prepare for reentry.

For more on the specific components of the Restoring Promise intervention in SCDC, see Appendix A: Restoring Promise Implementation in South Carolina.

## Randomized Control Trial

The research team conducted an RCT to assess the impact of Restoring Promise on violence/misconduct. This section covers the study design and analysis methods.

*Study Design & Methods*

[2] For more see, https://www.nytimes.com/2018/04/28/opinion/how-a-south-carolina-prison-riot-really-went-down.html; and https://enewspaper.latimes.com/infinity/article_share.aspx?guid=eea17144-8102-466b-b4ae-c5e00f977b76.

1. Recruitment: Young adults were alerted of the opportunity to apply to live on a Restoring Promise unit via flyers posted in the common areas of all units in each prison. The flyer outlined how their experience on the unit would differ from general population housing, the purpose of the initiative, and how to apply. Included with the application was an information page summarizing the details of the study: its purpose and timeline, eligibility criteria, randomization, and modes of data collection. In the attached form, young adults were informed that if they did not wish to be a part of the study, they should not apply. Applicants were eligible if they were between the ages of 18-25 with at least two months left on their sentence at the time of randomization and had no state-mandated programming requirements connected to housing status (for example, a requirement to live in an alcohol treatment unit). Applications were accepted on a rolling basis.
2. Randomization: Randomization occurred in waves, based on the availability of beds in the newly established Restoring promise units. The housing units communicated to the research team their readiness for a new cohort of young adults (10 at a time) creating a staggered timeline for participants' entrance into the study. As vacancies emerged on the units, bed space was held until there were at least 10 beds available, at which point the research team randomized a new wave assigned to the housing unit. Two-hundred applicants were randomly assigned into either the treatment (Restoring Promise) or control (general population) condition in ten groups over the course of 14 months (between January 2019 and March 2020). There were seven waves of randomization in Turbeville and three in Lee. The larger number of waves at Turbeville reflected the shorter sentences for young adults sentenced under the YOA. The research team used stratified randomization to ensure balance between the treatment arms on the strongest predictors of the outcomes. Disciplinary history,

which included any history of disciplinary infractions for the 2017 calendar year—the covariate researchers identified as the strongest predictor of violence (any violent infractions for the 2018 calendar year) in a regression analysis—was used for both prisons, applicants to Turbeville were stratified on the additional factor of race.[3] Table 2 provides a breakdown of stratified selection.

*Table 2: RCT Study Participants, Stratified Randomization*

| | **Turbeville (140 young adults)** | | **Lee (60 young adults)** | | **Overall (200 young adults)** | | |
|---|---|---|---|---|---|---|---|
| | Black | White/ Other | Black | White/ Other | Black | White/ Other | **Total** |
| Disciplinary | 38 (27%) | 2 (1%) | 39 (65%) | 3 (5%) | 77 (38.5%) | 5 (2.5%) | **82 (41%)** |
| No Disciplinary | 70 (50%) | 30 (21%) | 16 (27%) | 2 (3%) | 86 (43%) | 32 (16%) | **118 (59%)** |
| **Total** | **108** | **32** | **55** | **5** | **163** | **37** | **200** |

3. Fidelity to implementation: To promote an approach consistent with the principles of the initiative, Restoring Promise technical assistance staff worked closely with SCDC leadership, unit staff, and mentors. To support the unit's development, researchers conducted a process evaluation via quarterly surveys. The researchers shared the findings with technical assistance staff to inform their approach. For example, if survey results suggested that respondents were not able to meaningfully engage with family, researchers would alert technical assistance staff who then worked with the unit and DOC leadership to address and correct the issue.

4. Outcome and covariate measures: The study analyzed outcomes that occurred within one year of the participant's start date in the study using administrative data provided by SCDC.[4]

[3] Covariates analyzed that did not strongly predict violence: age, length of sentence, and recorded violent disciplinary charges. Race was a strong predictor in Turbeville, but not Lee.
[4] The start date for all study participants was defined by the move-in date for treatment participants in each respective wave. All treatment participants moved in on the same date within each wave.

The cumulative observation period was from December 2019- April 2021. The study analyzed outcomes related to disciplinaries, grievances, case management notes, and restrictive housing stays. *Disciplinary outcomes* included unfiltered disciplinary charges and convictions or informal resolutions- raw data from a combination of two data sources and filtered disciplinary charges and convictions- data derived from a filtered version of the raw dataset after accounting for measurement bias (explained below), violent charges, and violent convictions or other informal resolutions. Violence was defined using official SCDC definitions of violent/assaultive behavior. It is important to note that SCDC has five levels of severity for offenses that occur within their prisons. Among treatment group participants, restorative practices were used to respond to the lowest three violations (such as disorderly conduct, possession of contraband, or being out of place). The two highest levels of violations were handled using the standard disciplinary process, used elsewhere in the prison. To ensure equivalence between the treatment and control group, the research team created an on-unit tracking system maintained by staff. The tracking system required unit staff to log all violations and the corresponding disciplinary code that *would have been given* if the incident occurred in general population. Data on misconduct by treatment group participants was derived from *both* data sources—SCDC administrative data and the restorative practices tracking tool, with duplicates dropped. The use of restorative justice on the unit and the subsequent on-unit tracking system created a highly sensitive measure of misconduct. An investigation between the restorative justice data and administrative data showed several discrepancies and demonstrated that there was an overcount of disciplinary incidents on the Restoring Promise units. On one hand, the on-unit tracking system included violations that did not appear in the system-wide administrative tracking system (for example, “believed to

be under the influence"); conversations with prison staff indicate that substance use is common in the prison, however this did not trigger a disciplinary response outside of the Restoring Promise units. On the other, the Restoring Promise restorative justice data system included incidents that were not formal violations (for example, "not participating in morning circles"). To reconcile the differences and adjust the measures to account for measurement bias, a team of five people reviewed the restorative response data.[5] The review team went through an interrater reliability exercise for each incident—any incident that would have been written up in the general population remained in the dataset and a filter variable was created to remove any extraneous incidents. Additional outcomes were explored, including data related to overall health and wellbeing and experiences of solitary confinement. *Grievance outcomes* were data derived from a system tracking submissions of complaints and concerns by incarcerated people and included any grievances filed. *Management information notes (MINs)* were data derived from a tracking system of serious incidences/events that occur in each facility- outcomes included any MINS logged related to injuries, suicide or self-harm, use of force, and medical or mental health interventions. *Restrictive housing unit (RHU) stay outcomes* included whether the participant had any instances in RHU for any reason including, disciplinary detention, protective segregation, and segregation due to investigation. Outcome measures were parameterized as binary measures, which captured whether the participant engaged in or experienced any incident. Table 3 provides balance diagnostics for study participants. There was balance across all

[5] The review team included two formerly incarcerated individuals, one former SCDC employee, and two Restoring Promise researchers.

variables except age, most serious offense level 3, most serious offense level 4.[6] Variables included available socio-demographic variables—race, education level and age at application; variables related to incarceration history and environment—custody type, length of stay pre- and post-treatment, proportion of time spent in COVID lockdown, and most serious offense category; and pre-treatment outcomes.

*Table 3 RCT Study Participants, Balance Diagnostics*[7]

| **Variable** | **Treatment Mean (St. Dev.) or Percent** | **Control Mean (St. Dev.) or Percent** |
|---|---|---|
| Age*° | 20.71 (1.91) | 21.36 (2.06) |
| Race-Black | 81% | 80% |
| Custody level[8]-Minimum | 15% | 22% |
| Custody level-Medium | 54% | 52% |
| Custody level-Closed | 31% | 26% |
| Most serious offense, level 1 | 1% | 0% |
| Most serious offense, level 2 | 13% | 16% |
| Most serious offense, level 3*° | 33% | 48% |
| Most serious offense, level 4*° | 45% | 29% |
| Most serious offense, level 5 | 8% | 7% |
| Highest year of education | 10.53 (1.66) | 10.68 (1.03) |
| Length of stay in days (pre-treatment) | 326.5 (368.1) | 408.2 (485.8) |
| Length of stay in days (post-treatment) | 274.7 (96.54) | 250.9 (109.6) |
| Proportion of time in COVID-19 lockdown | 0.40 (.32) | 0.37 (.33) |
| Pre-treatment any disciplinary charges | 56% | 52% |
| Pre-treatment any disciplinary convictions | 53% | 51% |
| Pre-treatment violent charges | 21% | 23% |
| Pre-treatment violent convictions | 18% | 21% |
| Pre-treatment any grievances | 11% | 16% |
| Pre-treatment any MINs | 21% | 21% |
| Pre-treatment RHU stays | 13% | 15% |

* $p<0.05$

[6] Most Serious Offense, or controlling crime, is the most serious crime that the participant was convicted of when sentenced to incarceration. Categorization of the offenses was based on categories determined by the SCDC. offense_categories.pdf (sc.gov)

[7] Pre-treatment outcomes cover 1-year pre-treatment.

[8] Level/manner in which a resident is housed based on their perceived risk to others.

°While the between-group difference in age was statistically significant, it is unlikely the 8-month difference between treatment and control is not meaningful in predicting the outcomes of interest, particularly within a limited age range. There was a statistically significant difference in most serious offense levels 3 and 4 between the two groups - levels 3 and 4 cover mid/low-class felony crimes or serious misdemeanors. Most serious offense was not a significant predictor of the outcomes of interest.

5. Analysis: The RCT used an intent-to-treat design, tracking outcomes for all treatment and control participants even if a participant did not ultimately receive the intervention or received a partial dose (for example, young adults who were suspended or expelled from the unit). To compare outcomes, frequency tables were calculated separately for participants in treatment and control groups based on random assignment. To assess treatment effect, logistic regression models were estimated (see Tables 4 & 5). Effect sizes were calculated as odds ratios. Models with unadjusted odds ratios include only RCT assignment while subsequent models include the participant's age, race, education level, custody level, time at risk/exposure, and a proportion of time spent in COVID-19 lockdown, as well as a pre-treatment measure of the outcome.

*Table 4: Prevalence (count) of disciplinary violations, grievances, MINs reports, and RHU stays by treatment v. control (within 1-year from start date)*

| | **1-year from start date** | |
|---|---|---|
| **Variable** | **Treatment (n=100)** | **Control (n=100)** |
| Any charges | 72 | 62 |
| Any charges (filtered)[9] | 58 | 62 |
| Any convictions/informal resolutions | 71 | 61 |
| Any convictions/informal resolutions (filtered) | 57 | 61 |
| Any violent charges | 7 | 18 |
| Any violent convictions | 6 | 15 |
| Any grievances | 10 | 15 |
| Any MINS | 26 | 24 |
| Injury MINS | 4 | 3 |

[9] Filtered disciplinary outcomes are derived from a filtered version of charge and conviction data that accounts for measurement bias as a result of overreporting of incidences on Restoring Promise units.

| | | |
|---|---|---|
| Self-harm MINS | 2 | 2 |
| Use of force MINS | 8 | 11 |
| Medical/mental health MINS | 13 | 13 |
| RHU Stays | 5 | 12 |

*Table 5: Logistic regression models with unadjusted odds ratios of RCT assignment predicting prevalence of outcomes (treatment=1) and adjusted odds ratios from multivariable logits (See Appendix C for full result tables)*

| **Variable** | **OR** | **95% CI [LL, UL]** | **aOR** | **95% CI [LL, UL]** |
|---|---|---|---|---|
| Any charges | 1.576 | 0.870, 2.856 | 1.111 | 0.551, 2.240 |
| Any charges (filtered) | 0.846 | 0.480, 1.491 | 0.514 | 0.259, 1.020 |
| Any convictions | 1.565 | 0.868, 2.824 | 1.111 | 0.548, 2.252 |
| Any convictions (filtered) | 0.848 | 0.482, 1.490 | 0.517 | 0.260, 1.030 |
| Any violent charges (SCDC def.) | 0.343* | 0.136, 0.862 | 0.214** | 0.077, 0.597 |
| Any violent convictions (SCDC def.) | 0.362* | 0.134, 0.975 | 0.265* | 0.090, 0.780 |
| Any grievances | 0.630 | 0.268, 1.478 | 0.456 | 0.179, 1.162 |
| Any MINS | 1.113 | 0.586, 2.111 | 0.895 | 0.451, 1.778 |
| Injury MINS | 1.347 | 0.294, 6.180 | 0.863 | 0.169, 4.416 |
| Self-harm MINS | 1.000 | 0.138, 7.242 | 1.188 | 0.082, 17.165 |
| Use of force MINS | 0.704 | 0.270, 1.831 | 0.382 | 0.124, 1.174 |
| Medical/mental health MINS | 1.000 | 0.439, 2.280 | 0.278 | 0.280, 1.890 |
| RHU Stays | 0.386 | 0.131, 1.140 | 0.165** | 0.042, 0.640 |

* p<0.05 **p<0.01

*Results and findings*

Disciplinary outcomes

*Violence.* Our results demonstrate a statistically significant difference in rates of violence for treatment and control group participants in the first year. In the unadjusted model, this translates to treatment assignment being predictive of a 66% decrease in the odds of violent charges (OR 0.343, $p$=0.023) and 64% decrease in the odds of convictions (OR 0.362, $p$=0.044). After isolating the effect of treatment by controlling for pre-treatment covariates, there were stronger results with the adjusted odds ratio (aOR) showing a further decrease in the odds of violent

charges (aOR 0.214, *p*=0.003); and violent convictions (aOR 0.265, *p*=0.016). **The findings suggest that treatment assignment protects against engagement in violence.**

*Misconduct.* The results for the unfiltered disciplinary charge and conviction measure show a higher prevalence of charges and misconduct for the treatment group. Both models suggest that treatment assignment did not have a significant effect for either infraction charges (aOR 1.111, *p*=0.768) or infraction convictions (aOR 1.111, *p*=0.771). The filtered disciplinary charge and conviction measures demonstrate a slightly lower prevalence of charges and convictions for the treatment group. In both the adjusted and unadjusted models, there were no significant treatment effects for either charges (aOR 0.514, *p*=0.057) or convictions (aOR 0.517, *p*=0.061).

Additional outcomes

Both unadjusted and adjusted models suggest that treatment assignment did not have a significant effect on grievances (aOR 0.456, *p*=0.100) and MINs (aOR 0.895 *p*=0.752). As shown in Table 4, the prevalence of self-harm and medical/mental intervention MINs were the same for treatment and control participants, which comports with the unadjusted odds ratios. Restricted housing unit stays were not significant in the unadjusted models (OR .386, *p* = 0.085) but after controlling for covariates in the adjusted model, there was a stronger, and significant treatment effect demonstrating an 83% reduction in the odds of RHU stays (aOR 0.165, *p*=0.009). Generally, the prevalence of all additional outcomes for treatment and control group participants was low.

Limitations

Prisons are complex spaces and conducting a controlled experiment in them was equally complex. The study was impacted by lower than anticipated applications, operational challenges related to COVID-19 and its variants, and sole reliance on administrative data.

Two factors led to a lower number of applications than anticipated in the proposal, which negatively impacted the diversity of the applicant pool and our ability to satisfy the pre-defined requirements of the stratification model. First, because of a critical incident of violence in 2019 and the COVID-19 pandemic starting in 2020, movement between prisons was restricted and applications were limited to only young adults within each prison. Second, SCDC staff reported that organized groups within the prisons were not allowing affiliated young adults to apply to live on the Restoring Promise housing unit. The challenges were most prominent in Turbeville, where the applicant pool often did not match the disciplinary and race proportions found in the general young adult (YOA) population (see Table 4). As early as Wave 2, we did not have enough white young adult applicants with a disciplinary history. We decided to oversample in the Black disciplinary history stratum as opposed to the white non-disciplinary stratum since disciplinary history was the strongest predictor of violence, and to oversample white young adults with a disciplinary history in subsequent cohorts. However, the trend in applications continued throughout the study and we were ultimately unable to recruit the anticipated number of white young adults with a disciplinary history. To ensure the internal validity of the study we stratified by race and did a propensity score matching study to evaluate whether the application process had an effect on generalizability.

*Table 6: Breakdown of race and disciplinary history by wave for applicants and entire YOA population in Turbeville*

| | **Race** | | | | **Disciplinary History** | | | |
|---|---|---|---|---|---|---|---|---|
| | **All of Turbeville** | | **Applicant Pool** | | **All of Turbeville** | | **Applicant Pool** | |
| | **Black** | **White/Other** | **Black** | **White/Other** | **Yes** | **No** | **Yes** | **No** |
| **Wave 1 (n=34)** | 70% | 30% | 77% | 23% | 34% | 66% | 23% | 77% |
| **Wave 2 (n=47)** | 73% | 27% | 81% | 19% | 34% | 66% | 28% | 72% |
| **Wave 3 (n=35)** | 72% | 28% | 87% | 13% | 45% | 55% | 37% | 63% |
| **Wave 4 (n=50)** | 72% | 28% | 78% | 22% | 43% | 57% | 20% | 80% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Wave 5 (n=36)** | 71% | 29% | 87% | 13% | 36% | 64% | 8% | 92% |
| **Wave 6 (n=53)** | 69% | 31% | 86% | 14% | 33% | 67% | 8% | 92% |
| **Wave 7 (n=37)** | 73% | 27% | 76% | 24% | 34% | 66% | 21% | 79% |

Operational realities of the prison system during the COVID-19 pandemic led to further challenges. For example, a study participant at Lee was selected into the treatment group while in the restrictive housing unit. SCDC approved him to move into the treatment unit after completing disciplinary detention, but by then the COVID-19 pandemic was at its height and movement was strictly limited. By the time movement was reinstated several months later, the young adult no longer wished to move into the unit.

An additional limitation as a result of COVID was the units' ability to adhere to core components of the Restoring Promise approach. During the height of COVID, for over a year, facilities in SCDC (and prisons nationally) had restrictions on visitation. Depending on when they moved into the unit, some study participants were unable to see their family for the majority of the observation period. Family engagement is a central tenet of the Restoring Promise model, and the associated benefits were severely limited—for example motivating young people, aiding in their growth and development, and contributing to a better experience during incarceration. Additionally, non-security staff (including caseworkers and counselors) were working remotely for long stretches of time during COVID. Their absence had implications for staff to incarcerated person ratios and the general operations of the units. Non-security staff, in addition to security staff, hold important positions in Restoring Promise units and in SCDC collaborating with security staff and mentors in daily operations on the unit, and supporting the overall growth, development, and oversight of the community. In addition, these were the only staff members certified to conduct group counseling sessions, and specific classes/workshops dealing with

rehabilitation and reentry readiness. This gap increased the workload of security staff who maintained both their own roles and responsibilities while taking on those of the non-security staff. All of this happened during a tense and unprecedented public health crisis. COVID restrictions severely limited the treatment and supports that some participants received—20 participants experienced three months or less without COVID restrictions; 10 participants experienced no time without COVID restrictions during their year of observation.

The study was limited by its reliance on administrative data as the primary outcome measures. Disciplinary charges are meted out at the discretion of correctional staff and are vulnerable to the biases associated with any discretionary action. For example, the same behavior may elicit a different response depending on context which is why we decided to report both charges and convictions (dropping any charges that did not lead to formal convictions or informal resolutions). Additionally, the introduction and use of restorative justice and the on-unit tracking system led to an overreporting of incidents on the unit, which had implications for creating an accurate comparison to data from the traditional tracking system for control group participants. Another limitation of the administrative data is the potential impact that COVID-19 had on the prevalence of outcomes: movement in facilities was restricted, and people spent most of the day inside of their cells for long stretches of time limiting interactions with staff and other incarcerated people. This could have impacted both the prevalence of misconduct and violence, as well as the other outcomes of interest.

The original study design sought to mitigate this limitation with contextual data from the Restoring Promise Prison Culture Survey. Due to the COVID-19 pandemic, Restoring Promise Prison Culture Survey data collection did not begin until three years after the first cohort was randomized. The delay led to considerable attrition of research participants, primarily at

Turbeville because of release from incarceration or movement to other facilities. In total, 145 participants were lost to survey collection follow-up, or 73%. As a result, we solely relied on administrative records (for more information see the section below: Changes in approach from original design).

**Propensity Score Matching Study**

The research team sought to understand whether outcomes for young adults who volunteer to participate in Restoring Promise differ in important ways from those who do not elect to participate. Using propensity score matching (PSM), a comparison group was selected from the general population to compare with the control group from the RCT (those who applied but were not part of Restoring Promise units). PSM is a quasi-experimental methodology in which a comparison group is constructed from a subset of all young adults who did not choose to participate in Restoring Promise. These non-applicants were then compared to applicant, non-participants, i.e. the control group from the RCT. In PSM, a propensity score (PS) is estimated through modeling the conditional probability that an individual would apply to participate in Restoring Promise, given all observable factors. The propensity score summarizes this conditional probability, allowing for a simple matching algorithm between non-applicants and applicants. The two groups constructed using this method are balanced on all observables which, in the absence of unobserved confounding, would allow us to attribute any differences in outcomes to the effect of application or being an applicant.

*Study Design and Methods*

PSM techniques were used to create a comparison group of young adults that had not applied to join the Restoring Promise housing unit for the 100 control group applicants from the

randomized control trial. Vera researchers analyzed outcomes for both groups for one year after their start date using the same data sources as the RCT. Start date was determined by the final day in the application date range for each wave of randomization. Limitations with using this start data are discussed below.

Researchers used generalized boosted regression trees to estimate PS, which are flexible, machine learning models that do not assume a linear relationship among covariates and include any possible interactions.[10] The algorithms optimized the similarities of treatment and comparison observations, selecting the best iteration of the gradient boosted model to achieve balance.

Two PSM models were implemented, one for each prison, to calculate the average treatment effect on the treated (ATT). The models maximized the similarity of the conjoint distribution of the comparison group by minimizing the maximum Kolmogorov-Smirnov statistic (the cumulative distribution between the two samples) in all covariates. Matching covariates included available sociodemographic variables (race, education level, and age at application); variables related to incarceration history and environment (custody type, number of sentences, length of stay), and most serious offense category; and pre-treatment outcomes (any disciplinary violations any violent disciplinary violations, any grievances, any Management Information Notes [MINs] including injuries, self-harm, use of force, and medical/mental health interventions, and any stay in restrictive housing). Multivariable logistic regression models were fitted to assess differences between the non-applicant comparison group and applicant group for all the main RCT outcome variables. All matching covariates were included to control for any unaccounted effect.

*Results and findings*

[10] See https://cran.r-project.org/web/packages/twang/vignettes/twang.pdf for further information about the Toolkit for Weighting and Analysis of Nonequivalent Groups.

*Table 7 PSM Study Participants, Balance Diagnostics*[11]

| | Lee Correctional | | Turbeville Correctional | |
|---|---|---|---|---|
| Variable | Applicant, non-participants Mean (St. Dev.) or Percent | Non-Applicants Mean (St. Dev.) or Percent | Applicant, non-participants Mean (St. Dev.) or Percent | Non-Applicants Mean (St. Dev.) or Percent |
| Age | 22 (1.88) | 22.9 (1.77) | 20.71 (2.04) | 21.05 (2.06) |
| Race-Black*[12] | 90% | 89% | 79% | 67% |
| Custody level[13]-Minimum | 0% | 4% | 31% | 34% |
| Custody level-Medium | 23% | 19% | 64% | 64% |
| Custody level-Closed | 77% | 77% | 4% | 3% |
| Most serious offense, level 1 | - | - | 0% | 0.5% |
| Most serious offense, level 2 | 0% | 0.3% | 23% | 25% |
| Most serious offense, level 3 | 3% | 5% | 67% | 55% |
| Most serious offense, level 4 | 73% | 64% | 10% | 19.5% |
| Most serious offense, level 5 | 23% | 31% | - | - |
| Highest year of education | 10.47 (0.937) | 10.31 (1.37) | 10.77 (1.02) | 10.66 (1.40) |
| Length of stay in days (pre-treatment) | 801.03 (569.12) | 983.86 (671.45) | 189.24 (253.45) | 234.82 (230.67) |
| Length of stay in days (post-treatment) | 353.6 (53.26) | 355.21 (47.12) | 231.70 (95.19) | 199.95 (100.67) |
| Pre-treatment any disciplinary charges | 63% | 73% | 43% | 51% |
| Pre-treatment any disciplinary convictions | 57% | 67% | 40% | 49% |
| Pre-treatment violent charges | 43% | 33% | 10% | 15% |
| Pre-treatment violent convictions | 37% | 25% | 9% | 14% |
| Pre-treatment any grievances | 33% | 26% | 6% | 11% |
| Pre-treatment any MINs | 27% | 22% | 9% | 16% |
| Pre-treatment RHU stays | 23% | 35% | 7% | 13% |

*p<.05

*Table 8: Prevalence (percent) of disciplinary violations, grievances, MINs reports, and RHU stays for control group applicants and the comparison group (within 1-year from start date)*

| | Lee Correctional | | Turbeville Correctional | |
|---|---|---|---|---|
| **Variable** | **Applicant, non-participants** | **Non-applicants (n=345)** | **Applicant, non-participants** | **Non-applicants** |

[11] Pre-treatment outcomes cover 1-year pre-treatment.
[12] The between-group difference in race was statistically significant (p=0.05). As discussed in the limitations section of the Randomized Control Trial, we were unable to get a representative number of white applicants which is likely contributing to this imbalance.
[13] Level/manner in which a resident is housed based on their perceived risk to others.

| | (n=30) | | (n=70) | (n= 635) |
|---|---|---|---|---|
| Any charges | 17 (57%) | 210 (61%) | 40 (57%) | 402 (63%) |
| Any convictions/informal resolutions | 16 (53%) | 200 (58%) | 40 (57%) | 388 (61%) |
| Any violent charges | 7 (23%) | 101 (29%) | 12 (17%) | 105 (17%) |
| Any violent convictions | 7 (23%) | 81 (24%) | 9 (13%) | 79 (12%) |
| Any grievances | 7 (23%) | 91 (26%) | 9 (13%) | 49 (8%) |
| Any MINS | 4 (13%) | 46 (13%) | 9 (13%) | 88 (14%) |
| Injury MINS | 2 (7%) | 14 (4%) | 0 | 22 (4%) |
| Self-harm MINS | 1 (3%) | 6 (2%) | 1 (1%) | 18 (3%) |
| Use of force MINS | 3 (10%) | 34 (10%) | 8 (11%) | 68 (11%) |
| Medical/mental health MINS | 3 (10%) | 33 (10%) | 9 (13%) | 75 (12%) |
| RHU Stays | 7 (23%) | 95 (28%) | 1 (1%) | 28 (4%) |

*Table 9: Logistic regression models of application predicting prevalence of outcomes (applied=1) and adjusted odds ratios from multivariate models at both prisons, with 95% confidence intervals (CI).*

| | Lee Correctional | | Tuberville Correctional | |
|---|---|---|---|---|
| **Variable** | **aOR** | **95% CI [LL, UL]** | **aOR** | **95% CI [LL, UL]** |
| Any charges | 0.56 | 0.24, 1.34 | 0.54* | 0.31, 0.94 |
| Any convictions/informal resolutions | 0.49 | 0.2, 1.18 | 0.63 | 0.37, 1.09 |
| Any violent charges (SCDC def.) | 0.37 | 0.13, 1.04 | 0.81 | 0.4, 1.64 |
| Any violent convictions (SCDC def.) | 0.5 | 0.18,1.41 | 0.91 | 0.41, 2.05 |
| Any grievances | 1.1 | 0.4, 2.99 | 1.49 | 0.59, 3.72 |
| Any MINS | 0.6 | 0.21, 1.69 | 0.79 | 0.35, 1.77 |
| Injury MINS ° | 1.18 | 0.16, 8.48 | - | - |
| Self-harm MINS °° | - | - | 0.98 | 0.21, 4.62 |
| Use of force MINS | 0.68 | 0.2, 2.33 | 0.83 | 0.37, 1.88 |
| Medical/mental health MINS | 0.54 | 0.17, 1.72 | 1.04 | 0.46, 2.36 |
| RHU Stays | 0.59 | 0.21, 1.66 | 0.03*** | 0.01, 0.11 |

*p<.05, **p<.01, ***p<.001

° As there were 0 applicants with injury MINs in Turbeville, the models were unable to produce results for this measure.

°° As there was 1 applicant with a self-harm MIN in Lee, the multivariate model was unable to produce results for this measure.

## Disciplinary outcomes

The results demonstrate a similarity in the prevalence of violence for the applicants and the comparison group in the first year for both prisons. When comparing violent charges and convictions, none of the crude or adjusted ORs were statistically significant. For disciplinary charges in the adjusted models for Turbeville, applying was associated with a 46% decrease in the odds of having any charges (aOR 0.54, p= 0.03). However, there were no significant effects for disciplinary convictions. Additionally, at Lee there were no significant differences in disciplinary misconduct charges and convictions. **While further exploration is needed, this suggests that those who apply to be housed in Restoring Promise units, but do not participate, are similar and experience similar outcomes to those who do not apply. This suggests that the differences in outcomes observed in the main RCT are due to the Restoring Promise housing units, and not to characteristics of who chooses to apply to participate. The results have positive implications for the scalability of making changes to prison culture.**

Additional outcomes

The models suggest that applying is not significantly related to grievances and MINS, for both Lee (aOR 1.1, p=0.859, and aOR 0.6, p=0.335, respectively) and Turbeville (aOR 0.242, p=0.397, and aOR 0.79, p=0.565, respectively). In Lee, applying was not significantly associated with restrictive housing unit stays (aOR = 0.59, p=0.317) In Turbeville, however, applying was predictive of a 97% reduction in the odds of RHU stays (aOR 0.03, p<0.001).

Limitations

The process to determine the best matching method was cumbersome given the different characteristics of the people incarcerated at Lee and Turbeville, specifically their sentence length. Young adults incarcerated at Turbeville have much shorter sentences than those at Lee,

creating a higher turnover rate and, therefore, limiting opportunities to be considered for the comparison group based on the time left on their sentences. When combined with the 'wave' and 'rollover' structure of application and randomization, the pool of potential matches was further diminished making it difficult to employ a one-to-one matching method with strong balance.

Using generalized boosted regression trees led to a loss of precision in how we calculated outcomes. Specifically, since it was not possible to use individual application dates, we set up a cutoff date as a proxy for the 'start date' for participants in each wave based on the range of dates for applications from each wave[14].

Another limitation was the methods available for recruitment for Restoring Promise applicants. While there were several occasions where researchers were able to assist staff with recruitment efforts, since applications were live for over a year and accepted daily, ultimately it was the responsibility of the staff to actively recruit. While Vera met with staff frequently to check in about this and ensure that young adults were being actively recruited, it is possible that there were young adults – especially at Turbeville where there is higher turnover – who were not made aware of the opportunity.

**Cross-site analysis study**

The research team conducted a cross-site analysis study to understand how Restoring Promise is implemented and experienced across diverse correctional environments (jails and prisons) and populations (rural and urban, men and women).

*Study Design and Methods*

[14] For example, if an RCT selected control group participant for Wave 2 at Turbeville applied on January 3rd, 2020, and the application date range for that wave of randomization ended January 31st, 2020, their start date would reflect the latter date along with everyone else in that wave.

To describe how the Restoring Promise approach is implemented and experienced across five Restoring Promise housing units, the research team analyzed data from two sources: Restoring Promise housing unit records and self-reported data from Restoring Promise's Prison Culture Survey. The Restoring Promise housing units are in three states and five facilities—Lee and Turbeville Correctional Institutions in South Carolina; Cheshire Correctional Institution, a maximum-security men's jail in Connecticut; Middlesex Jail and House of Correction, a maximum-security men's jail in Massachusetts and York Correctional Institution, a maximum-security women's prison in Connecticut.[15]

Table 10 provides basic descriptive information about sentenced young adults in each facility from administrative records collected prior to the Restoring Promise unit openings.[16]

*Table 10: Demographics for young adults incarcerated in each facility collected at one point in time prior to Restoring Promise unit openings.*

| | Turbeville (2018) | Lee (2018) | Middlesex (2017) | Cheshire (2016) | York (2017) |
|---|---|---|---|---|---|
| Race/Ethnicity | | | | | |
| Asian | -- | -- | -- | -- | 1% |
| Black | 76% | 85% | 26% | 52% | 33% |
| Hispanic | -- | -- | 28% | 29% | 22% |
| White | 22% | 12% | 44% | 18% | 44% |
| Something else | 2% | 3% | 3% | 1% | -- |
| Age (mean) | 21 | 22.6 | 22.5 | 23 | 23 |
| Length of Stay (average) | 7.5 months | 18 years | 6 months | 8 years | 3.3 years |
| Disciplinary infractions (mean) | 3 | 6 | 1 | 6 | 5.67 |

*Analytical and data analysis techniques*

Implementation of core model components

[15] Middlesex Jail and House of Correction houses people who are unsentenced or sentenced to two and a half years or less. York Correctional Institution houses people who are unsentenced and sentenced. The Restoring Promise housing unit served young adults in both categories.
[16] The data here is point in time data—a snapshot of all young adults incarcerated on one day 6 months before the unit opened.

The research team collected and analyzed a combination of written records and tracking data kept by unit staff and administrative records from each state's research department. Written records described implementation of core model components including programming, mentorship, accountability, and family partnership. Other information (provided in Table 12) was static (for example, number of beds on the unit) or regularly collected by unit staff via internal tracking methods and/or by the state's research department.

Prison Culture Survey: Young Adults and Staff

Restoring Promise conducted a Prison Culture Survey in Connecticut, Massachusetts, and South Carolina, both before (baseline) and 18 months after (unit) each Restoring Promise unit opened. For the baseline survey, all young adults housed in select prisons[17] were randomly invited to respond to one of the four main dimensions studied: Purpose, Safety, Fairness, and Family Connection. Each item was measured by a Likert scale from 1 (Strongly Disagree) to 4 (Strongly Agree). For the unit survey, all young adults in Restoring Promise units received questions for all four dimensions (See Table D1 in Appendix D for the items from the surveys that were included in each analysis). Additional information was collected from all participants on facility conditions, restrictive housing experience, sociodemographic information, among others. In total, 1,417 YA responded to the survey (distribution of the populations for each model and model fit information for competing latent class models in Tables D2-D5 in Appendix D). Across CT, MA, and SC, 788 corrections staff took a similar Prison Culture Survey, covering the same four dimensions.

The research team used Latent Class Analysis (LCA) to analyze the Prison Culture Survey. LCA is a multivariate exploratory statistical method that uses a stepwise, iterative process to

[17] Prisons with the highest number of young adults were selected for survey administration.

identify response patterns and underlying typologies present in the data.[18] The research team identified distinct patterns of responses to the Restoring Promise Prison Culture Survey questions, including groupings, or classes, defined as "zones of experiences" (ZoE)—i.e., distinct subtypes of prison culture that young adults and staff may experience while living and working in a correctional setting. LCA also identifies commonalities in characteristics inherent to each ZoE.

Researchers fit 16 LCA models, specifying within two and six latent classes. Based on the Bayesian Information Criteria (BIC), entropy, and parsimony principle, for the young adults' baseline models, three classes (ZoE1-ZoE3) were selected for Purpose, Safety, Fairness, and Family dimensions. For the Young Adults' follow-up models, two classes were selected for all dimensions (ZoE1 & ZoE2). Regarding the staff's baseline models, three classes (ZoE1-ZoE3) were chosen for each dimension. Two classes (ZoE1 & ZoE2) were selected for the staff's follow-up surveys for each dimension (See Appendix E for LCA covariate models).

*Results and findings*

This section includes findings from the analysis of unit records and the prison culture survey.

Implementation of core model components

*Table 12 Descriptive information encompassing the first 18-months of each unit*

| Unit Name | # of beds | Hours of out-of-cell time | Number of on-unit programs | Avg # of disciplinaries | Avg length of sentence | # of young adults who lived on unit |
|---|---|---|---|---|---|---|
| CADRE OF HOPE | 65 | 15 | 22 | 0.76 | 18 years | 42 |
| CORE | 67 | 15 | 25 | 0.60 | 7.5 months | 80 |
| TRUE | 104 | 16 | 53 | 0.59 | 2 years | 76 |
| WORTH | 40 | 14 | 58 | 0.35 | 6 months | 67 |

[18] Latent Class Analysis: A Guide to Best Practice - Bridget E. Weller, Natasha K. Bowen, Sarah J. Faubert, 2020 (sagepub.com)

The analysis of unit records and data showed a high level of consistency across different settings related to daily routine and to the operations of the mentor model, restorative practices, and family engagement. All unit mentors play a very similar role which includes conducting workshops and classes, maintaining accountability, collaborating with staff on daily unit schedules and young adult growth and development, and conducting one on one check-ins with young adults. There is also an accountability model in all units that uplifts restorative justice allowing for mentees who broke a unit agreement to discuss, learn, and grow from mistakes. This often takes the form of restorative circles, where all residents of the unit gather in a circle and have an open discussion as to what happened, hear everyone's input, and solve issues through conversation and dialogue. Regarding family partnership, all units provided new mentees' families with an orientation and all units had family engagement visits--additional visits provided two times a month where mentees can sit next to their families, engage in activities, and involve unit staff and mentors in their conversations.

There were areas of divergence as to how the unit's structure different components of the Restoring Promise approach. For example, in the CORE, Cadre of Hope, and TRUE units, mentees are assigned to their respective mentors, while WORTH has mentees move onto the unit and, overtime, develop bonds with mentors with whom they are most comfortable. Additionally, while all units have a family partnership model and offer orientations and engagement events, only WORTH builds upon the family aspect by hosting meetings and having phone calls with families.

Latent Class analysis

Overall, results from the LCA based on general population surveys yielded zones of experience with high variability and low scores for staff and young adults across all four dimensions. The

results of culture surveys in the Restoring Promise units yielded more positive and homogenous zones of experience for staff and young adults across all four dimensions.

For young adults in the general population, location was significantly associated with being in one zone over another for three out of the four dimensions. For the Purpose dimension, young adults from South Carolina men's facilities and the CT women's facility were more likely to be in a positive zone of experience. For the Safety dimension, young adults from the Middlesex County men's jail were more likely to be in a zone of experience with mixed responses to questions. For the Family Dimension, young adults from the Middlesex County men's jail were more likely to be in a positive zone of experience. In Restoring Promise units, young adults from the WORTH unit were more likely to be in a positive zone of experience for two dimensions (Purpose and Fairness).

For staff in the general population, location was significantly associated with being in one zone over another for three (Purpose, Safety, and Family) out of the four dimensions. This was also true for staff in Restoring Promise units. Staff from the Cadre of HOPE unit in South Carolina were more likely to fall in slightly different (and less positive) zones of experience for the Purpose and Safety dimensions; and staff from the PACT unit in Massachusetts were more likely to fall in a slightly different, less positive zone of experience for the Family dimension.

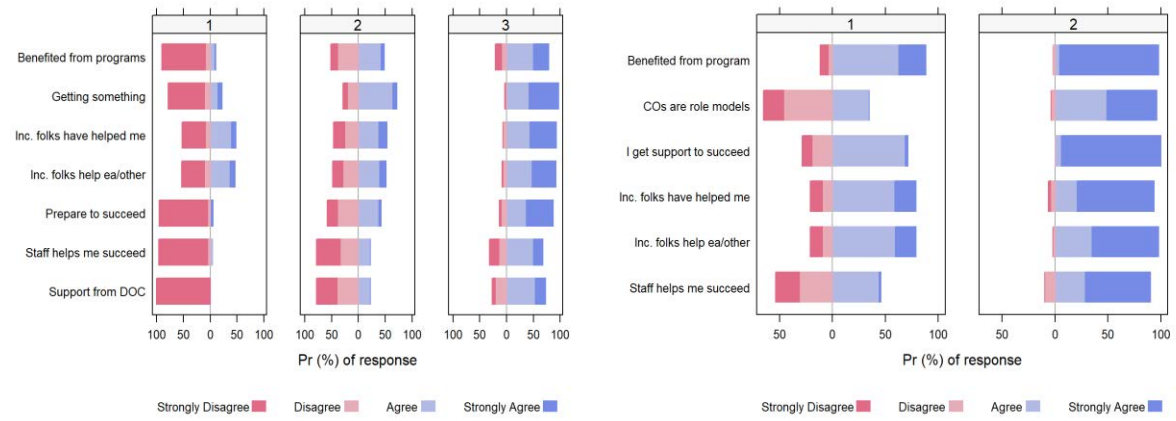
Young adults

*Purpose* (See Figure 1). At the baseline, young adults' perceptions and zones of experience regarding their sense of purpose while incarcerated ranged from extremely negative (ZoE1) to mostly positive (ZoE3). The largest share of the young adult population fell in Zone 1 (41%); and the smallest in Zone 3 (26%). Facility conditions, like living in a clean facility and being in

the women's facility in Connecticut and in the men's facilities in South Carolina were related to young adults being in zone three (the most positive).

Young adults in Restoring Promise units generally had mostly positive zones of experience with the main difference between the two zones being less agreement with questions related to staff. Specifically, those in the more negative zone were less likely to agree that corrections officers are good role models and that staff try to help them succeed. The share of the young adult population who fell in each zone was similar for both (52% and 49%, respectively). Facility conditions such as cleanliness and having good food; as well as living in the WORTH unit were related to having a more positive experience (ZoE2).

*Figure 1: Young adults' response patterns- zones of experience- for the Purpose dimension in general population (left), and Restoring Promise units (right).*




*Safety* (See Figure 2). Young adults' patterns of responses to safety questions in the general population fell into three zones of experience. The first demonstrated a middle ground experience with respondents almost equally likely to feel safe and unsafe, this is where the highest share of the young adult population fell (48%). The second zone of experience was an overwhelmingly negative experience of safety, and the third was a mix between responding



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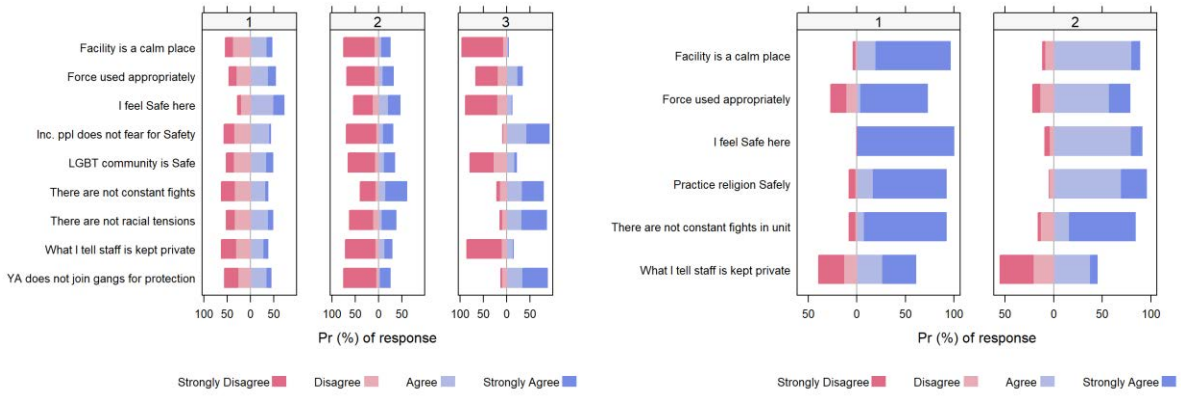
overwhelmingly negative or positive. Covariates regarding cleanliness and being incarcerated in the Middlesex County Sheriff's Office were related to being in ZoE1 vs ZoE3.

On the other hand, perceptions from young adults in Restoring Promise regarding safety fell into two generally positive zones, with a similar share of the young adult population in each (53% in ZoE 1, and 47% in ZoE 2). The two zones of experience determined by the model indicate that overall, young adults feel safe in their environment. The main difference between the two experiences was the degree of agreement with certain questions- with those in Zone 1 more likely to strongly agree than to somewhat agree with questions related to safety. For both zones, some young adults believe that what they tell staff is not kept private and disagree to some extent with them using force appropriately. There were no differences between locations for this dimension.

*Figure 2: Young adults' response patterns- zones of experience- for the Safety dimension in general population (left), and Restoring Promise units (right).*




*Fairness* (See Figure 3). Young adults' perceptions of fairness in prison generated three zones of experience. Those whose responses fell in ZoE3 had a distinctly negative experience and a little over a third of young adults' responses fell in this zone (37%), even though, to some degree, they agreed that they and their families understand the rules. Young adults in ZoE1, however, had a



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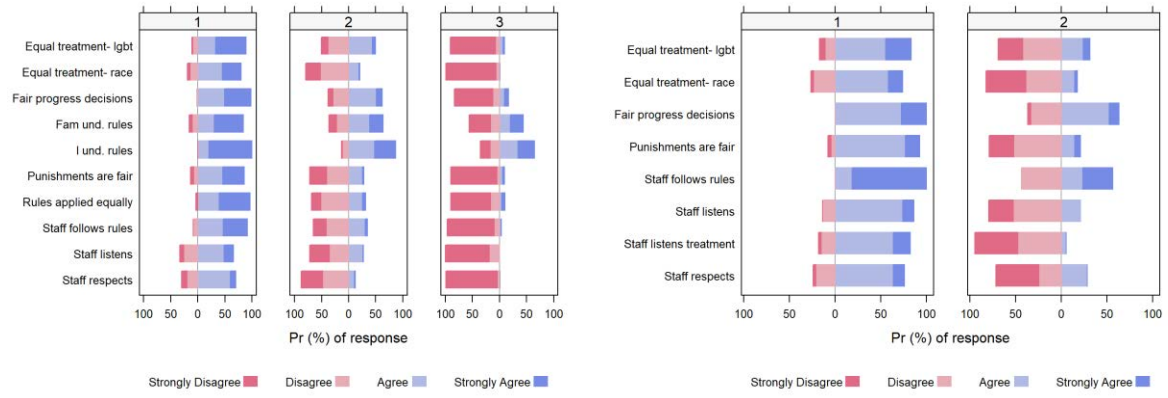
distinctly positive experience, while those in ZoE2, which had the highest share of the young adult population (46%) were split between responding negatively and positively.

Fairness was a more complex dimension on Restoring Promise units, in that the two zones of experience were different from one another, and the population share was evenly split. Those in ZoE1 were more likely to rate all fairness items positively; while those in ZoE2 were split. Living in the WORTH unit was related to having a more positive experience regarding fairness (being in ZoE1 vs. ZoE2).

*Figure 3: Young adults' response patterns- zones of experience- for the Fairness dimension in general population (left) and Restoring Promise units (right).*




*Family* (See Figure 4). For young adults in the general population, their experience connecting with their families has different levels. ZoE1 demonstrated the most negative experience and a quarter of young adults fell in this zone. However, even though young adults in this zone were likely to have little connection to their family, they still agreed that they can count on their families and that their families help them. Young adults in ZoE2, which had the highest share of young adults (54%), experience more connection to their family and demonstrate stronger agreement with their family being likely to visit and know how they are doing. In ZoE3, young adults have a similar experience to those in ZoE2 but differ in their degree of agreement.



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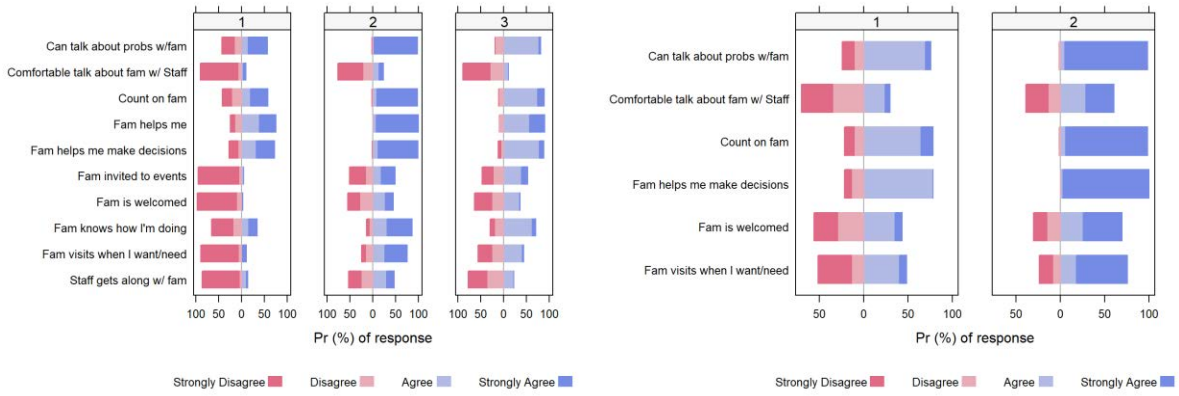
Young adults in Restoring Promise units have a positive experience regarding family connection. In both zones, young adults agree that they can talk to family about problems, count on them, and that they are helpful in making decisions. In addition, young adults agree that their family is welcome in the unit and can visit when needed. The main difference between ZoE1 and ZoE2 is that ZoE2 responses reflected a more positive experience. Specifically, in ZoE1, young adults are more likely to feel their family is not welcome, that they can't visit when needed, and that they cannot talk about family with staff. Young adults were pretty evenly split between the two zones (52% and 48%, respectively).

*Figure 4: Young adults' response patterns- zones of experience- for the Family dimension in general population (left) and Restoring Promise units (right).*




## Staff

*Purpose* (See Figure 5). Staff responses regarding questions in the purpose dimension were categorized into three classes. In ZoE1, which had the lowest share of the population (19%), there was a high probability of strongly agreeing that young adults have the support they need to succeed, that staff are good role models who try to help young adults, and that young adults have the potential to succeed. In ZoE2, which had the highest share of the population (53%) staff still held these beliefs but with less strength, whereas in ZoE3, staff were least likely to agree with most of the Purpose items. Working in the women's facility in Connecticut was related to being



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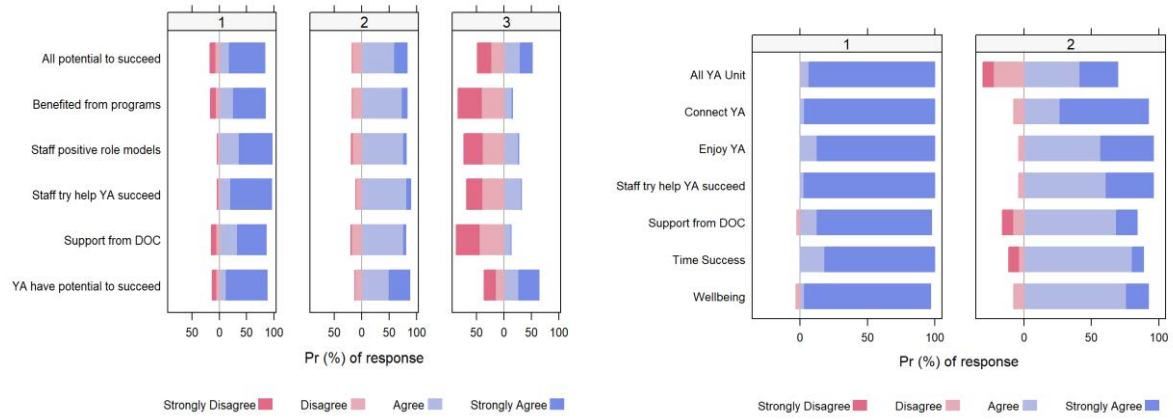
in ZoE2 or ZoE3 as opposed to ZoE1, and those working in South Carolina were more likely to be in ZoE3 in compared to ZoE1.

Responses to the survey for staff in Restoring Promise units fell in two zones, the first was overwhelmingly positive and most staff fell in this zone (54%). Staff in ZoE1 strongly agreed with all items in the purpose dimension. Staff in ZoE2 demonstrated a high level of agreement with all items as well but did not necessarily agree that all young adults in the unit have the potential to succeed. Working in COH was significantly associated with being in ZoE1.

*Figure 5: Staff response patterns- zones of experience- for the Purpose dimension in general population (left) and Restoring Promise units (right).*




*Safety* (See Figure 6*).* In the general population, staff perceptions regarding safety were varied, with similar shares of the population falling in three different zones of experience. Those who fell in ZoE3 (30% of the population) had a mostly negative perception of safety. However, they did agree that staff use force appropriately, that coworkers have their backs, and that staff stop fights. Staff who fell in ZoE2 (38% of the population), were more likely to experience feeling safe around young adults and to feel cared for by the administration and colleagues. However, they would more likely agree that there is young adult related violence and gang issues, and that restrictive housing effectively controls the population and maintains safety. ZoE1 is a more



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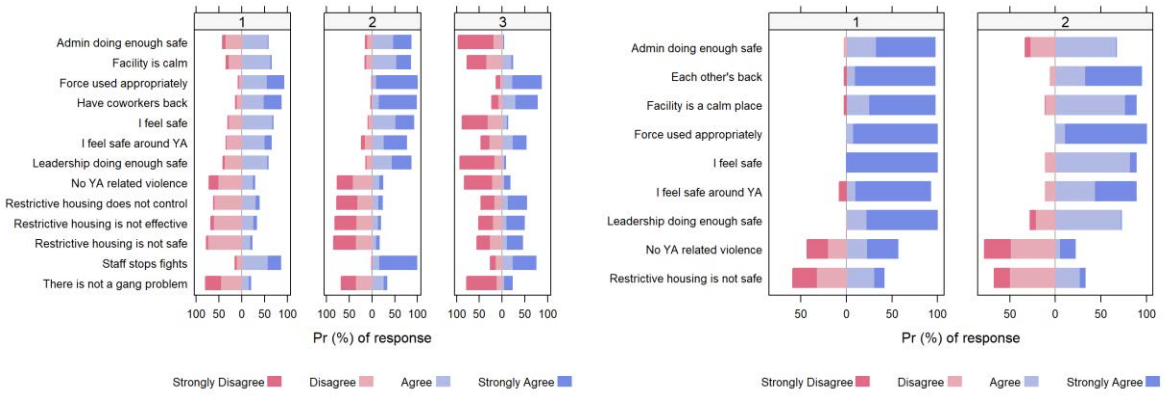
middle-ground experience with similar characteristics to ZoE2. Working in a South Carolina facility was significantly associated with being in ZoE2 compared to ZoE1.

In Restoring Promise units, staff experiences regarding safety fell in two zones. Those in ZoE1, where most staff responses fell (68%) responded overwhelmingly positively to all safety questions except for questions related to young adult violence and viewing restrictive housing as an effective tool. Staff whose responses fell in ZoE2 were still relatively positive, but the degree of agreement was not as strong as in ZoE1. Being in Cadre of Hope was significantly associated with being in ZoE1.

*Figure 6: Staff response patterns- zones of experience- for the Safety dimension in general population (left) and Restoring Promise units (right).*




*Fairness* (See Figure 7). Staff's perceptions regarding fairness in the general population also generated three zones of experience. ZoE1 demonstrates a primarily negative experience, with the caveat that staff would acknowledge that they follow the rules. ZoE2 is a more positive experience, where staff believe that both family and young adults understand the rules, decisions on progress and punishment are fair, and young adults listen to staff and their advice; however, young adults do not always follow the rules and do not necessarily respect each other. ZoE3 is a middle-ground experience between the two.



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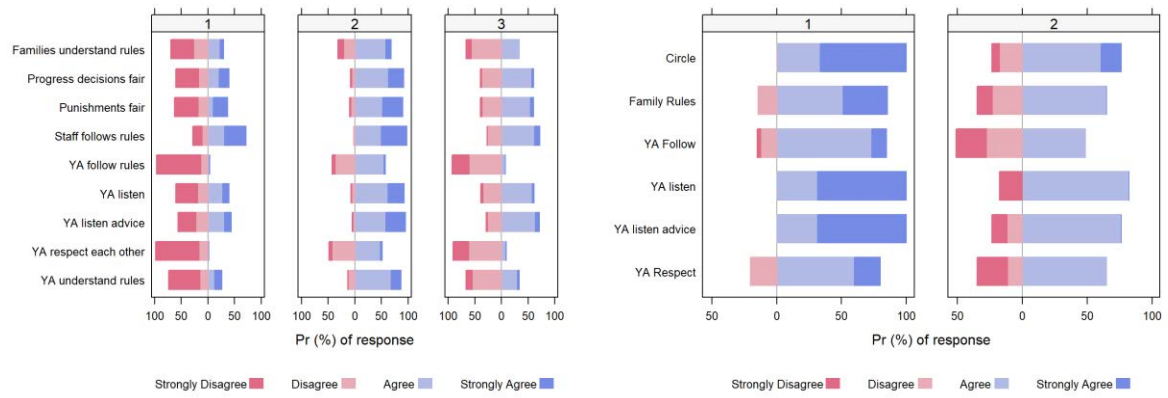
For Staff in Restoring Promise units, fairness is a positive experience. Response patterns in ZoE1- the zone with the higher share of staff (67%) were overwhelmingly positive. Staff in this zone agree that using circles as conflict resolution is a fair process; young adults listen and ask for advice and respect one another. ZoE2 is also positive, yet in this zone staff struggle a bit with perceptions of young adults and are less likely to agree that young adults follow the rules, listen to advice, or show respect to each other.

*Figure 7: Staff response patterns- zones of experience- for the Fairness dimension in general population (left) and Restoring Promise units (right).*




*Family* (See Figure 8). In the general population the three zones of experience for staff regarding the Family dimension demonstrated variation in how staff relate to families and to young adults about their families. In all zones, staff understand and agree that family is important for young adults, however there is variability in whether staff are trained to work with them, whether they seek family's advice when working with young adults, and whether they believe engagement with families in necessary for their work. Those in ZoE2 were most likely to agree that they feel comfortable working with families and talking about them with young adults. Those in ZoE3 were least likely to agree with any of the questions in this dimension. ZoE1 is the middle ground between ZoE2 and ZoE3. Being in a facility in South Carolina makes it more likely for staff to be in ZoE1 as compared to ZoE3.



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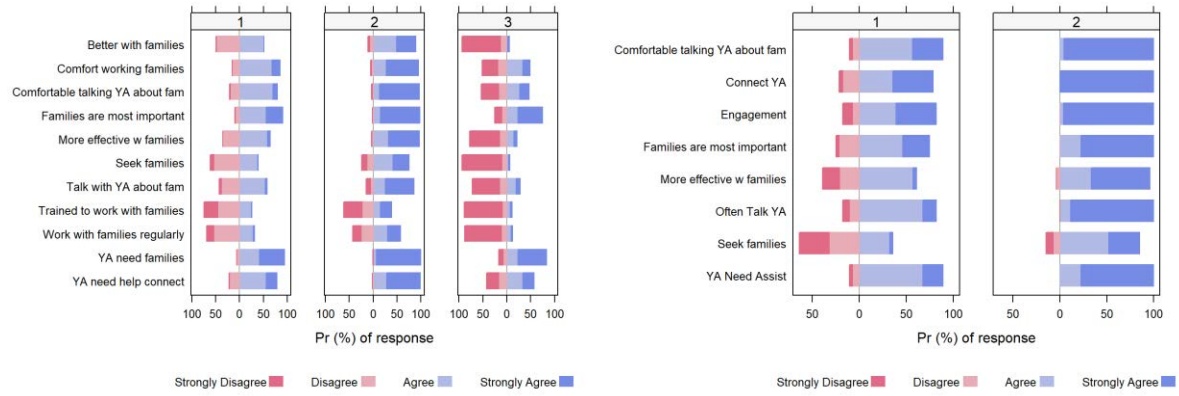
In Restoring Promise units, staff perceptions related to questions in the family dimension are positive. Staff in ZoE2 were more likely to agree and strongly agree with most of the items for this dimension. In ZoE1, staff were less likely to believe that working with families does not make things more effective and that they would not seek family support to work with young adults. Being in any Restoring Promise unit relates to being in ZoE2 vs. ZoE1 compared to PACT.

*Figure 8: Staff response patterns- zones of experience- for the Family dimension in general population (left) and Restoring Promise units (right).*




## Limitations

One limitation of this study was our inability to procure data related to implementation of the core model components from the Middlesex County Sheriff's Office. We were only able to include the PACT unit in the prison culture survey analysis.

Another limitation is the sample size for this study- if we had a larger sample size, we could have looked at how the different dimensions interacted with each other in the latent class analysis; and produced a more robust analysis. There are two reasons this was not possible- in the baseline survey for young adults, not everyone got all question; and for the unit survey we simply didn't have enough people living and working on the unit at any given time to produce a large sample size. Additionally, as responding to the survey is a voluntary process, YA and staff

chose not to respond to specific questions, which led to a large percentage of missing values for variables that we would have liked to use as covariates, such as facility condition questions and demographic questions – this was exacerbated by a small sample size and most acute for staff.

Latent class analysis is a descriptive analysis in nature, and it does not allow us to make causal claims. Also, it is not generalizable to a broader population-both because of the sample size and because young adults who live in, and staff who work in, Restoring Promise units volunteer to be there. We expect that by replicating this exercise with new facilities and many more units, we may provide a more robust analysis with greater external validity.

**Participants and other collaborating organizations**

The study required deep partnership with multiple departments of corrections—the leadership but also the people that work and are incarcerated in them.

For the RCT and PSM, the collaborating organization was SCDC, and the participants were all young adults at Lee and all young adults sentenced under the YOA at Turbeville who were incarcerated from October 2017-October 2022.

For the cross-site analysis, the collaborating organizations were the departments of corrections in Connecticut and South Carolina and the Middlesex Sheriff's Office in Massachusetts. The participants were the young adults and staff who work(ed) and live(d) on the five Restoring Promise units.

**Changes in approach from original design and reason for change**

The research team pivoted numerous times during the research study as a result of external factors—primarily, but not only, related to the impact of the COVID-19 global pandemic (and its

variants). There are three areas that were impacted for the Randomized Control Trial: the observation period, eligibility criteria, and collection of Prison Culture Survey data.

The grant proposal indicated that the *year of observation* would start one year after study enrollment (or 'move-in' to the Restoring Promise young adult housing unit). However, given the shorter lengths of stay for young adults in Turbeville, the year of observation was changed and began the day of enrollment (or 'move-in').

Similarly, the *eligibility criteria* written in the grant proposal noted that young adults would have to have at least 1 year left on their sentence, but this was no longer feasible given the need to adjust the observation period.

The grant proposal indicated that the research team would collect data from young adults using the *Restoring Promise Prison Culture Survey* after the year of observation and would continue for a year. Due to the COVID-19 pandemic and its variants, Restoring Promise Prison Culture Survey data collection did not begin until three years after the first cohort was randomized. The delay led to significant attrition of research participants, primarily at Turbeville. In total, 145 participants were lost to survey collection follow-up, or 73%. The significant delay negatively impacted our ability to collect data from all participants because of release from incarceration or movement to other facilities and, as a result, we solely relied on administrative records. Additionally, at the time of data collection two housing units at Lee were under quarantine restrictions and we were unable to collect data from 24 participants. Due to the low response rate, we decided not to include the results from the survey.

**Artifacts**

Two vera publications are forthcoming and we plan to identify opportunities to publish in peer reviewed journals. We will maintain communication with NIJ to provide updates in this regard.

*Data sets generated (broad descriptions will suffice)*

Randomized Control Trial & Propensity Score Matching Study

I. Person level file for treatment and control group participants, including data on sociodemographic information, incarceration history, and outcomes.
II. Person level file for control group applicants and matched groups, including data on sociodemographic information, incarceration history, and outcomes.
III. Case level files for a subset of young adults incarcerated in South Carolina from October 2017-October 2022
    a. Disciplinaries
    b. Management Information Notes (MINs)
    c. Grievances
    d. Restrictive Housing Unit (RHU) stays

Cross-site analysis

I. Baseline prison culture survey data from staff and young adults in the general population
    a. Connecticut men's
    b. Connecticut women's
    c. Massachusetts
    d. South Carolina
II. Prison culture survey data from staff and young adults in Restoring Promise units
    a. Connecticut men's
    b. Connecticut women's
    c. Massachusetts
    d. South Carolina

# Appendices

## Appendix A: Restoring Promise Implementation in South Carolina Department of Corrections

There are four areas related to the implementation of Restoring Promise in South Carolina: young adults are supported by trained staff and mentors and their families, young adults learn about and practice restorative justice, and young adults participate in a daily routine that is structured and organized.

**Support from Staff and Mentors.** Daily, corrections professionals and mentors work in partnership to provide young adults guidance, structure, and support. The team guides the young adults as they navigate the prison environment, maintain structure and accountability on the unit, and meaningfully prepare the young adults to transition back into their communities successfully.

SCDC assigned a program coordinator, typically a counselor, a unit manager, a lieutenant, and security staff to the Restoring Promise housing units. The program coordinator and unit manager worked with Restoring Promise technical assistance providers to ensure that programmatic (peer and staff-led workshops, educational activities, family engagement, community outreach, restorative practices) and operational (ensuring the safety and security of conditions, residents, staff and visitors) efforts complemented one another to provide a space that was conducive to the goals of the initiative.

SCDC assigned 16 mentors to live and work on the Restoring Promise housing units. Mentors bridged the gap between incarcerated young adults and correctional professionals. Mentors co-created the community agreements (unit rules) with the unit's corrections professionals, held young adults accountable when community agreements were violated; scheduled workshops, trainings, and activities; and facilitated team-building activities/programs on the units. Mentors meet with the Restoring Promise site team for regular training and technical assistance meant to ensure the sustainability of the unit and real-time troubleshooting, where necessary.

Each mentor was also assigned a group of young adults to provide one-on-one support. Mentors created a trusted space with their assigned group—teaching young adults how to communicate effectively to work through conflicts, to identify and talk about their emotions, and prepare for successful transition out of prison.

To prepare staff and mentors, Restoring Promise trained them using a three-week curriculum. The training covered young adult development, family engagement, conflict resolution, restorative justice, and communication skills. Restoring Promise also facilitated workshops with the corrections professionals and mentors prior to the unit opening to plan the structure of the new unit and design how it would operate.

**Family Engagement & Partnership.** Family engagement, broadly defined to include supportive people, was a critical part of the intervention in SCDC. Correctional staff and mentors worked with young adults' support systems to help them navigate their time in the Restoring Promise community. Family and loved ones of young adults were invited to attend an orientation that

introduced them to the initiative and provided an immersive experience on the unit. Family and loved ones were encouraged to help make their loved one's cell a space of comfort and familiarity by bringing comforters, personal memorabilia, decorating with photographs, and other sentimental items. In addition to the orientation, family engagement events were held throughout the year to strengthen connections young adults had to their families. The family engagement events were less restrictive spaces that allowed for more intimate interactions—young adults shared their accomplishments and certificates with their families, introduce their families to the mentors and corrections staff, and share artwork and other projects that were within the facilities.

**Restorative Justice.** Restorative justice practices replaced punishment on the units to hold young adults accountable, as needed. SCDC has five levels of infractions that come with punishments—three out of five were allowed to be addressed on the housing unit using restorative practices alone, while the other two included restorative practices and traditional disciplinary measures at the warden's discretion. In addition to SCDC rules, staff and mentors created community agreements (for example, participating in twice daily check-ins.) before the unit opened that dictated expectations and the restorative practices that would be used in response to community agreement violations. For example, if there was a disagreement between incarcerated men on the unit, a one-on-one meeting would be held to understand and address the root cause. Restorative circles were held for more serious violations of the community agreements to provide space for the incarcerated person to openly acknowledge the harm their behavior caused the community and provide opportunity for the community to have an input on how the harm can be restored. Circle practice is geared toward creating space in the unit that fosters open communication, peer support and community.

**Daily Routines.** The units made efforts to shape daily routines that were reflective of life in the community. Young adults spent 15 hours a day out of their cells, attended school or participated in a vocational education program, and worked within the facility. On the unit, the young adults completed chores, participated in a wide range of enrichment programming (e.g., Critical Thinking, Healing 101, Interviewing 101, Cultural Awareness), and met with their mentors one-on-one. Mornings and evenings were anchored by group check-ins, often held in the form of circles led by the team of corrections professionals and mentors. The twice daily check-ins reinforce a sense of community on the unit, engage everyone's voice, and bring in everyone's unique perspectives and experiences to handle unit matters collaboratively.

## Appendix B: The Fundamental Components of a Restoring Promise Unit Across Sites

Mentorship Model

The mentorship models among the Restoring Promise units in South Carolina and Connecticut share fundamental qualities. At the center of each of these sites is the mentor-and-young adult relationship designed to bridge the gap between incarcerated young adults and the staff who work in those prisons (see above for description of mentors).

Apart from the women's facility, there is one mentor assigned to a select number of young adults. At the women's facility, the young adults and mentors independently forge a partnership overtime. In all Restoring Promise housing units mentors are responsible for working one-on-one with young adults, as needed; facilitating workshops and classes; assisting staff with operations of the unit (coordinating orientations for young adults and families, managing the daily schedule unit, creating, distributing, and reviewing the community agreements (unit rules) and developing contracts for mentees to sign related to community agreements; and facilitating team-building activities/programs on the unit. Mentors have one-on-one meetings with their mentors throughout the day and stay on the floor to interact with mentees and staff. Aside from mentoring their mentees, a major duty of mentors is to uplift and maintain morale and to identify and rectify the root cause of any low morale in the unit. They are responsible for providing guidance to their mentees and working with staff to gauge where adjustments may need to be made on the unit. When issues arise in the unit, mentees are to address their concerns to their mentor, who has the responsibility of formulating a response plan, which usually manifests as a restorative circle. It is up to the mentors' discretion whether they deem it necessary to involve staff right away. These circles involve all mentees and mentors on the unit, and sometimes a staff member if mentors deem it necessary, to gather together to de-escalate the situation. The circle is meant to allow all individuals to share their perspectives and feelings about the issue, to engage all voices, and for a solution to be reached as a group effort. If the issue persists and staff and mentors feel they have exhausted all remedies to no avail, then the chain of command is followed, and higher-up parties become involved if needed.

Accountability Model

When it comes to accountability, each site has established its own community agreements and has given its mentors a leadership role in handling arguments/problems among mentees. Community agreements often include items such as no contraband, gossiping, solicitation, stealing, weapons, or violence; having respect for all persons; keeping communal areas clean and orderly; and maintaining an open mind and trusting the process.

Problems/incidents are handled and resolved through a restorative lens instead of a punitive lens, meaning "restorative responses" are issued instead of "punishments." When a mentee is found engaging in activities that go against the community agreements, their mentor is notified and conducts a one-on-one meeting with him. These one-on-ones are meant to allow the mentee to explain himself, understand the root of the problem (as opposed to dismissing the reasoning and punishing straight away), and demonstrate and teach a healthier way of handling conflict. The mentor may then meet with other mentors to discuss resolutions if necessary, and a restorative circle will be arranged. These circles are meant to be facilitated by a trained neutral staff member; though, if the incident is deemed minor (such as absence from class or failing to complete a chore(s)), then a mentor may lead the circle. If the incident involves multiple parties, then each party would meet separately first to share their perspective on the issue, and then made

to gather for circle where peer support is expected and encouraged. The daily integration of circles, not just restorative response circles, but the daily check-in and-out circles, are geared toward creating a space in the unit that fosters open communication, peer support, and community.

A primary component of the Restoring Promise accountability model is the use of restorative responses in response to disciplinaries. These restorative responses can be a writing assignment on topics relevant to the disciplinary. For example, if the mentee was caught smoking or in possession of certain contraband, then he may be tasked with writing an essay on the detrimental effects of cigarettes. Other responses could be a public apology to the harmed party and/or to the entire community (all Restoring Promise residents and staff); an extra chore without pay or additional duties that in some way support the group/unit such as assisting security with ensuring all mentees are up and ready for morning circle on time; attending extra classes or sessions with his mentor; a temporary suspension from the unit or in more severe cases, removal from the unit.

Family Partnership Model

Family Partnership is a key element of the Restoring Promise model, and it takes shape through two primary forms: family orientation and family engagement. Family orientation is a one-day event in which the families and loved ones of mentees are invited to the unit to attend a presentation put on by the prisons' upper administration about what Restoring Promise is, its purpose, and its guiding principles. Usually, the warden gives opening remarks; staff and mentees introduce themselves; volunteering mentees present the unit's mission, vision, and pledge; designated mentors give speeches; the warden facilitates a question-and-answer session; and the event closes out with an hour-long (or so) session for mentees' families to meet and engage with staff and mentors. This orientation is a formal yet celebratory event for all involved parties and acts as an opportunity for families to get an immersive experience in the unit with their loved ones. In fact, at both South Carolina units, families were allowed to bring bedding from home for their mentee's cells, which are commonly decorated with photographs of loved ones, personal memorabilia, and other sentimental items that create a space of comfort and familiarity.

Family engagement consists of familial visits that are much more intimate than what standard visitation in the general population allows and can last for a few hours (usually two to four hours, depending on the unit). Visitors and mentees sit next to one another and share physical contact. Mentees introduce their mentors to their families, as well as share any certificates they have earned, schoolwork, artwork, and other items that showcase their achievements to their families. Mentees who are parents have even been allowed to provide coloring books as an activity to share with their children. By nature of their design, family engagement visits allow for interaction and relationship-building between prison staff and families and ultimately strengthen the existing relationships mentees have with their families, so that, when released, they have a more stable support system waiting for them at home. These visits also allow families to receive direct updates from unit staff about how their loved one is doing in the program, which creates an open line of communication between the two parties. Additionally, this visitation format allows for an even greater support network to be forged as all visitors meet and interact with each other. These relationships strengthen as Restoring Promise units have hosted their own special events to which families have also been invited. Such events have included anniversaries

(commemorating the opening of the unit), Mother's Day and Father's Day events, and Black History Month celebrations.

## Appendix C: RCT Multivariable Logistic Regression Output

*Disciplinary charges*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 1.111 | 0.551 | 2.240 | 0.7679 |
| **Age_atapp** | 0.677 | 0.549 | 0.833 | 0.0002 |
| **black** | 0.584 | 0.225 | 1.511 | 0.2672 |
| **ME** | 4.825 | 1.514 | 15.377 | 0.0078 |
| **MI** | 15.958 | 3.651 | 69.747 | 0.0002 |
| **HIGHEST_GRADE_LEVEL** | 1.239 | 0.952 | 1.614 | 0.1113 |
| **exposure1** | 1.012 | 1.007 | 1.017 | <.0001 |
| **covid1** | 1.064 | 0.374 | 3.023 | 0.9078 |
| **totcha_max_pre** | 3.036 | 1.422 | 6.479 | 0.0041 |

*Disciplinary convictions/informal resolutions*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 1.111 | 0.548 | 2.252 | 0.7707 |
| **Age_atapp** | 0.644 | 0.519 | 0.797 | <.0001 |
| **black** | 0.483 | 0.184 | 1.267 | 0.1392 |
| **ME** | 4.846 | 1.522 | 15.424 | 0.0076 |
| **MI** | 18.274 | 4.126 | 80.931 | 0.0001 |
| **HIGHEST_GRADE_LEVEL** | 1.187 | 0.919 | 1.533 | 0.1890 |
| **exposure1** | 1.012 | 1.007 | 1.017 | <.0001 |
| **covid1** | 1.148 | 0.399 | 3.302 | 0.7977 |
| **totcon_max_pre** | 3.685 | 1.710 | 7.943 | 0.0009 |

*Disciplinary charges (filtered)*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.514 | 0.259 | 1.020 | 0.0569 |
| **Age_atapp** | 0.743 | 0.610 | 0.906 | 0.0033 |
| **black** | 0.457 | 0.184 | 1.135 | 0.0915 |
| **ME** | 4.490 | 1.544 | 13.053 | 0.0058 |
| **MI** | 5.964 | 1.632 | 21.791 | 0.0069 |

| | | | | |
|---|---|---|---|---|
| **HIGHEST_GRADE_LEVEL** | 1.184 | 0.922 | 1.519 | 0.1860 |
| **exposure1** | 1.011 | 1.006 | 1.016 | <.0001 |
| **covid1** | 0.986 | 0.355 | 2.740 | 0.9784 |
| **totcha_max_pre** | 3.628 | 1.758 | 7.484 | 0.0005 |

*Disciplinary convictions/informal resolutions (filtered)*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.517 | 0.260 | 1.030 | 0.0605 |
| **Age_atapp** | 0.714 | 0.583 | 0.873 | 0.0011 |
| **black** | 0.392 | 0.156 | 0.988 | 0.0471 |
| **ME** | 4.596 | 1.579 | 13.376 | 0.0051 |
| **MI** | 6.594 | 1.787 | 24.327 | 0.0046 |
| **HIGHEST_GRADE_LEVEL** | 1.129 | 0.886 | 1.438 | 0.3258 |
| **exposure1** | 1.011 | 1.006 | 1.016 | <.0001 |
| **covid1** | 1.072 | 0.382 | 3.008 | 0.8948 |
| **totcon_max_pre** | 4.107 | 1.980 | 8.520 | 0.0001 |

*Violent charges*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.214 | 0.077 | 0.597 | 0.0032 |
| **Age_atapp** | 0.711 | 0.532 | 0.950 | 0.0211 |
| **black** | 2.445 | 0.496 | 12.064 | 0.2722 |
| **ME** | 0.910 | 0.275 | 3.013 | 0.8774 |
| **MI** | 1.220 | 0.179 | 8.332 | 0.8391 |
| **HIGHEST_GRADE_LEVEL** | 0.869 | 0.616 | 1.224 | 0.4209 |
| **exposure1** | 1.010 | 1.002 | 1.017 | 0.0103 |
| **covid1** | 0.290 | 0.043 | 1.978 | 0.2066 |
| **viocha1_max_pre** | 1.842 | 0.649 | 5.230 | 0.2511 |

*Violent convictions*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.265 | 0.090 | 0.780 | 0.0159 |
| **Age_atapp** | 0.738 | 0.542 | 1.006 | 0.0542 |

| | | | | |
|---|---|---|---|---|
| **black** | 1.632 | 0.325 | 8.202 | 0.5519 |
| **ME** | 1.136 | 0.320 | 4.032 | 0.8440 |
| **MI** | 0.743 | 0.067 | 8.208 | 0.8084 |
| **HIGHEST_GRADE_LEVEL** | 0.893 | 0.606 | 1.315 | 0.5661 |
| **exposure1** | 1.008 | 1.000 | 1.015 | 0.0385 |
| **covid1** | 0.620 | 0.092 | 4.202 | 0.6248 |
| **viocon1_max_pre** | 2.844 | 0.968 | 8.358 | 0.0573 |

*Grievances*

| **Odds Ratio Estimates** | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.456 | 0.179 | 1.162 | 0.0999 |
| **Age_atapp** | 0.802 | 0.614 | 1.048 | 0.1056 |
| **black** | 0.883 | 0.276 | 2.822 | 0.8340 |
| **ME** | 1.635 | 0.481 | 5.563 | 0.4310 |
| **MI** | 3.218 | 0.559 | 18.541 | 0.1908 |
| **HIGHEST_GRADE_LEVEL** | 1.888 | 1.208 | 2.950 | 0.0053 |
| **exposure1** | 1.010 | 1.003 | 1.018 | 0.0061 |
| **covid1** | 0.240 | 0.039 | 1.479 | 0.1240 |
| **totgri_max_pre** | 1.376 | 0.427 | 4.435 | 0.5926 |

*Management Information Notes (Any MINs)*

| **Odds Ratio Estimates** | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.895 | 0.451 | 1.778 | 0.7518 |
| **Age_atapp** | 0.794 | 0.646 | 0.975 | 0.0279 |
| **black** | 2.000 | 0.744 | 5.379 | 0.1695 |
| **ME** | 1.195 | 0.461 | 3.101 | 0.7142 |
| **MI** | 2.771 | 0.784 | 9.792 | 0.1136 |
| **HIGHEST_GRADE_LEVEL** | 0.960 | 0.755 | 1.220 | 0.7363 |
| **exposure1** | 1.007 | 1.003 | 1.012 | 0.0027 |
| **covid1** | 0.803 | 0.241 | 2.671 | 0.7200 |
| **totmin_max_pre** | 0.958 | 0.405 | 2.270 | 0.9230 |

*Injury MINs*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.863 | 0.169 | 4.416 | 0.8598 |
| **Age_atapp** | 0.712 | 0.433 | 1.169 | 0.1795 |
| **black** | 0.463 | 0.071 | 3.034 | 0.4224 |
| **ME** | 0.678 | 0.099 | 4.631 | 0.6922 |
| **MI** | <0.001 | <0.001 | >999.999 | 0.9603 |
| **HIGHEST_GRADE_LEVEL** | 0.860 | 0.559 | 1.325 | 0.4944 |
| **exposure1** | 1.020 | 0.993 | 1.047 | 0.1484 |
| **covid1** | 0.509 | 0.015 | 17.087 | 0.7064 |
| **injury_max_pre** | <0.001 | <0.001 | >999.999 | 0.9844 |

*Self-harm MINs*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 1.188 | 0.082 | 17.165 | 0.8995 |
| **Age_atapp** | 1.495 | 0.752 | 2.972 | 0.2508 |
| **black** | 0.086 | 0.005 | 1.344 | 0.0802 |
| **ME** | 1.209 | 0.056 | 25.965 | 0.9034 |
| **MI** | 0.243 | <0.001 | 131.028 | 0.6597 |
| **HIGHEST_GRADE_LEVEL** | 1.662 | 0.521 | 5.300 | 0.3905 |
| **exposure1** | 1.006 | 0.987 | 1.026 | 0.5226 |
| **covid1** | 0.254 | 0.002 | 29.849 | 0.5729 |
| **selfharm_max_pre** | 67.622 | 0.827 | >999.999 | 0.0607 |

*Use of force MINs*

| Odds Ratio Estimates | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.382 | 0.124 | 1.174 | 0.0929 |
| **Age_atapp** | 0.676 | 0.480 | 0.953 | 0.0253 |
| **black** | 1.929 | 0.375 | 9.919 | 0.4319 |
| **ME** | 0.632 | 0.174 | 2.288 | 0.4842 |
| **MI** | 1.078 | 0.092 | 12.699 | 0.9524 |

| | | | | |
|---|---|---|---|---|
| **HIGHEST_GRADE_LEVEL** | 0.721 | 0.528 | 0.985 | 0.0398 |
| **exposure1** | 1.016 | 1.004 | 1.028 | 0.0089 |
| **covid1** | 0.235 | 0.022 | 2.525 | 0.2319 |
| **force_max_pre** | 1.433 | 0.215 | 9.535 | 0.7100 |

*Medical/mental health intervention MINs*

| **Odds Ratio Estimates** | | | | |
|---|---|---|---|---|
| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
| **tx** | 0.728 | 0.280 | 1.890 | 0.5136 |
| **Age_atapp** | 0.762 | 0.574 | 1.012 | 0.0606 |
| **black** | 0.606 | 0.195 | 1.889 | 0.3880 |
| **ME** | 0.444 | 0.133 | 1.489 | 0.1886 |
| **MI** | 1.090 | 0.149 | 7.966 | 0.9325 |
| **HIGHEST_GRADE_LEVEL** | 0.865 | 0.651 | 1.150 | 0.3174 |
| **exposure1** | 1.015 | 1.005 | 1.024 | 0.0028 |
| **covid1** | 0.135 | 0.016 | 1.103 | 0.0617 |
| **med_max_pre** | 4.225 | 1.213 | 14.720 | 0.0237 |

*Restrictive Housing Unit Stays*

| **Effect** | **Point Estimate** | **95% Wald Confidence Limits** | | **Pr > ChiSq** |
|---|---|---|---|---|
| **tx** | 0.165 | 0.042 | 0.640 | 0.0092 |
| **Age_atapp** | 0.692 | 0.478 | 1.001 | 0.0506 |
| **black** | 3.218 | 0.358 | 28.911 | 0.2967 |
| **ME** | 0.352 | 0.082 | 1.508 | 0.1595 |
| **MI** | 0.650 | 0.043 | 9.819 | 0.7555 |
| **HIGHEST_GRADE_LEVEL** | 1.036 | 0.624 | 1.722 | 0.8905 |
| **exposure1** | 1.017 | 1.004 | 1.030 | 0.0090 |
| **covid1** | 0.023 | 0.001 | 0.474 | 0.0145 |
| **totrhu_max_pre** | 5.081 | 1.341 | 19.254 | 0.0168 |

## Appendix D: Latent Class Analysis Prison Culture Survey Items & Model Fit Information

*Table D1: Prison Culture survey items included in analysis for each dimension and population.*

| Young Adult Baseline Survey | Young Adult Culture Survey | Staff Baseline Survey | Staff Culture Survey |
|---|---|---|---|
| Purpose | | | |
| I am getting the support I need from DOC to succeed during my time here.<br><br>DOC is preparing me for successful reentry.<br><br>I benefit from participating in programs here.<br><br>Corrections officers try to help me succeed.<br><br>I am gaining real life skills here.<br><br>Other incarcerated people on my unit help me.<br><br>Other incarcerated people on my unit help each other. | Corrections officers on this unit are good role models.<br><br>I have benefited from living on this unit.<br><br>I am getting the support I need to succeed on this unit.<br><br>Staff try to help me succeed.<br><br>Other incarcerated people on this unit help me.<br><br>Other incarcerated people on this unit help each other. | Young adults get the support they need from DOC to succeed.<br><br>Young adults benefit from participating in programs offered here.<br><br>Staff are good role models.<br><br>Staff try to help young adults succeed.<br><br>Young adults incarcerated here have the potential to be successful.<br><br>All young adults have the potential to be successful. | Young adults are getting the support they need from this unit to succeed.<br><br>Staff try to help young adults succeed.<br><br>Time in this program is preparing young adults to be successful.<br><br>All young adults in this unit have the potential to be successful.<br><br>The staff working on this pod care about the young adults' wellbeing.<br><br>I enjoy working with mentees on this unit.<br><br>My job involves talking and connecting with young adults. |
| Safety | | | |
| What I tell staff is kept private.<br><br>I feel safe here.<br><br>The facility is generally a calm place.<br><br>There are constant fights.<br><br>Corrections officers use force only when they have to.<br><br>There are racial tensions in this prison. | What I discuss with corrections officers is kept private.<br><br>I feel safe here.<br><br>This unit is generally a calm place.<br><br>There are constant fights.<br><br>Corrections officers use force only when they have to.<br><br>I am able to openly practice my religion. | The administration is doing enough to make this a safe work environment<br><br>Leadership in this facility doing enough to have a safe work environment<br><br>I feel safe working in this facility.<br><br>The facility is generally a calm place.<br><br>There is a gang problem at this facility. | The administration is doing enough to make this a safe work environment.<br><br>Leadership is doing enough to make this a safe work environment<br><br>I feel safe working in this unit.<br><br>This unit is generally a calm place.<br><br>Restrictive housing is an effective deterrent. |

| | | | |
|---|---|---|---|
| People who are incarcerated join gangs for protection.<br><br>People who are incarcerated fear for their safety.<br><br>People who are LGBT are safe here. | | Restrictive housing is effective for managing behavior.<br><br>Restrictive housing keeps people safe.<br><br>Putting young adults in restrictive housing helps control the population/make the facility safer.<br><br>Staff stop fights when they happen.<br><br>Staff use force only when they have to.<br><br>My coworkers and I watch each other's backs.<br><br>There is a lot of young adult-related violence in this facility.<br><br>I don't feel safe around young adults in this facility. | Staff use force only when they have to.<br><br>My coworkers and I have each other's back<br><br>There is a lot of young adult-related violence in the unit.<br><br>I don't feel safe around the young adults in this unit. |
| Fairness | | | |
| Corrections officers listen when I talk to them.<br><br>Corrections officers treat incarcerated people with respect.<br><br>I understand the facility rules.<br><br>My family understands the facility rules.<br><br>Rules here are applied to all incarcerated people equally.<br><br>Corrections officers treat people who are | Corrections officers listen when I talk to them.<br><br>Staff listen to me when making decisions about me.<br><br>Corrections officers treat people who are incarcerated with respect.<br><br>Corrections officers treat people who are incarcerated equally regardless of race or ethnicity.<br><br>Corrections officers treat | Young adults listen when I talk to them.<br><br>Young adults listen to me when they ask me for advice.<br><br>Young adults treat each other with respect.<br><br>Young adults understand the facility rules.<br><br>Staff understand the facility rules.<br><br>Families understand the facility rules. | Young adults listen when I talk to them.<br><br>Young adults listen to me when they ask me for advice.<br><br>Young adults treat each other with respect.<br><br>The accountability process is fair.<br><br>Families understand this unit's rules.<br><br>Young adults understand this unit's rules. |

| | | | |
|---|---|---|---|
| incarcerated equally regardless of race.<br><br>Punishments I receive here seem fair.<br><br>Corrections officers treat people equally regardless of sexuality.<br><br>Decisions about my progress seem fair.<br><br>Corrections officers follow the rules. | people who are incarcerated equally regardless of their sexual orientation.<br><br>Corrections officers follow rules.<br><br>Punishments I receive here seem fair.<br><br>Decisions about my progress seem fair. | The punishments young adults receive here seem fair.<br><br>Decisions about young adults' progress seem fair.<br><br>Young adults follow the rules. | |
| Family Connection | | | |
| I can count on my family when things go wrong.<br><br>I feel comfortable talking to corrections officers about my family.<br><br>My family really tries to help me.<br><br>Family helps me make decisions<br><br>People who visit me have positive interactions with corrections officers during visits.<br><br>People can visit when I want or really need them to.<br><br>My family feels welcomed at this facility.<br><br>My family knows how I'm doing here.<br><br>My family is invited to events. | I can count on my family when things go wrong.<br><br>I feel comfortable talking to unit staff about my family.<br><br>I can talk about problems with my family.<br><br>My family is willing to help me make decisions.<br><br>My family can visit me when I want or need them to.<br><br>My family feels welcome on this unit. | I feel comfortable interacting with families during visitation.<br><br>I work with families regularly.<br><br>I received training to interact with families.<br><br>Families are the most important source of support for incarcerated people, especially young adults.<br><br>I feel comfortable talking with young adults about their family.<br><br>I often talk with young adults about their families.<br><br>Young adults in this facility need additional assistance maintaining relationships with their families.<br><br>I seek support from family members to better understand the young adults I am working | Families are the most important source of support for incarcerated people, especially young adults.<br><br>I feel comfortable talking with young adults about their family.<br><br>I often talk to young adults about their families.<br><br>It is important that young adults stay connected to their family.<br><br>Young adults in this facility need additional assistance maintaining relationships with their families.<br><br>I seek support from family members to better understand the young adults I am working with.<br><br>Family engagement is an important part of the unit.<br><br>Working with families |

| | | | |
|---|---|---|---|
| | | with.<br><br>I have better results with young adults when their families are involved.<br><br>Working with families makes my work with young adults more effective. | makes my work with young adults more effective. |

*Table D2: Distribution of the population for young adult baseline models and model fit information for competing latent class models.*

| Population: Young adults in the general population | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Purpose** | | | | | | | | | |
| nclass | maxiter | nrep | par | bic | aic | Relative entropy | gsq | df | nobs |
| 3* | 10000 | 100 | 85 | 5258.6 | 4935.9 | 0.858 | 1558.2 | 244 | 329 |
| 2 | 10000 | 100 | 53 | 5285.1 | 5083.9 | 0.889 | 1742.5 | 276 | 329 |
| 4 | 10000 | 100 | 117 | 5309.5 | 4865.4 | 0.914 | 1430.1 | 212 | 329 |
| 5 | 10000 | 100 | 149 | 6281.1 | 5715.5 | 1.000 | 2066.9 | 180 | 329 |
| 6 | 10000 | 100 | 181 | 6445.9 | 5758.8 | 0.993 | 1945.0 | 148 | 329 |
| **Safety** | | | | | | | | | |
| 3* | 10000 | 100 | 103 | 6756.3 | 6380.1 | 0.873 | 3091.1 | 182 | 285 |
| 2 | 10000 | 100 | 65 | 6760.2 | 6522.8 | 0.832 | 3240.7 | 220 | 285 |
| 4 | 10000 | 100 | 141 | 6812.5 | 6297.5 | 0.923 | 3046.0 | 144 | 285 |
| 5 | 10000 | 100 | 179 | 7489.3 | 6835.5 | 1.000 | 3449.2 | 106 | 285 |
| 6 | 10000 | 100 | 217 | 7671.8 | 6879.2 | 0.985 | 3424.5 | 68 | 285 |
| **Fairness** | | | | | | | | | |
| 3* | 10000 | 100 | 112 | 6957.2 | 6540.1 | 0.915 | 3043.0 | 194 | 306 |
| 4 | 10000 | 100 | 153 | 7002.2 | 6432.5 | 0.910 | 2871.6 | 153 | 306 |
| 2 | 10000 | 100 | 71 | 7065.1 | 6800.7 | 0.915 | 3362.3 | 235 | 306 |
| 5 | 10000 | 100 | 194 | 8281.0 | 7558.6 | 0.984 | 3645.9 | 112 | 306 |
| 6 | 10000 | 100 | 235 | 8483.6 | 7608.6 | 0.999 | 3663.6 | 71 | 306 |
| **Family Connection** | | | | | | | | | |
| 3* | 10000 | 100 | 110 | 6205.3 | 5805.5 | 0.904 | 2504.0 | 170 | 280 |
| 2 | 10000 | 100 | 70 | 6218.7 | 5964.3 | 0.883 | 2732.8 | 210 | 280 |
| 4 | 10000 | 100 | 150 | 6235.0 | 5689.7 | 0.908 | 2336.2 | 130 | 280 |
| 5 | 10000 | 100 | 150 | 6235.0 | 5689.7 | 0.908 | 2336.2 | 130 | 280 |
| 6 | 10000 | 100 | 230 | 7393.2 | 6557.2 | 0.998 | 3046.0 | 50 | 280 |

*Model chosen

*Table D3: Distribution of the population for young adult Restoring Promise unit models and model fit information for competing latent class models.*

| Population: Young adults in Restoring Promise units | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Purpose | | | | | | | | | |
| nclass | maxiter | nrep | par | bic | aic | Relative entropy | gsq | df | nobs |
| 2* | 10000 | 100 | 46 | 1326.8 | 1206.5 | 0.957 | 425.8 | 55 | 101 |
| 3 | 10000 | 100 | 74 | 1331.4 | 1137.9 | 0.987 | 341.1 | 27 | 101 |
| 4 | 10000 | 100 | 102 | 1427.6 | 1160.9 | 0.960 | 301.2 | -1 | 101 |
| 5 | 10000 | 100 | 130 | 1745.0 | 1405.0 | 0.999 | 449.6 | -29 | 101 |
| 6 | 10000 | 100 | 158 | 1881.9 | 1468.7 | 1.000 | 499.2 | -57 | 101 |
| Safety | | | | | | | | | |
| 2* | 10000 | 100 | 46 | 1217.3 | 1100.4 | 0.923 | 304.9 | 48 | 94 |
| 3 | 10000 | 100 | 74 | 1284.3 | 1096.1 | 0.942 | 268.7 | 20 | 94 |
| 4 | 10000 | 100 | 102 | 1382.2 | 1122.7 | 0.946 | 258.9 | -8 | 94 |
| 5 | 10000 | 100 | 130 | 1577.6 | 1246.9 | 0.989 | 364.7 | -36 | 94 |
| 6 | 10000 | 100 | 158 | 1701.8 | 1300.0 | 1.000 | 355.7 | -64 | 94 |
| Fairness | | | | | | | | | |
| 2* | 10000 | 100 | 60 | 1830.9 | 1678.3 | 0.979 | 801.6 | 34 | 94 |
| 3 | 10000 | 100 | 95 | 1858.0 | 1616.4 | 0.968 | 686.0 | -1 | 94 |
| 4 | 10000 | 100 | 95 | 1858.0 | 1616.4 | 0.968 | 686.0 | -1 | 94 |
| 5 | 10000 | 100 | 165 | 2430.1 | 2010.5 | 0.994 | 840.3 | -71 | 94 |
| 6 | 10000 | 100 | 165 | 2430.1 | 2010.5 | 0.994 | 840.3 | -71 | 94 |
| Family Connection | | | | | | | | | |
| 2* | 10000 | 100 | 45 | 1396.0 | 1277.4 | 0.979 | 380.8 | 58 | 103 |
| 3 | 10000 | 100 | 72 | 1447.2 | 1257.5 | 0.946 | 336.5 | 31 | 103 |
| 4 | 10000 | 100 | 99 | 1718.2 | 1457.4 | 0.985 | 461.0 | 4 | 103 |
| 5 | 10000 | 100 | 126 | 1844.1 | 1512.1 | 0.996 | 488.0 | -23 | 103 |
| 6 | 10000 | 100 | 153 | 1941.1 | 1538.0 | 1.000 | 475.4 | -50 | 103 |

*Model chosen

*Table D4: Distribution of the population for Staff baseline models and model fit information for competing latent class models.*

| Population: Staff in the general population | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Purpose | | | | | | | | | |
| nclass | maxiter | nrep | par | bic | aic | Relative entropy | gsq | df | nobs |
| 5 | 10000 | 100 | 106 | 9166.6 | 8683.1 | 0.825 | 1426.3 | 601 | 707 |
| 4 | 10000 | 100 | 84 | 9205.0 | 8821.9 | 0.828 | 1608.1 | 623 | 707 |
| 3* | 10000 | 100 | 62 | 9258.0 | 8975.2 | 0.832 | 1785.7 | 645 | 707 |
| 6 | 10000 | 100 | 128 | 9448.9 | 8865.1 | 0.842 | 1505.6 | 579 | 707 |
| 2 | 10000 | 100 | 40 | 9599.5 | 9417.1 | 0.799 | 2259.6 | 667 | 707 |
| Safety | | | | | | | | | |
| 5 | 10000 | 100 | 211 | 18366.4 | 17424.4 | 0.914 | 8869.8 | 431 | 642 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6 | 10000 | 100 | 211 | 18366.4 | 17424.4 | 0.914 | 8869.8 | 431 | 642 |
| 4 | 10000 | 100 | 168 | 18461.6 | 17711.6 | 0.904 | 9253.4 | 474 | 642 |
| 3* | 10000 | 100 | 125 | 18661.1 | 18103.1 | 0.877 | 9713.1 | 517 | 642 |
| 2 | 10000 | 100 | 82 | 19205.1 | 18839.0 | 0.910 | 10513.4 | 560 | 642 |
| Fairness | | | | | | | | | |
| 4 | 10000 | 100 | 120 | 12274.8 | 11743.5 | 0.829 | 4018.4 | 499 | 619 |
| 5 | 10000 | 100 | 151 | 12313.4 | 11644.7 | 0.860 | 3869.9 | 468 | 619 |
| 6 | 10000 | 100 | 182 | 12366.6 | 11560.7 | 0.859 | 3755.2 | 437 | 619 |
| 3* | 10000 | 100 | 89 | 12367.2 | 11973.1 | 0.804 | 4317.5 | 530 | 619 |
| 2 | 10000 | 100 | 58 | 12615.5 | 12358.7 | 0.809 | 4753.4 | 561 | 619 |
| Family Connection | | | | | | | | | |
| 5 | 10000 | 100 | 181 | 12472.6 | 11699.3 | 0.910 | 4967.6 | 349 | 530 |
| 6 | 10000 | 100 | 218 | 12553.0 | 11621.6 | 0.918 | 4801.8 | 312 | 530 |
| 4 | 10000 | 100 | 144 | 12569.9 | 11954.6 | 0.908 | 5263.8 | 386 | 530 |
| 3* | 10000 | 100 | 107 | 12677.3 | 12220.1 | 0.916 | 5601.0 | 423 | 530 |
| 2 | 10000 | 100 | 70 | 13343.4 | 13044.3 | 0.916 | 6493.7 | 460 | 530 |

*Model chosen

*Table D5: Distribution of the population for Staff Restoring Promise unit models and model fit information for competing latent class models.*

| Population: Staff in Restoring Promise units | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Purpose | | | | | | | | | |
| nclass | maxiter | nrep | par | bic | aic | Relative entropy | gsq | df | nobs |
| 2* | 10000 | 100 | 39 | 667.0 | 586.7 | 0.947 | 186.3 | 19 | 58 |
| 3 | 10000 | 100 | 61 | 716.5 | 590.8 | 0.974 | 160.5 | -3 | 58 |
| 4 | 10000 | 100 | 83 | 784.0 | 613.0 | 0.984 | 132.8 | -25 | 58 |
| 5 | 10000 | 100 | 105 | 866.2 | 649.9 | 0.955 | 130.0 | -47 | 58 |
| 6 | 10000 | 100 | 127 | 952.5 | 690.8 | 0.967 | 139.4 | -69 | 58 |
| Safety | | | | | | | | | |
| 2* | 10000 | 100 | 53 | 992.7 | 884.4 | 0.982 | 354.8 | 4 | 57 |
| 3 | 10000 | 100 | 82 | 1043.9 | 876.3 | 0.989 | 297.9 | -25 | 57 |
| 4 | 10000 | 100 | 111 | 1146.0 | 919.2 | 0.976 | 311.2 | -54 | 57 |
| 5 | 10000 | 100 | 140 | 1228.5 | 942.5 | 0.966 | 263.4 | -83 | 57 |
| 6 | 10000 | 100 | 169 | 1345.0 | 999.7 | 0.993 | 286.5 | -112 | 57 |
| Fairness | | | | | | | | | |
| 2* | 10000 | 100 | 39 | 679.5 | 603.4 | 0.891 | 210.0 | 13 | 52 |
| 3 | 10000 | 100 | 61 | 706.5 | 587.5 | 0.995 | 152.1 | -9 | 52 |
| 4 | 10000 | 100 | 83 | 775.6 | 613.6 | 0.948 | 132.6 | -31 | 52 |
| 5 | 10000 | 100 | 105 | 854.8 | 649.9 | 0.980 | 130.6 | -53 | 52 |
| 6 | 10000 | 100 | 127 | 939.5 | 691.7 | 1.000 | 137.3 | -75 | 52 |
| Family Connection | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2* | 10000 | 100 | 53 | 951.8 | 845.4 | 0.947 | 350.1 | 2 | 55 |
| 3 | 10000 | 100 | 82 | 1007.2 | 842.6 | 0.976 | 293.8 | -27 | 55 |
| 4 | 10000 | 100 | 111 | 1090.8 | 867.9 | 0.963 | 272.8 | -56 | 55 |
| 5 | 10000 | 100 | 140 | 1185.5 | 904.5 | 0.969 | 258.6 | -85 | 55 |
| 6 | 10000 | 100 | 169 | 1296.8 | 957.6 | 0.974 | 233.7 | -114 | 55 |

## Appendix E: Latent Class Analysis Covariate Models

*Covariate Key:*

| Variable | Description |
|---|---|
| Race | Participant race |
| Age | Participant age |
| Facility_Clean | Answered affirmatively to “The facility is clean” |
| FACILITY_foodgood | Answered affirmatively to “The food is good here” |
| FACILITY_goodmedcare | Answered affirmatively to “I am able to get good medical care” |
| FACILITY_DOCsuccess | Answered affirmatively to “DOC is preparing me to be successful” |
| Nocontact | Participant indicated that they never receive visit or phone calls |
| DOCCT_women | Participants in the women’s facility |
| DOCMSO | Participants in the men’s county jail |
| DOCSC | Participants in men’s prisons in South Carolina |
| UNIT_nameCOH | Participants from the Cadre of HOPE unit in South Carolina |
| UNIT_nameCORE | Participants from the CORE unit in South Carolina |
| UNIT_nameTRUE | Participants from the TRUE unit in Connecticut men’s facility |
| UNIT_nameWORTH | Participants from the WORTH unit in Connecticut women’s facility |

*Only included in young adult purpose baseline model

For all models: *p<.05,**p<.01,***p<.001

***Young adult Models***

Baseline, Purpose: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.25042 | 0.60452 |
| Age | -0.26777 | 0.35866 |
| Facility_Clean | 0.94918 | 0.56752 |
| FACILITY_foodgood | 2.61372 | 1.35281 |
| FACILITY_goodmedcare | -0.20537 | 0.51852 |
| FACILITY_DOCsuccess | 1.97418 | 1.18039 |
| noncontact | 0.03486 | 0.64957 |
| DOC1CT_women | 0.77862 | 0.51256 |
| DOC1MSO | 0.42884 | 0.67089 |
| DOC1SC | 0.45372 | 0.49119 |

Baseline, Purpose: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -2.52962 | 0.96224 |
| Age | -0.27126 | 0.35858 |
| Facility_Clean** | 2.05756 | 0.62211 |
| FACILITY_foodgood | 2.23539 | 1.38798 |
| FACILITY_goodmedcare | -0.00823 | 0.68199 |
| FACILITY_DOCsuccess** | 3.55507 | 1.08278 |
| nocontact | -0.04029 | 0.74379 |
| DOC1CT_women* | 2.17249 | 0.83889 |
| DOC1MSO | 0.93304 | 1.18768 |
| DOC1SC* | 1.96895 | 0.83641 |

Baseline, Safety: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | 1.39152 | 0.76408 |
| Age | 0.09746 | 0.49325 |
| Facility_Clean | -1.25671 | 0.89133 |
| FACILITY_foodgood | 1.94044 | 1.07462 |
| FACILITY_goodmedcare | -0.61448 | 1.00988 |
| FACILITY_DOCsuccess | -1.73683 | 1.14171 |
| DOC1CT_women | 1.59017 | 0.84638 |
| DOC1MSO | 0.35765 | 1.03715 |
| DOC1SC | -0.08058 | 0.76164 |

Baseline, Safety: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | 0.57131 | 0.43811 |
| Age | 0.68446 | 0.44825 |
| Facility_Clean** | -2.53705 | 0.87662 |
| FACILITY_foodgood*** | -15.93540 | 0.00000 |

| | | |
|---|---|---|
| FACILITY_goodmedcare | -0.03608 | 0.58682 |
| FACILITY_DOCsuccess | -0.31139 | 0.61560 |
| DOC1CT_women | -0.28392 | 0.84629 |
| DOC1MSO*** | -15.63751 | 0.00000 |
| DOC1SC | 1.20985 | 0.70364 |

Baseline, Fairness: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.72271 | 0.67254 |
| Age | 0.68209 | 0.64902 |
| Facility_Clean | -0.71560 | 0.63680 |
| FACILITY_foodgood | -1.15887 | 0.93055 |
| FACILITY_goodmedcare | -1.31581 | 0.69727 |
| FACILITY_DOCsuccess | -0.96380 | 0.65027 |
| DOC1CT_women | -0.69369 | 0.96730 |
| DOC1MSO | 0.09433 | 1.71696 |
| DOC1SC | -0.24858 | 0.90903 |

Baseline, Fairness: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.12864 | 0.70736 |
| Age | 0.62322 | 0.68162 |
| Facility_Clean | -1.18743 | 0.84418 |
| FACILITY_foodgood | -1.22124 | 1.14706 |
| FACILITY_goodmedcare* | -1.89121 | 0.91047 |
| FACILITY_DOCsuccess* | -1.65849 | 0.77852 |
| DOC1CT_women | 0.88657 | 1.00289 |
| DOC1MSO | 0.38157 | 1.74475 |
| DOC1SC | 0.01984 | 0.97132 |

Baseline, Family Connection: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.59240 | 0.50742 |
| Age | -0.28032 | 0.40978 |
| Facility_Clean | 0.34111 | 0.67660 |
| FACILITY_foodgood | -0.10305 | 1.01240 |
| FACILITY_goodmedcare | 0.01803 | 0.76164 |
| FACILITY_DOCsuccess | 0.65687 | 0.72686 |
| DOC1CT_women | -0.28419 | 0.68843 |
| DOC1MSO*** | 519.56265 | 0.00000 |
| DOC1SC | 0.15665 | 0.63877 |

Baseline, Family Connection: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.18930 | 0.67898 |
| Age | -0.14622 | 0.54941 |
| Facility_Clean | 0.43038 | 0.81687 |
| FACILITY_foodgood | -0.94361 | 1.40349 |
| FACILITY_goodmedcare | 1.13909 | 0.84365 |
| FACILITY_DOCsuccess | 0.56590 | 0.97876 |
| DOC1CT_women | 0.00032 | 1.01158 |
| DOC1MSO*** | -243.45102 | 0.00000 |
| DOC1SC | 0.39778 | 0.90418 |

Restoring Promise, Purpose: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.14070 | 0.67502 |
| Age | 0.12284 | 0.93710 |
| Facility_Clean*** | 15.47144 | 0.81148 |
| FACILITY_programsgood* | 2.02385 | 0.79094 |
| UNIT_nameCOH | 0.04446 | 1.45316 |

| | | |
|---|---|---|
| UNIT_nameCORE | 0.21633 | 1.38929 |
| UNIT_nameTRUE | -0.61065 | 1.08999 |
| UNIT_nameWORTH* | 2.61103 | 1.27424 |

Restoring Promise, Safety: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.08221 | 1.01394 |
| Age | 0.40853 | 0.84026 |
| Facility_Clean | -1.00008 | 1.18139 |
| FACILITY_programsgood | -1.59368 | 0.87677 |
| UNIT_nameCOH | 0.57176 | 1.52372 |
| UNIT_nameCORE | 2.19373 | 1.34895 |
| UNIT_nameTRUE | 1.40452 | 1.37295 |
| UNIT_nameWORTH | 0.26939 | 1.88037 |

Restoring Promise, Fairness: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.88441 | 1.45952 |
| Age | -0.14500 | 2.35149 |
| Facility_Clean | -0.00364 | 2.56303 |
| FACILITY_programsgood | -1.47502 | 1.31736 |
| UNIT_nameCOH | 1.77527 | 3.88207 |
| UNIT_nameCORE | 1.99238 | 2.75186 |
| UNIT_nameTRUE | 1.57577 | 2.61247 |
| UNIT_nameWORTH*** | -14.77004 | 0.00000 |

Restoring Promise, Family Connection: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| Race | -0.93168 | 0.69584 |
| Age | -0.13983 | 0.89586 |
| Facility_Clean | 0.74808 | 1.00055 |
| FACILITY_programsgood | 0.11260 | 0.70306 |

| | | |
|---|---|---|
| UNIT_nameCOH | 0.39787 | 1.00133 |
| UNIT_nameCORE | 0.30087 | 1.07567 |
| UNIT_nameTRUE | 0.62628 | 0.87581 |
| UNIT_nameWORTH | 0.98087 | 1.14500 |

***Staff Models***

Baseline, Purpose: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen*** | 30.91599 | 0.29640 |
| DOCMSO | -0.21106 | 0.42708 |
| DOCSC | 0.30973 | 0.27713 |

Baseline, Purpose: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen*** | 30.90901 | 0.29640 |
| DOCMSO | 0.10618 | 0.47403 |
| DOCSC* | 0.68256 | 0.31298 |

Baseline, Safety: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen | 0.72071 | 0.84251 |
| DOCMSO | 0.02395 | 0.49821 |
| DOCSC** | -0.97111 | 0.29114 |

Baseline, Safety: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen | 0.05664 | 0.98916 |
| DOCMSO | 0.19122 | 0.52847 |
| DOCSC | -0.55853 | 0.32295 |

Baseline, Fairness: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen | -0.11226 | 0.95615 |

| | | |
|---|---|---|
| DOCMSO | 0.76813 | 0.54927 |
| DOCSC | -0.11907 | 0.30487 |

Baseline, Fairness: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen | 1.40249 | 0.80763 |
| DOCMSO | 0.57016 | 0.63317 |
| DOCSC | 0.46823 | 0.34060 |

Baseline, Family Connection: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen | 1.27020 | 0.68318 |
| DOCMSO | 0.14994 | 0.57406 |
| DOCSC | 0.15426 | 0.33937 |

Baseline, Family Connection: Predicting Class Membership to Zone 3 (Base Class: Zone 1)

| Variable | Coefficient | Std. Error |
|---|---|---|
| DOCCTwomen | -1.75636 | 1.40010 |
| DOCMSO | 0.07644 | 0.45188 |
| DOCSC* | -0.71217 | 0.28198 |

Restoring Promise, Purpose: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| | | |
|---|---|---|
| UNIT_nameCOH*** | -25.52235 | 0.00000 |
| UNIT_nameCORE | 0.18063 | 2.44040 |
| UNIT_nameTRUE | 0.05464 | 2.19917 |
| UNIT_nameWORTH | -2.20313 | 2.14965 |

Restoring Promise, Safety: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| | | |
|---|---|---|
| UNIT_nameCOH*** | -17.02773 | 0.00063 |
| UNIT_nameCORE | 0.69315 | 4.40348 |
| UNIT_nameTRUE | 1.91702 | 4.08053 |
| UNIT_nameWORTH | -0.66885 | 4.35578 |

Restoring Promise, Fairness: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| | | |
|---|---|---|
| UNIT_nameCOH*** | -34.10310 | 0.00000 |
| UNIT_nameCORE*** | -16.26477 | 1.20017 |
| UNIT_nameTRUE*** | -15.50877 | 0.78458 |
| UNIT_nameWORTH*** | -19.07952 | 1.10922 |

Restoring Promise, Family Connection: Predicting Class Membership to Zone 2 (Base Class: Zone 1)

| | | |
|---|---|---|
| UNIT_nameCOH*** | 32.60430 | 0.00000 |
| UNIT_nameCORE** | 16.17480 | 0.88213 |
| UNIT_nameTRUE** | 15.09168 | 0.63504 |
| UNIT_nameWORTH** | 15.95117 | 0.58712 |