



Our Title: Harsh Conditions Contribute to Inmate Violence in Prison

Author's Title: Is Tougher Better? The Impact of Physical Prison Conditions on Inmate Violence

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Design Issue:

Purpose: A study was conducted to determine the impact of physical building conditions in federal prisons on inmates' levels of violence.

Rationale:

- In 2010, there were over 2 million inmates in the United States, reflecting a large increase from the previous decade.
- The impact of a harsh prison environment has been debated; both as an appropriate, external motivator for the inmate to avoid re-incarceration versus as an inappropriate contributor to declining inmate health (both physical and psychological), anti-social behavior, increased violence, and recidivism.
- Theoretical literature discusses the relationship between the physical environment and inmate violence, which ultimately contributes to policymaking, laws, and provision of resources (monetary and human), yet little empirical evidence exists as the foundation for decision-making to support either harsh or more comfortable surroundings for inmates.

Design Criteria:

InformaDesign identified the following design criteria:

- Consider the impact of facility design on inmates' physical and psychological well-being as there is a relationship between better physical conditions (e.g., acoustics, sanitation, and privacy) and more positive behaviors.
- Beware of acoustical implications of design decisions on noise levels in housing units.
- Consider sightlines as they relate to privacy and security in housing units.
- Be aware that amenities in prison housing units are influenced by security level .
- Design decisions should take into consideration operational needs (maintenance, sanitation, storage) of prison staff and inmates.

Key Concepts:

- Between the late 1930s and the 1960s, many aspects about places of incarceration have been studied from political, legislative, moral, and legal perspectives. However, since the 1970s, the focus has been on the relationship between inmate welfare and behavior and the influence of facility conditions on the inmate once released into society.
- Both inmate and correctional staff have reported negative impacts of excessive noise, overcrowding, antiquated facilities, and substandard levels of sanitation and their contributions to misconduct and violence.
- As documented by journalists, factors contributing to prison riots and uprisings are gangs, racial, cultural, and social conflicts as well as the physical prison environment.



- With the growth of the prison population, newly constructed prisons programmatically tie the design of the prison environment to behavior. It has been theorized that by stripping comforts (e.g., televisions, weight-lifting equipment, radios, hot meals, or other recreational activities), behavior will improve and the number of those reoffending will diminish.
- With fewer comforts (i.e., distractions), it is anticipated that inmates will focus on educational and treatment programming. Boot camp prisons exemplify this approach as they became popular in the late 20th-century (Armstrong, 2004).
- Criminological theorists (strain, routine activities, rational choice, social disorganization advocates, subcultural, and social control theories) present a broad though consistently negative perspective of the impact of harsh prison conditions on inmates in terms of compromised physical and mental health, diminished coping skills, antisocial behavior, confidence when engaging in anonymous misconduct or violence, and future outcomes relative to recidivism, i.e., support of criminality.
- When federal budgets require cutting, correctional facilities are likely targets, as cutting costs in prisons is more palatable to taxpayers than other types of publically funded facilities.
- Demographic characteristics of inmates (race, gender, age, criminal history) are typically used for housing classification relative to security level placement in prison. The combination of characteristics inform prison administration the likelihood of misconduct and violence.
- The Federal Bureau of Prisons (BOP) has a system to evaluate misconduct that includes four levels (100 through 400); 100-level (homicides, rape, or assaults involving permanent injury) and 200-level (injury that is not life altering or fatal) are the most serious.
- Security level impacts physical conditions in prisons as the higher level of security, the higher the inmate to staff ratio, less clutter, and less crowding, typically.
- The better the physical conditions in a prison (relative to noise, sanitation, privacy, etc.), the fewer occurrence of serious violence (misconduct) by inmates ($p < .001$). Also, tied to physical conditions, security level impacted the occurrence of violence .
- Neither staff demographics (age, race, gender) nor operational factors (population related to capacity, inmate to staff/custody staff ratios) had an impact on the occurrence of violence.

Research Method:

- Data about prison conditions was accessed from the Prison Social Climate Survey, conducted in October 2007. A stratified, random, proportional probability sample design (Levy & Lemeshow, 1991) was used to select data provided by prison staff of the BOP. Overall, from the sample of 3,130 staff, 2,240 staff returned surveys. Some were deleted due to missing data, resulting in a sample size of 1,738 BOP prison staff. Participation was voluntary. The number of staff surveyed were proportional between prisons.
- The 114 prisons in operation by the BOP were in the sample; prisons that were operated for the BOP by private entities were not included.
- Data from staff ratings about conditions of confinement (7) on an individual facility basis



were evaluated using various Likert-type scales, and reliability was confirmed through factor analysis (Cronbach's $\alpha = .77$). Questions focused on presence of insects, rodents, dirt or litter in housing units or the dining hall (2 separate questions); in housing units, the presence of fuel (or clutter) for feeding a fire, availability of sanitation supplies, and access to privacy (3 separate questions); and housing unit noise levels in the evening or during sleeping hours (2 separate questions). Inmates did not rate the conditions, as staff ratings have been found to be a reliable substitution.

- Operational data were gathered from monthly reports by the BOP about the inmates, staff, and physical prison environment and were averaged across the time period accessed for the staff survey, namely, May through October, 2007.
- Independent variables (covariates) from the monthly reports for the inmates included risk of misconduct (high, medium, low, and minimum), crowding (ratio of inmates versus rated capacity), inmate to staff ratios, and gender of inmates (6 female prisons).
- Independent variables (covariates) from the monthly reports for the staff included demographics: gender, race, age, supervisory versus non-supervisory status.
- The occurrence of serious misconduct (dependent variable) at the 100- or 200-level as rated by the BOP were included. It was considered the most reliable measure as lesser levels of misconduct are reported at the discretion of the staff. Misconduct was calculated by month, then averaged by facility across the 6-month period.
- A stepwise analysis of covariates was conducted due to the small sample size, beginning first with a measurement of the relationship between misconduct and the prison's physical conditions.

Limitations of the Study:

The author identified the following limitations:

- Due to the small sample size, covariates had to be analyzed individually with only significant findings included in the model.
- Future studies should consider using physical measures of sound, sanitation, etc., in combination with surveying occupants.
- It is possible that violent acts lead inmates to housing of harsher conditions, not incarceration in harsh conditions that incite violent acts, as found in this study; a future study using a longitudinal approach is recommended.

Commentary: A review of literature was grounded in a substantial reference list. See Hilbe's (2007) Poisson framework for a more in-depth understanding of the modeling applied in the analysis by the author. Author notes that staff perceptions are a sound substitution for those by inmates, based on literature that indicated that the two populations provide parallel responses (levels) when compared (Camp, Gaes, Klein-Saffran, Daggett, & Saylor, 2002). Only the two most severe levels of misconduct (100- and 200-level) were evaluated.



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