

**Learning to Walk “the Toughest Beat”:
Quasi-Experimental Evidence on the Role of Prison Context in Shaping
Correctional Officer Attitudes towards Rehabilitation**

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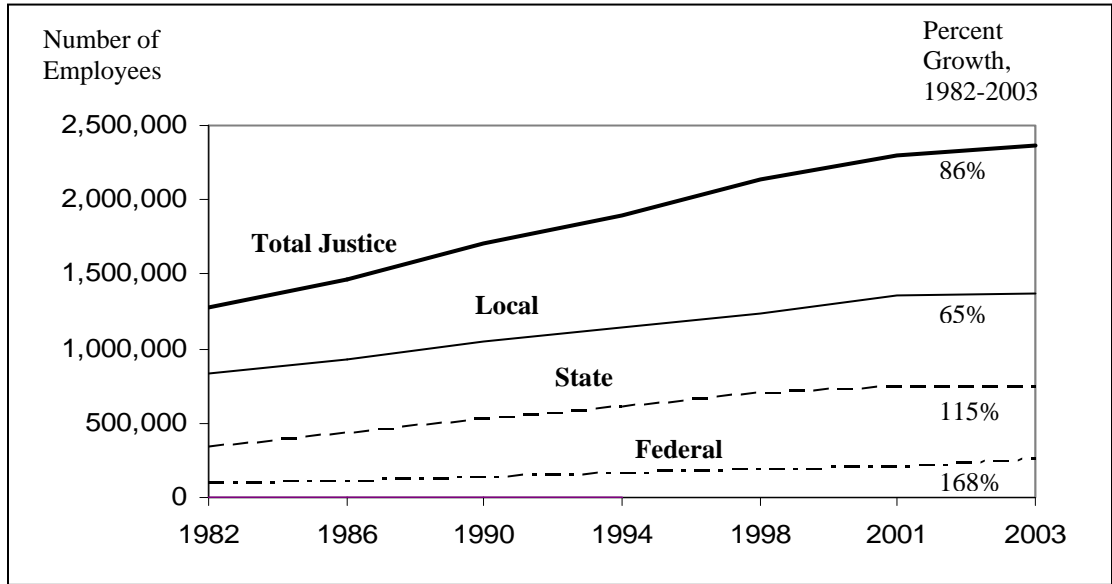
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1. Introduction

The number of people employed in some capacity by the U.S. criminal justice system increased 86% between 1982 and 2003, to more than 2.36 million people (see Figure 1). As of March 2003, about 12.7% of all public employees, and a larger percentage of public employees in 15 states and the District of Columbia, worked in the criminal justice sector.¹ Much of this growth is accounted for by the well-documented expansion of the American prison system that has taken place over the past thirty years. The number of corrections employees has risen concurrently with the number of people incarcerated: between 1982 and 2003, corrections employment more than doubled, rising from about 300,000 to over 748,000 people. Corrections employees now account for more than 63% of state criminal justice employees, with police protection and judicial/legal employees accounting for the other 14% and 22%, respectively..

Figure 1: Justice Employees by Level of Government, 1982-2003



Bureau of Justice Statistics

Source:

¹ These states include Nevada (16.9%), Florida (16.6%), Arizona (15.5), DC (15.5%), Delaware (15.1%), New Jersey (15.1%), New York (14.8%), Maryland (13.8%), Pennsylvania (13.7%), Louisiana (13.6%), Illinois (13.5%), Missouri (13.4%), Georgia (13.3%), California (13.2%), Massachusetts (13.2%), and Connecticut (12.8%).

Although research on correctional officers is still far less expansive than scholarship on inmates, interest in those who work inside America's prisons has grown exponentially over the past few decades. What was once an overly-simplistic and even hostile literature depicting correctional officers as "less than quick witted" or "sadists," and their jobs as requiring only "20/20 vision, the IQ of an imbecile, [and] a high threshold for boredom," now encompasses a diverse set of descriptive and empirical studies that explore many aspects of correctional officers' attitudes and behavior (Philliber 1987).

Of particular interest to researchers are the attitudes of correctional towards the goals and practice of corrections, such as relative support for rehabilitative or punitive correctional ideologies (Whitehead and Lindquist 1989; Bazemore and Dicker 1994; Liou 1995; Kifer et al. 2003). Correctional officers, on the front lines of the prison system, are responsible for the day-to-day execution of almost every aspect of prison life. Their attitudes towards the nature and goals of the prisons system are thus a critical part of the implementation of correctional policy.

Extant literature on the professional norms of prison custody staff posits two sets of factors that predict officers' attitudes towards correctional goals: individual demographics and institutional context (Bazemore and Dicker 1994). On the one hand, the professional norms of officers might stem from stable attributes of the individual; demographics like race and age correlate with certain life experiences that may result in particular attitudes towards professional work. If this is the case, it is along these cleavages that we might expect to find variation. Studies focusing on the demographics of individual officers have examined whether characteristics like race (Jurik 1985; Cullen 1989; Paboojian and Teske 1997), education (Poole and Regoli 1980; Cullen et al. 1985; Jurik 1985), age (Paboojian and Teske 1997), gender

(Crouch and Alpert 1982; Jurik 1985; Zupan 1986; Cullen 1989), and tenure (Shamir and Drory 1982; Lombardo 1989) are related to officer attitudes.

On the other hand, professional norms and attitudes might be shaped by accumulated and shared experiences on the job. Officers may adopt working norms in response to the resource constraints and contextual cues that they face in their day-to-day working environments. If this is the case, variation should be dictated more by characteristics of the prisons in which officers work than by distinctions between individuals. Several studies have focused on structural factors that influence custody orientations, such as occupational socialization (Crouch and Alpert 1982) and institutional safety (Cullen 1989).

Yet despite the proliferation of research on the subject, previous research on correctional officer attitudes has failed to offer consistent and sufficient explanations for what shapes correctional officers' professional norms. This has led some scholars to conclude that the "nuances of the correctional officers' job may not be amenable to survey research" (Maahs and Pratt 2001). However, it is unlikely that surveys themselves have led to contradictory findings. Instead, the difficulty in isolating factors that shape officer attitudes likely reflects the problem of self-selection: officers choose to work in a particular prison facility and at a particular post within that prison. While data may show a correlation between characteristics of the prison in which an officer works and more or less support for rehabilitation, this need not necessarily imply causality. Instead, officers may simply be choosing the particular prison or custody level that fits with their existing predispositions. More punitive-minded officers may prefer more restrictive or punitive prison settings because they believe them to be the "right" type of prison or because they like the more contentious nature of the inmate-staff relationship that might typify such prisons. Some may also like the feeling of power associated with overseeing inmates who

are confined to their cells more of the time, or who have less privileges. Conversely, officers who are more rehabilitation-oriented may select into prisons that offer more or better quality rehabilitation programs. This type of assignment—according to individual preference—makes it difficult to assess the effects of occupational experience. Officers who request to work in one type of prison likely differ systematically from those who request another type of prison, resulting in significant selection bias.

In order to address this concern, the analyses presented in this paper leverage a somewhat unique feature of the process by which correctional officers are assigned to prisons in the state of California: for correctional officers who are still in their first two years of work in the correctional system, assignment to a particular security level is by rotation. It is not until officers have completed the apprenticeship period and accrued some seniority that they may select into the particular prison and post they prefer. Comparing officers who are assigned to different security levels during this period therefore allows us to obtain a *causal* estimate of the effect of different prison environments on new officers' attitudes towards rehabilitation.

This paper proceeds as follows. Section 2 describes the primary data source used in the paper: an original survey of 5,775 correctional officers currently employed in the California state prison system. The California Department of Corrections and Rehabilitation (CDCR) oversees the third largest prison system in the world, second in size only to the federal Bureau of Prisons and the Chinese national correctional system. The state has a total of 33 adult prison facilities, which are organized into four security levels ranging from the least (Level I) to the most (Level IV) restrictive.²

² As of 2005, the Department of Corrections also reported 40 custody camps, 12 community correctional facilities and 5 prisoner mother facilities, as well as 14 federal facilities, twelve public and two private.

Section 3 details correctional officers' attitudes towards rehabilitation. The data show that there is significant diversity in attitudes towards rehabilitation as a correctional philosophy. Slightly less than half of officers (46%) agree that rehabilitation should be a central goal of incarceration. By contrast, there is little variation in opinion on the provision of rehabilitation program: an overwhelming majority of officers support offering specific rehabilitation programs—including GED programs (91%), drug and alcohol treatment (90%), and vocational training (84%)—to inmates who desire them. Somewhat fewer officers support the provision of college level education (56%). While there is a strong relationship between support for rehabilitation as an ideology and support for specific rehabilitation programs, officers nevertheless distinguish between the two dimensions.

Section 4 examines the individual demographics and contextual factors that predict correctional officers' attitudes towards both the ideological and program dimensions of rehabilitation. I first present results from a series of multi-level models that assess the predictive power of individual demographics, with particular emphasis on how inclusion of partisan identification in the model may alter the significance of other variables, such as race and education. The data show that party identification is especially important in helping distinguish subtleties in officer attitudes: while self-identified Democrats are significantly more likely than Republicans to support rehabilitation as a correctional philosophy, partisan groups are equally supportive of providing rehabilitation programs.

Section 5 presents evidence from a quasi-experiment assessing the causal effect of prison context on officers' attitudes. While demographic characteristics of individual officers appear to predict support for rehabilitation both as an ideology and a set of programs, prison-level differences affect only support for rehabilitation programs. Using a matched sample of

apprentice officers, I find that assignment to Level IV rather than Level III significantly decreases support for rehabilitation programs, particularly vocational training and college education. The paper concludes with a discussion of the implications of these findings for the study of correctional officer attitudes and for the future of California correctional policy.

2. California Prisons and the 2006 California Correctional Officer Survey

This paper relies on data from the 2006 California Correction Officer Survey (CCOS), an original survey of correctional officers working in all 33 of California's adult state prisons. California was—and arguably continues to be—on the forefront of the move towards a more punitive approach to corrections. In “Understanding California Corrections,” Joan Petersilia points out that California enrolls a significantly lower percentage of inmates in vocational and educational programs than the national average: while 31% of inmates nationwide participate in vocational programs and 38% in educational programs, California inmates participate at a rate of only 13.8% for the two types of programs combined (2006). Of the \$9.77 billion CDCR budget for the 2007-2008 fiscal year, about \$456.87 million, or 4.7%, was allocated to offender programs. Petersilia suggests that California's comparative lack of educational and vocational programming is due both to the growth of the state's prison population, which has strained the capacity of existing programs, and the defunding of programs due both to political pressure and their perceived inefficacy.

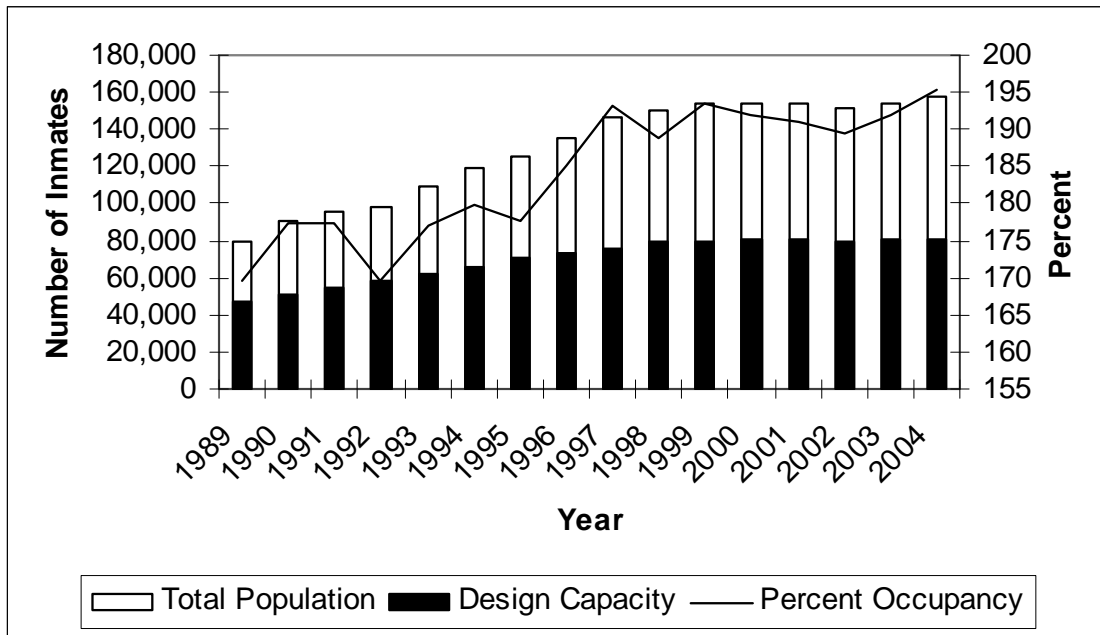
At the same time that rehabilitation-oriented programs have been constricted over the past several decades, state criminal justice costs have steadily risen. Including jails and probation, corrections now accounts for over \$8.92 billion in annual expenditures (Petersilia 2006). The average cost to imprison one inmate for one year in California is about \$43,300

(Petersilia 2007). That's more than five times the \$8,564 allocated in the 2007-2008 state budget for K-12 education expenditures per pupil (EdSource 2007), and more than ten times the \$4,192.25 it costs for a California resident to attend the University of California, Berkeley for the fall semester (Registrar 2007-2008).

Yet despite the significant costs of criminal justice to the state, the modern California prison system is critically dysfunctional. A 2003 report of the Little Hoover Commission described the system as "a billion dollar failure" and evidence of the system's problems abound: California has one of the highest recidivism rates in the country; rates of assault, homicide and suicide are higher in the state's prisons than the national average; and California prisons are home to some of the most notorious gangs in the nation (Petersilia 2006). In addition, despite the \$1.1 billion a year spent on prison healthcare, in 2005 U.S. District Judge Thelton Henderson ordered the prison healthcare system into receivership, citing the needless deaths of inmates due to substandard care and "outright depravity" (Sterngold 2005).

In large part, the myriad problems plaguing California corrections are a result of over-population, which remains a constant and critical source of strain on the system. In October of 2006, Governor Schwarzenegger declared a state of emergency in response to the overcrowding problem in California prisons. As Figure 2 clearly shows, crowding has long been a problem in the state's prisons, but it has become particularly severe in recent years. In 1989, the state's prisons were at 169% capacity relative to the numbers they were built to house. While the total design capacity of California prisons has been almost doubled over the past two decades, increasing from 47,210 in 1989 to 80,890 in 2004, it has been outpaced by increases in the state's inmate population. On average, California prisons are now at 186% capacity relative to the population they were designed for.

Figure 2: Population and Design Capacity of California Prisons: 1989-2004



Source: Offender Information Services Branch, Estimates and Statistical Analysis Section, Data Analysis Unit, California Department of Corrections.

By the time of the Governor’s announcement in 2006, almost 10% of California inmates, or roughly 17,000 men and women, were being housed in “bad beds,” defined by Corrections Secretary James Tilton as “bunks in areas not designed as living spaces...converted gyms, hallways and lounges...[and] roughly 1,500 sleep in triple-decker bunks” (Warren 2006). These high levels of overcrowding have severely affected all areas of prison capacity, from infrastructure to administration. “Crowding is so severe, the governor’s emergency decree [stated], that it has overwhelmed water, sewer and electrical systems at some prisons and fueled hundreds of prisons riots, melees and smaller disturbances in the last year” (Warren 2006).

The large number of inmates who are currently incarcerated, the rising cost of corrections, and the changing face of California corrections provide compelling reasons to take a closer look at the state of state prisons. Yet despite the preponderance of statistics and rhetoric

concerning California criminal justice, there is actually little publicly available information about what goes on each day inside the state's prisons. In part, this is due to a significant decline in the type of sociological prison research that abounded in the 1970s. Since that time, prisons have become increasingly closed to researchers, with correctional administrators often citing concerns about researchers' safety. At the same time, much of the administrative data necessary to answer questions about prisons are no longer available even on a permission basis. The data collected by the CDCR exist in more than 80 separate databases, many of which cannot be linked, and the Department of Corrections dissolved its own internal research organization in the mid-1990s, reinstating it only as recently as July 2005 (Petersilia 2006).

The data from the California Correctional Officer Survey (CCOS) are therefore particularly unique, in that they provide previously unavailable insights into modern prison culture. The CCOS, conducted from April to October of 2006, was a large-scale effort to gather the thoughts, attitudes, and experiences of correctional officers currently working in the California state prison system. The survey asked officers a series of closed-ended questions about a variety of topics, including job satisfaction, work stress, personal safety and security, attitudes towards inmates, and professional orientation. Surveys were sent to each correctional officer by mail to their home address, rather than distributed at either union meetings or the workplace. This was primarily to assure that officers felt they could be honest about their work experiences. Respondents were also assured that surveys would be completely anonymous, and that no one except the researchers would ever have access to individual surveys.

About 5,775 officers send back completed surveys for a response rate of about 33%. This rate is relatively standard for mail-administered surveys. As Table 1 shows, respondent demographics were quite representative of the total population. About 84.3% of the survey

sample is male relative to 82% in the population. About 55.1% of the sample identified as white compared to 46.2% of the population, 27.3% of survey respondents identified as Hispanic (compared to 34.3%), 8.8% as black (compared to 12.3%), and 3% as Asian (compared to 1.8%). Moreover, though response rates varied by institution, no prisons had to be excluded from analysis due to a paucity of respondents.³

Table 1: CCOS Response Sample Demographics

	Sample (%)	Population (%)
Race		
White	55.1	46.2
Black or African American	8.8	12.3
Hispanic	27.3	34.4
Asian	3.0	1.8
Other	4.0	5.3
Missing Data	3.9	--
Gender		
Male	84.3	82
Female	15.7	17.7
	N=5,775	N=21,243

Population data is taken from the Department of Corrections and Rehabilitation Office of Personnel Services for October 12, 2006. Sample data are from the 2006 California Correctional Officer Survey (N=5,775). Sample race sums to more than 100% due to some respondents identifying more than one racial category.

3. Correctional Officer Attitudes towards Rehabilitation

Broad ideas about the function of incarceration can be thought of as different correctional philosophies, correctional orientations, or professional norms. Each ideology offers its own interpretation of the role of a prison system in modern society, and advocates for a different set of priorities that should motivate officers and other correctional staff in carrying out their jobs. Rehabilitation is one example of a correctional philosophy. The United Nations defines

³ Additional details on the CCOS protocol and a breakdown of response rates by prison are provided in Appendix A.

rehabilitation as “a goal-oriented and time-limited process aimed at enabling an impaired person to reach an optimum mental, physical and/or social level, thus providing her or him with the tools to change her or his own life” (1982). For those who believe that prisons have both the capacity and the responsibility to rehabilitate, prisons can and should provide offenders with the skills and resources they lack. Participation in rehabilitation programs like drug treatment and education can give individuals in prison an opportunity to turn their lives around.

Alternatives to the rehabilitation ideology include philosophies of deterrence, punishment, or incapacitation. For people who believe prisons should function primarily to deter criminal activity, incarceration is meant to serve as a threat that will discourage potential offenders from carrying out crimes. Those who espouse this view argue that an individual, in deciding whether or not to carry out a crime, will weigh the potential gain from committing the crime against the possibility of being caught and sentenced to confinement. To the degree that an offender desires to avoid this possible outcome, he will be discouraged from committing the crime. A third philosophy of corrections is one focused on punishment. For those who believe incarceration is primarily a tool to penalize illegal and/or immoral behavior, prisons provide a way to impose a retributive measure of “just deserts”. Rooted in *lex talionis*, or the “law of retaliation,” the prison in this model is a means of imposing justice by doing harm to those who have harmed others. Finally, a philosophy of corrections oriented towards incapacitation asserts that the primary function of a prison is nothing more than to physically separate criminals from the public. The containment of offenders during incarceration will assure that, at least while incarcerated, these individuals do not commit further crimes.⁴

⁴ This does not, however, account for crimes that are committed by inmates while in prison, either against other inmates or against correctional officers and staff.

California correctional officers, on the whole, believe that some combination of ideological goals should guide penal practice. While about 46% agree that rehabilitation should be a central goal of incarceration, there is reasonable consensus that it should not be the only, or even the primary, purpose of a prison. Instead, a majority of correctional officers believe that *both* rehabilitation and punishment should be goals of a prison. When asked whether the “purpose of a prison is rehabilitation, punishment, or both,” only 19% express the belief that the purpose of a prison is totally punishment, and 5% that a prison is exclusively about rehabilitation. By comparison, about 77% support some balance between the two objectives. However, only a quarter of respondents feel that punishment and rehabilitation are equally important. The largest proportion of officers believe that prisons should be oriented more towards punishment than rehabilitation: 42% express the belief that the purpose of a prison is more punishment but still rehabilitation, while only 10% believe a prison’s function is more about rehabilitation than punishment.

Likewise, while 68% of officers agree that “the job of a prison is to keep the public safe, not to help inmates,” many also believe there is some place for the rehabilitation. About 29% voice support for rehabilitation as a central goal of incarceration and *also* agree that the primary job of a prison is to keep the public safe. In other words, for about a third of officers the goals of rehabilitation and public safety are not mutually exclusive. By comparison, 48% support public safety and not rehabilitation, and 23% support rehabilitation and do not believe that public safety should come at the expense of helping inmates.

There are several ways to interpret these findings. Officers may believe that some categories of inmates can be served by one goal while another group might be suited by another. Thus prisons might be organized to punish some offenders, while rehabilitating others. Different

philosophies might also be seen by some officers as intertwined: if rehabilitation helps keep offenders from committing new crimes once they are released, then the goal of rehabilitation could be considered part of the larger objective of keeping the public safe. Conversely, punishment itself could be viewed as serving to rehabilitate offenders. A period of punishment might provide time for inmates to consider their crimes, and thus to undergo some form of personal transformation.

Despite diversity in opinion over whether rehabilitation should serve as a central ideological goal, attitudinal differences all but disappear when it comes to support for rehabilitation programs. In fact, while a significant proportion of correctional officers oppose rehabilitation as an ideological objective of incarceration (54%), a large majority of officers voice support for rehabilitation when asked about the implementation of specific services: 84% of respondents agree that inmates who want it should be given access to vocational training; 90% say inmates should have access to drug and alcohol treatment; and 91% of respondents agree that inmates who want it should have access to academic training up to and including GED preparation. There is a notable exception to these high levels of support for rehabilitation programs, though. Compared to support for other programs, support for college-level education is low. Only about half of respondents (56%) agree that inmates should be offered academic training at the college level.⁵

⁵ Notably, officers at San Quentin State Prison have attitudes towards college programs that are significantly more positive on average than at other prisons. At San Quentin, about 80% of officers agree that inmates who want it should be offered higher education. This is roughly comparable to levels of support for other types of rehabilitation programs. This anomaly is likely related to the fact that San Quentin is the only California state prison that currently hosts an on-site accredited college program. It may simply be that officers' personal familiarity with a prison-based college program leads to more supportive attitudes; officers may be better able to imagine a prison college program, having seen a first-hand example. It may be also be that officers at that prison particularly like the program's director, administrators, or teachers. Or, it may be that officers like what they perceive as the effects of the program, either on inmates or on the prison as a whole. Finally, it may be that relatively low support for prison-based higher education among officers reflects an aversion to the use of public funds for this purpose. This concern may be lessened at San Quentin where the college program is funded exclusively through private donations.

As might be expected, there is a strong relationship between support for rehabilitation as an ideological goal of incarceration and support for offering specific rehabilitation programs to inmates who want them. Among those who agree that rehabilitation should be a central goal of incarceration, support for rehabilitation programs ranges from a low of 69.8% for academic programs at the college level to a high of 95.4% for academic programs up to and including GED and for drug and alcohol treatment. By comparison, levels of support for each type of rehabilitation program are significantly lower among those who do not believe rehabilitation should be a prison's central objective. Among this group, support ranges from a low of 43.8% for academic programs at the college level to a high of 87.4% for academic programs up to and including GED.

While it seems intuitive that those who support rehabilitation in theory would be more likely to support it in practice, it seems more difficult to make sense of the sizable group who oppose rehabilitation as a central goal of corrections but support offering rehabilitation programs to inmates. To understand this seeming contradiction, it is important to note that officers appear to think about rehabilitation in two distinct realms: a realm of abstract goals or values, and a realm of concrete programs and policies. Table 2 presents the results of a factor analysis examining attitudes towards rehabilitation. As Table 2 clearly indicates, questions tapping correctional goals measure a separate attitudinal dimension from questions concerning correctional programs. The value of each may be assessed independently of the other and officers appear to think of them as related, but ultimately separate, domains.

There are a variety of different ways that officers might relate these two distinct dimensions. It may be that those officers who support rehabilitation programs but do not espouse a rehabilitation philosophy believe that prisons should be assessed first and foremost

according to their capacity to confine, a criterion uniquely specific to prisons, instead of by their ability to help people build skills, a task more suited to institutions like schools or job training programs (Logan 1993). This does not mean that rehabilitative programs should be discarded, only that their effectiveness at actually changing offenders should be incidental to determining whether a prison is achieving its goals.

Table 2: Two Dimensions of Rehabilitation

	Factor Loadings	
	Dimension 1	Dimension 2
Correctional Goals		
Rehabilitation should be a central goal of incarceration.	-.758	.397
The job of a prison is to keep the public safe, not to help inmates.	.736	-.284
Do you feel that the purpose of a prison is rehabilitation, punishment, or both?	.744	-.104
Correctional Programs		
Inmates who want it should have access to academic training at least up to and including GED preparation.	-.160	.831
Inmates who want it should be given access to vocational training.	-.294	.830
Inmates who want it should have access to drug and alcohol treatment.	-.218	.729
Inmates who want it should have access to academic training at the college level.	-.340	.719

Results from factor analysis with principal component extraction and oblimin rotation. Data are from the 2006 California Correctional Officer Survey (N=5,775)

It is also possible that, whether or not rehabilitation programs can or should be expected to assist inmates in changing their lives, they are desirable to officers for other reasons, such as helping to maintain order in the prison by giving inmates a productive way to fill free time. It may also be that officers believe rehabilitation programs are useful for some inmates, but not for others. While rehabilitation programs might be important for those inmates who are ready to change, for others they are likely to be ineffective. Finally, the questions about rehabilitation

programs that were posed in the CCOS specified that particular services should be offered to inmates who *want* to take part in them. Officers may have been more likely to support this position than if they had been asked whether rehabilitation programs should be offered to all inmates.

4. Predicting Support for Rehabilitation

Characteristics of individual correctional officers and features of the prison environment have each been posited to predict attitudes towards rehabilitation. A series of hierarchical linear models provides a good starting point to help elucidate the factors that predict support for each dimension of rehabilitation. Hierarchical linear modeling, also known as random effects modeling, is a type of analysis employed to assess multi-level data. When individual data is nested within larger organizational units, observations are not fully independent. So for example, we would expect that scores on a math test vary across individual students with different levels of ability, but that students in a good school will have higher scores, on average, than those in a lower quality school. In the correctional officer data presented here, clustering is due to the common experiences of staff working within the same security level or at the same prison. While Ordinary Least Squares (OLS) regression will produce standard errors that are too small, increasing the probability that a null hypothesis will be rejected, hierarchical linear modeling deals with this problem by taking the multilevel data structure into account.⁶

⁶For an excellent treatment of HLM, see *Hierarchical Linear Models: Applications and Data Analysis Methods* (Raudenbush and Bryk 2002). For good examples of the use of multi-level models in criminal justice research, see *The Influence of Prisons on Inmate Misconduct: A Multilevel Investigation* (Camp et al. 2003) and *Considering Hierarchical Model for Research on Inmate Behavior: Predicting Misconduct with Multilevel Data* (Wooldredge et al. 2001).

An Unconditional Means Model is the simplest multi-level model. The Unconditional Means Model is equivalent to a one-way ANOVA with random effects. It includes no independent variables, allowing us just to measure how variation is allocated across three different levels: variation between individuals, between security levels within prisons, and between prisons. Table 3 presents the results of two Unconditional Means Models predicting support for rehabilitation as a philosophy (Model I) and for rehabilitation programs (Model II). Rehabilitation as a philosophy is measured by response to the statement: rehabilitation should be a central goal of incarceration. Support for rehabilitation programs is measured with a linear additive index combining support for GED programs, vocational training and drug and alcohol treatment programs.⁷

Table 3: Unconditional Means Models Predicting Support for Rehabilitation

	Rehabilitation should be a central goal of incarceration. (Model I)	Rehabilitation Programs Index (Model II)
Fixed Effects		
Intercept	.486 (.006)	.765 (.005)
Covariance Parameters		
Individual (Residual)	.043*** (.001)	.023*** (.000)
Security Level (Intercept)	.001 (.000)	.000 (.000)
Prison (Intercept)	.001 (.000)	.001** (.000)
-2 log likelihood	-1585.5	-4975.81

The Rehabilitation Programs Index is a linear combination of the following three questions: Inmates who want it should have access to academic training up to and including GED preparation; Inmates who want it should be given access to vocational training; Inmates who want it should have access to drug and alcohol treatment. [strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree]. Both dependent variables are scaled from 0-1. Data are from the 2006 California Correctional Officer Survey (N=5,775)

***p<.001, **p<.01, *p<.01, #p<.1, ##p<.15

⁷ Respondents chose from the same 7-point response set, and both dependent variables have been recoded to range from 0 to 1. Note that support for college-level education programs is excluded from the index.

The intraclass correlation coefficients for both models in Table 3, calculated by comparing the size of the variance components at each level, indicate that the majority of variation occurs at the individual, rather than at the prison, level. About 96% of the total variability in attitudes occurs between individuals. However, while covariance parameters from the Unconditional Means Model reveal significant variation at only the individual level for attitudes towards rehabilitation as a philosophy, attitudes towards rehabilitation programs appear to vary significantly at both the individual and the prison level.

As both models shown in Table 3 indicate that significant variability exists between attitudes at the individual level, it makes sense to add covariates to the models that explain this variation. We might expect attitudes towards rehabilitation to differ according to the race and gender of correctional officers, or relative to other salient demographic characteristics such as age or education. The first set of conditional models examines the relationships between characteristics of individual officers and their orientations towards rehabilitation.⁸ In these models, black and Latino officers appear somewhat more likely than white officers to support providing rehabilitation programs to inmates who want them. While black and Latino officers also appear somewhat more likely to support rehabilitation as a central goal of corrections, among blacks this appears to be primarily related to partisan identification. When party is included in the model, the effect of being black relative to white is attenuated and is no longer statistically significant.⁹ By contrast, the relationship of gender to support for rehabilitation is very weak, confirming the findings of earlier studies. Female officers do not appear substantially

⁸ For the purposes of simplicity, all variables are first modeled as fixed effects; that is, the effects of each variable are not allowed to vary across security levels or prisons. In later specifications, the effects of race and gender were allowed to vary across prisons.

⁹ African Americans in the general population have historically identified overwhelmingly with the Democratic Party. The same is true of correctional officers. Compared to 24% of white officers, 74% of African American officers identify as Democrats.

more likely to support rehabilitation programs than male officers, and there appears to be no significant difference between male and female officers in support for rehabilitation as a central goal of corrections.

The length of time an officer has been working for the California Department of Corrections appears to significantly predict attitudes towards rehabilitation programs, but not towards rehabilitation as a goal. Officers with more tenure appear more supportive of rehabilitation programs than those who have started working for the Department of Corrections more recently. Conversely, education appears to predict support for rehabilitation as a goal, but has no significant relationship to support for rehabilitation programs. Those with more education appear more supportive of a rehabilitation philosophy of corrections. Again, however, this appears to be primarily a function of partisan identification. Those with at least some higher education are more likely to identify as Democrats than those with a High School diploma or GED, and when this is controlled for the effect of education diminishes substantially.

Finally, partisan identification appears to predict support for rehabilitation as an ideology that should guide correctional practice. Those who identify as Republican are less supportive of a rehabilitation philosophy than those who identify as Democrats or Independents.¹⁰ Compared to 41% of Republicans who believe rehabilitation should be a central goal of a prison, 46% of Independents and 58% of Democrats voice this sentiment. This is not to say that being a member of a particular party necessarily *causes* different attitudes. Like most people, correctional officers likely choose a partisan identification at least in part according to their beliefs on this and other social issues. However, it is clear that officers' party identifications and their levels of support for rehabilitation as an ideology are highly correlated. By comparison,

¹⁰ Independents include those who identify with any political party other than the Democratic or Republican.

there is no partisan difference on questions of rehabilitation programs. Democrats, Independents and Republicans are all equally likely to support offering drug and alcohol, educational and vocational programs to those inmates who want them.

5. The Causal Effect of Prison Context: Evidence from a Quasi-Experiment

The Unconditional Means Model shown in Section 4 revealed some variation in attitudes towards rehabilitation programs at the level of the prison. However, while the HLM model provides interesting insights, it suffers from the difficulties of self-selection described in the introduction; namely, officers likely select the prison and security level that most closely conforms to their pre-existing attitudes about rehabilitation. Officers who are less supportive of rehabilitation programs may prefer to work in a higher security environment where fewer such programs are offered, and vice versa. In order to estimate the *casual* effect of prison type, we must address this issue by making prison assignment exogenous to officer's existing preferences. The California Department of Corrections and Rehabilitation's (CDCR) procedures for placing new correctional officers provide an excellent quasi-experiment.

Among other avenues, the CDCR relies on its website and unemployment offices to attract candidates to open correctional officer positions. It also actively recruits on military bases and at recruitment fairs. The minimum requirements to become a correctional officer are that individuals be US citizens, over 21 years of age, have a high school diploma or equivalency, have no felony convictions, be in good physical condition and be eligible to own or possess a firearm. Prospective officers who fit the hiring criteria undergo an extensive screening process,

which includes a standard civil service written exam, a thorough background check, a physical fitness test, vision and medical exams, a drug screening, and a psychological evaluation.¹¹

Candidates who successfully complete the screening process are eligible for placement on the certification list, from which the incoming class of the next Basic Correctional Officer Academy (BCOA) is chosen. At this point, individuals are asked to specify up to 10 institutions to which they would like to be assigned. When job vacancies come open, candidates are chosen from the certification list and invited to accept or reject the position. A prospective officer is allowed 3 rejections before he or she must reapply for candidacy. When a candidate accepts a position, he or she is required to attend a 16-week, 640-hour BCOA training at a facility just outside Sacramento.

Cadets are expected to report to their assigned institution on the Monday following graduation from the BCOA. They then begin a 2-year apprenticeship program, during which they must complete a minimum 3,600 hours of professional experience. The apprenticeship program consists of a series of intra-institutional placements that are assigned at the discretion of management. An officer is subject to reassignment about every 90 days, and is not assigned a permanent post until completion of the program. After completing the probationary period, officers placed at an institution that is not their first choice may then submit a transfer packet.

¹¹ In addition to the minimal requirements, the CDCR lists as “desirable qualifications” for employment as a correctional officer: a college degree, completion of criminal justice coursework, possession of Penal Code 832 (POST) Certifications, Experience supervising other employees, and service in the US military, or as a social worker, military police officer, non-sworn correctional officer, peace officer, or fire fighter (CDCR Selection Process Brochure 2008). Listed as “Special Personal Characteristics” for correctional work are: “emotional maturity and stability; objective understanding of persons in custody; satisfactory record as a law-abiding citizen; sobriety; demonstrated leadership ability; honesty; integrity; tact; good personal and social adjustment for correctional work; neat personal appearance; courage; alertness; willingness to work day, evening, or night shifts, weekends, and holidays, and to report for duty at any time emergencies arise. Must have integrity, dependability, good judgment, and the ability to work cooperatively with others. Must be physically and mentally able to perform the essential functions of the position” (CDCR Career Opportunities Bulletin 2008).

Transfer requests can be submitted annually until an officer can be reassigned. Reassignments are then made by management as positions become available, and according to seniority.

Before they are hired, prospective officers are asked to specify a list of almost 1/3 of the state's correctional institutions as prisons where they would be willing to work. At the time that this list is solicited by the state, most correctional officer candidates have very limited information about each institution, with the exception of their geographic location. Moreover, they can be offered a position at any prison on their list, and are only allowed to turn down 3 offers before they lose their eligibility for hiring. Once assigned to a particular prison, assignment to a particular security level within that prison is by rotation, with officers cycling through different placements during the probation period. Thus, while officers likely sort into their preferred security level and facility as they gain seniority within the CDCR, it is unlikely that apprentice officers are initially selecting into posts based on their preference for one security level over the others.

The CCOS contains a sample of 310 correctional officers who are in their first two years of service, 265 of whom are in their first year. If this group has indeed been arbitrarily assigned to a security level, the treatment (assignment to a higher custody post) should be independent of all observable characteristics of officers. Apprentice officers who are assigned to work with Levels III and IV inmates are indeed relatively comparable in their gender, age, level of education, current educational status and race. This suggests that, as hypothesized, officers of different demographic backgrounds are not sorting themselves into different types of institutions. At both security levels, roughly half of apprenticed officers have at least some college education. 17.2% of officers at Level III and 13.8% of officers at Level IV are female. 14.1% and 10.9% are black; 40% and 34.5% are Hispanic; and 47.1% and 45.5% are white. The average age of

officers at each level is about 36 years, meaning that most officers in each group entered CDCR at about 34 or 35 years of age. The only significant discrepancy between apprenticed officers assigned to Level III and Level IV prisons is their partisan identification: the proportion of democrats at Level IV (36.7%) prisons is somewhat lower than Levels III (58.3%). In part, this is due to differences in the geographical region of the prison where officers are located. Particularly given the significance of party identification in predicting attitudes, these differences must be corrected in order to estimate an accurate causal effect.

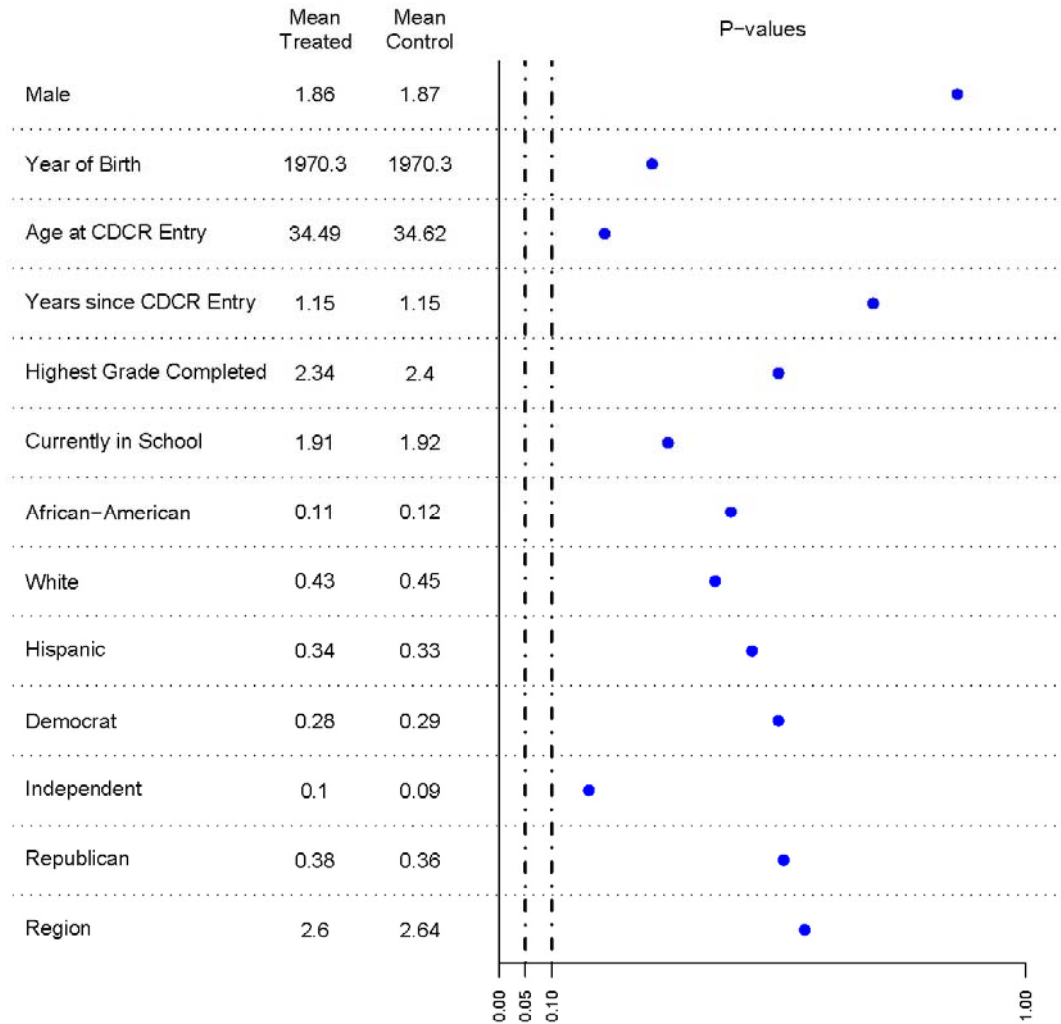
In order to reduce the bias that might stem from even minimal differences between groups of officers at different security levels, it is useful to create a matched dataset. In the matched sample, officers assigned to Level IV are matched to officers assigned to Level III on all observable demographics. They are also matched on the region of the prison facility where they have been assigned.¹² Data were matched with weights obtained from GenMatch, a nonparametric genetic matching package in R (Diamond and Sekhon 2005; Sekhon forthcoming). Figure 3 presents balance statistics for the matched sample of apprenticed officers who are assigned to security levels III (control) and IV (treatment). There are no statistically significant differences between the two groups in the matched sample.

Using the matched sample, it is then possible to assess the effects of prison context on individual attitudes towards rehabilitation. The results of these estimates confirm the inferences of the HLM models: prison context appears to have a significant effect on attitudes towards rehabilitation programs, but no relationship to rehabilitation as a professional ideology. On the question of whether “rehabilitation should be a central goal of incarceration,” the effect of assignment to Level IV rather than Level III is .01, or a difference of less than 1% of the scale

¹² Prison facilities were coded into 6 geographic regions: North, North Central, South Central, Los Angeles Area, South and Far South. Regions were coded as a continuous variable, such that matching considers the “nearest neighbor” region.

ranging from 1 “strongly disagree” to 6 “strongly agree.” This effect is not statistically significant ($T = .05, p = .96$). The same is true when considering support for rehabilitation relative to punishment. On this question officers assigned to security levels III and IV are statistically indistinguishable.

Figure 3. Match Balance for Treated (Level IV) and Control (III) Groups



Data are from the 2006 California Correctional Officer Survey (N=169 matched observations)
Includes only officers in the CCOS sample who are in their first year of employment

By comparison, there is a statistically significant effect of security level on attitudes towards the provision of specific rehabilitation programs. Officers assigned to Level IV posts are less likely to support offering some types of rehabilitation programs than officers assigned to Level III. In particular, assigning officers to work with higher custody inmates makes them less likely to support offering either academic training at the college level or vocational training. The size of the effect of Level IV assignment on support for college education is $-.42$, or about 7% of the scale, and the effect on support for vocational training is roughly equivalent ($-.41$).¹³ While the size of these effects may be considered relatively small, this is a strong finding given the relative weakness of the treatment. Apprenticed officers have spent little time in the prison system and are rotated across security levels. Thus the socializing effects of prison context may be even larger for the correctional officer population as a whole.

There is no significant effect on support for either substance abuse or GED programs. Compared to these types of programs, college education and vocational training received significantly lower levels of support among the total population. Recall that, while GED and substance abuse programs received the support of 91% and 90% of officers, respectively, only 84% of officers in the total sample supported the provision of vocational programs and 56% agreed that inmates who wanted them should be given access to college education. The less popular programs may be considered by many to be privileges rather than rights. While many prison systems have GED programs and substance abuse treatment as core or even mandated services, college programs and vocational training are more often considered amenities that can be selectively granted to inmates to encourage good behavior. This may help to explain why attitudes towards these types of programs are more easily swayed.

¹³ The Benjamini-Hochberg adjusted p-values for college programs and vocational training are .24 and .177 respectively.

Table 6: ATT Estimates of the Effect of Prison Context on Support for Rehabilitation

	Estimate (AI SE)	T-statistic	p-value
Rehabilitation Philosophy			
Rehabilitation should be a central goal of incarceration.	.01 (.25)	.05	.96
Do you feel that the purpose of a prison is rehabilitation, punishment, or both?	.21 (.16)	1.35	.18
Rehabilitation Programs			
Inmates who want it should have access to...			
academic training at least up to and including GED preparation.	-.05 (.18)	-.03	.79
academic training at the college level	-.42 (.22)	-1.89	.06
vocational training.	-.41 (.20)	-2.10	.04
drug and alcohol treatment.	.01 (.19)	.03	.97

Data are from the 2006 California Correctional Officer Survey (N=169 matched observations)

Includes only officers in the CCOS sample who are in their first year of employment

***p<.001, **p<.01, *p<.01, #p<.1, #p<.15

Finally, Table 7 shows the results of a post-matching parametric bias adjustment run on the matched sample. These equations predict support for the Rehabilitation Programs Index, which combines the individual questions on different types of programs. The index is regressed on the treatment, first with no covariates and then including all baseline demographic covariates. The matching estimate for the index is -.03. As should be expected, the standard error of the treatment coefficient in the regression equation goes down slightly from the matched estimate, confirming that the treatment has been made orthogonal to the covariates. In the regression equations, the estimate of the treatment effect does not substantially change. The effect of assignment to Level IV rather than Level III on officer attitudes towards rehabilitation programs is -.05 and is statistically significant at p<.05.

Table 7: Post-Matching Parametric Bias Adjustment

	Matching Estimate	Bivariate Regression	Full Regression
Treatment	-0.03 (0.03)	-0.05* (0.02)	-0.05* (.02)
Constant		0.78*** (0.02)	-26.63 (53.38)
Demographics Included		N	Y
Adj. R. Sq.		0.02	-0.00

Data are from the 2006 California Correctional Officer Survey (N=169 matched observations)

Includes only officers in the CCOS sample who are in their first year of employment

***p<.001, **p<.01, *p<.01, #p<.1, #p<.15

5. Implications and Conclusions

Disagreement over what goals should guide modern correctional practice has led to impassioned debate, the outcome of which has important implications for the professional role of correctional staff and the formal culture of the modern prison. Differing ideas about what prisons can and should be expected to accomplish lead to differences of opinion about the ways in which correctional staff should be trained, and ultimately what role they should play in the functioning of the prison system.

Rehabilitation is one of the core philosophies that could serve to guide correctional practice. Yet studies of correctional officers have evidenced a lack of consensus on what “rehabilitation” means. The literature offers a wide array of definitions for rehabilitation: attitudes towards inmates, support for rehabilitation programs, punitiveness, human service orientation, counseling role, and so on. Each concept has been studied by multiple scholars, and measured by a variety of different indices and scales (Tellier et al. 2001). This has led to inconsistencies in findings about what factors shape these attitudes, and difficulties in comparing the results of one study to another.

The preceding sections have presented analyses of correctional officer attitudes towards rehabilitation. Several important characteristics of these attitudes are clear. First, correctional officers are divided over what the goals of incarceration should be. While many officers believe that rehabilitation should be a central goal of incarceration, most believe that this should be balanced with other objectives, such as public safety or punishment. By comparison, it appears that officers overwhelmingly support the provision of specific rehabilitation programs to those inmates who want them. A large majority of officers support the provision of academic programs up to and including GED, vocational programs, and drug and alcohol treatment. A smaller majority support offering academic training at the college level.

These findings point to an important aspect of correctional officer attitudes towards rehabilitation that has been ignored in much of previous research. “Support for rehabilitation” consists of two distinct dimensions. Rehabilitation may describe a philosophy of corrections, concerned with the responsibility and potential of the prison to change individual inmates. Or, rehabilitation may describe concrete correctional policy and issues related to the implementation of specific types of programs. Officers appear to think about the philosophy of corrections and the provision of programs as related, but ultimately as two distinct domains.

Despite the vast array of variables usually included in models predicting correctional officers’ attitudes, previous research has largely ignored the relationship of political affiliation to support for different correctional philosophies. Most surveys of correctional officers have not included a measure of political partisanship and so cannot account for this as a predictor of attitudes. This leaves an important variable unaccounted for, introducing bias into empirical estimates. This study finds that, in the domain of goals and values, rehabilitation appears to be a partisan issue: officers who identify as Republican are less likely to agree that rehabilitation

should be a central goal of a prison. Compared to 41% of Republicans, 58% of Democrats support a correctional philosophy oriented around rehabilitation. By comparison, there is no such partisan difference in the domain of policy and practice. On questions of rehabilitation programs, Democrats and Republicans are equally likely to support offering rehabilitation programs to those inmates who want them.

While characteristics of individual officers appear to predict support for rehabilitation both as an ideology and a set of programs, prison-level differences appear only in support of rehabilitation programs. It is possible that prison level differences are only the results of self-selection; over the course of their careers, it is likely that correctional officers self-select into the types of prisons to which they feel best suited. Officers may sort according to their pre-existing attitudes towards rehabilitation programs. Those who are more supportive of rehabilitation programs should be more likely to locate themselves in prisons that offer them. However, the quasi-experiment presented here suggests that working in different security levels exerts a causal effect on individual attitudes. Apprenticed officers who are assigned to work primarily with Level IV rather than Level III inmates adopt more oppositional attitudes towards rehabilitation programs.

Correctional officers play an important role in the implementation of correctional policy, and understanding how they view the goals and nature of incarceration is a crucial part of documenting the way a prison bureaucracy is constructed. As the data presented here make clear, though, custody staff do not only help to shape the environment of the prison. They are also shaped by it. Like inmates, correctional officers have daily and intense experience within American prisons. Different types of prisons can have significantly different effects, altering the

ways in which officers come to think about rehabilitation programs, inmates, and the nature of corrections.

Taken together, the findings presented here have important implications for the ongoing debate over correctional policy and practice. Conventional wisdom suggests that talking in broad terms helps build agreement. By speaking in the language of large ideals and overarching philosophies, it may sometimes be possible to avoid discussing details that will alienate particular groups. Many believe that “the devil is in the details,” and this is perhaps often the case. Yet if policymakers and administrators are looking for areas where rehabilitation will find broad support among correctional officers, they may do well to take the lead from custody staff themselves. This study suggests that consensus among officers may be difficult to achieve when it comes to the broad goals of incarceration. When rehabilitation as an abstract goal or philosophy is probed, officers appear significantly divided. However, there is clear agreement when it comes to the implementation of correctional policy: a large majority of officers agree that rehabilitation programs should be made available to those inmates who want them. Instead of continuing to talk about rehabilitation in broad terms, it might therefore be fruitful to refocus the debate on the practical areas of implementation that matter most: concrete programs, offered to specific groups of offenders.

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Appendix A. Details of the 2006 California Correctional Officer Survey

A field test of the survey instrument was conducted in February of 2006, at a CCPOA Board of Directors meeting. Those in attendance included correctional officer representatives from each prison in the state system, for a total of roughly 90 attendees. Each attendee was invited to take the survey, after which a question and answer period was held to address any issues or concerns that participants had with the survey instrument. The survey was then significantly revised based on these completed surveys and the comments offered by participants. The final survey instrument included sixty-eight closed-ended questions.

In the week preceding the initial survey mailing, a full page advertisement was placed in the *Peacekeeper*, a publication of CCPOA, informing officers about the survey, explaining its objectives, and inviting participation. A postcard, survey and cover letter were then sent to each correctional officer at the end of March 2006, along with a stamped and addressed reply envelope. The cover letter explained the goals of the survey, as well as providing information about confidentiality. Two weeks after the initial mailing, a follow-up postcard was sent to every officer, reminding people to fill out their surveys. In addition, a second full page advertisement was run in the *Peacekeeper*. At the end of June, a second mailing of the survey was sent to the full sample. The second mailing included a duplicate copy of the survey, a slightly different cover letter, and a pre-addressed business reply envelope.

As nearly as possible, surveys were sent to every correctional officer currently working in the California system. While a highly stratified random sample was considered, a focus group conducted with correctional officers during the field test revealed a great deal of concern that past survey efforts had “hand-picked” particular people to receive surveys, in order to obtain data that would paint the prison system in an overly positive light. For this reason, it was decided that

the additional time and expense of including the total population was worthwhile. The survey ultimately yielded 5,775 completed and returned surveys, for a response rate of about 33 percent.¹⁴ Table A details response rates by institutions.

Response Rates by Institution

Institution	Estimated Positions Filled	Returned Surveys (#)	Response Rate (%)
Avenal State Prison	671	161	24.0
CA Correctional Center	520	164	31.5
CA Correctional Institution	975	245	25.1
CA Institution for Men	888	236	26.6
CA Institution for Women	302	67	22.2
CA Medical Facility	526	190	36.1
CA Men’s Colony	748	249	33.3
CA Rehabilitation Center	605	138	22.8
CA State Prison - Corcoran	1057	220	20.8
CA State Prison - Sacramento	747	215	28.8
CA State Prison - Solano	597	123	20.6
CA State Prison - Wasco	703	172	24.5
Calipatria State Prison	564	157	27.8
Centinela State Prison	607	139	22.9
Central CA Women’s Facility	376	95	25.3
Chuckawalla Valley State Prison	331	77	23.3
Correctional Training Facility	728	182	25.0
CA State Prison – LA County	637	170	26.7
Delano II State Prison	751	136	18.1
Deuel Vocational Institution	549	157	28.6
Folsom State Prison	449	150	33.4
High Desert State Prison	671	214	31.9
Ironwood State Prison	587	150	25.6
Mule Creek State Prison	475	148	31.2
North Kern State Prison	653	137	21.0
Pelican Bay State Prison	805	271	33.7
Pleasant Valley State Prison	689	159	23.1
RJ Donovan Correctional Facility	683	184	26.9
Salinas Valley State Prison	725	181	25.0
San Quentin State Prison	805	198	24.6
Sierra Conservation Center	543	159	29.3
Substance Abuse Treatment Facility	872	203	23.3
Valley State Prison for Women	404	121	30.0

Additional surveys were returned that did not specify an institution.

¹⁴ As of June 30, 2006, the CDCR Position Inventory by Institution reported 21,243 established positions filled, and the survey went out to a database of 21,478. Of the mailed surveys, 2,161 were returned with problem addresses. An additional subset of 1,500 is estimated to have been sent to officers who were either retired, called to active military service, or working in the fire camps. These cases were excluded from the population.

The large size of the survey sample provides a nice cross section of officers by race and gender, as well as across all of California's correctional institutions. This is particularly important, as it allows for an assessment of how attitudes are affected by institutional characteristics, or variation between prison facilities. In addition to the completed and returned surveys, a large number of officers included unsolicited letters and comments concerning the questions asked on the survey, and elaborating on the closed-ended responses they had provided. In total, several hundred of these letters were catalogued, and they provide an exciting and unexpected addition to the data collected during the project.