Feedback Effects and the Criminal Justice Bureaucracy: Officer Attitudes and the Future of Correctional Reform

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Although political scientists have documented the effects of incarceration on those serving time in prison and jail, there has been much less discussion about feedback effects on the attitudes of those who work in correctional institutions. This is a considerable oversight, given the enormous growth of the correctional workforce and its importance in the implementation of crime policy. In this article, we present original survey data from a large sample of California correctional officers. Our analyses suggest that characteristics of the institutions where correctional officers work—the levels of violence to which they are exposed, the proportion of inmates involved in high-quality rehabilitation programs, as well as the quality of management—help to shape officers' attitudes toward rehabilitation. These dynamics have important implications for how public policies can create political constituencies among criminal justice officers. The attitudes of these officers should therefore be a concern for scholars, advocates, and practitioners who are interested in political strategies for long-term, meaningful reform to the correctional system.

Keywords: correctional officer; mass incarceration; prison; policy feedback; criminal justice; rehabilitation

For the first time in more than 50 years, the United States has seen a nearly 5 percent decline in the size of its inmate population, with some states experiencing decreases of between 14 and 25 percent (Sentencing Project 2017). These declines are the result of political

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reform efforts at every level of government. Many local police departments are rethinking their approach to low-level crimes; several states have instituted policy changes aimed at reducing criminal penalties for low-level and nonviolent offenses; and a federal, bipartisan coalition has been working on a substantial legislative package for sentencing reform (Scott 2014; American Bar Association 2019). These are important signs that the growth of mass incarceration might finally be slowing, or even beginning a reversal of course.

These changes are the culmination of decades-long efforts by civil and human rights advocates, who have shed light on the myriad harms inflicted on low-income and minority communities by the nation's aggressive approach to crime control that began with Nixon's declaration of a "War on Drugs" in 1971. These harms have been well documented and rightfully demand our attention. In this article, however, we argue that policy reformers today might usefully broaden their scope to consider also the health and safety of correctional workers.

Previous studies have shown that individual demographics such as race and partisanship predict officers' attitudes toward criminal justice, just as they do in the public as a whole (Unnever 2014; Lerman and Page 2012, 2015). However, we show in this study that characteristics of the institutions where correctional officers work—the levels of violence to which they are exposed, the proportion of inmates involved in high-quality rehabilitation programs, as well as the quality of training and management—also predict officers' attitudes toward rehabilitation, inmates, and the purpose of corrections. Our results are unique in that we employ original survey data from a large sample of California correctional officers, including questions related to both workplace experiences and attitudes toward rehabilitation. Additionally, responses were collected from officers working in thirty-three different state prisons, allowing us to measure the influence of institutional factors on a range of attitudinal outcomes, as well as allowing us to leverage institutional variation in the likelihood of exposure to violence.

The dynamics we uncover have important implications for our understanding of how public policies can create political constituencies in the criminal justice domain. Although political scientists have documented the effects of mass incarceration on those who serve time in prison and jail (e.g., Manza and Uggen 2008; Lerman and Weaver 2014), there has been much less discussion about feedback effects on the attitudes of those who work in correctional institutions. This is a considerable oversight, given the enormous growth of the correctional workforce. By 2000, almost 13 percent of state and local public employment (and a larger percentage in at least fifteen states) was in the criminal justice domain (Hughes 2006). According to the most recent available data, approximately 468,600 correctional officers and bailiffs were employed in the United States in 2016, more than by General Motors and Ford combined (Bureau of Labor Statistics 2019; General Motors 2016; Ford Motor Company 2017).

The policy attitudes of law enforcement personnel matter to criminal justice politics and policy reform in several distinct ways. As Michael Campbell notes in his account of the punitive politics of Texas criminal justice, "Law enforcement actors and the occupational organizations that represent them occupy an important and somewhat ambiguous theoretical terrain: They are simultaneously

interest groups and state functionaries" (2011, 635). As a large group of citizens with a personal stake in the outcomes of criminal justice policy debates, law enforcement personnel represent an "issue public"—a group of citizens who are highly attuned to a specific political issue. Individuals within these issue publics "are likely to think frequently about those attitudes, to perceive competing candidates as being relatively polarized on the issue, and to form presidential candidate preferences on the basis of those attitudes. Also, policy attitudes that citizens consider personally important are highly resistant to change and are therefore especially stable over long periods of time" (Krosnick 1990, 59).

Law enforcement personnel are also frequently well organized; many officers belong to public-sector unions, as well as benevolent and fraternal associations, that represent their attitudes and interests in public debates. These law enforcement organizations can have an outsize influence on crime policy (Gottschalk 2006; Miller 2008; Page 2011). In California, for example, the California Correctional Peace Officers Association (CCPOA)—the public-sector union representing roughly thirty thousand correctional officers, parole officers, and other public safety personnel in the state—plays a central role in state policy debates over criminal justice reform, as well as in electoral campaigns across California. Upwards of 95 percent of eligible employees belong to the union, and this provides the organization with both a large membership base and ample resources to expend representing their interests. In the early 1990s, the union was California's second largest political action committee, and between 2000 and 2009, it ranked among California's top twenty largest special interest groups in political spending. In some political campaigns, it has been among the state's largest organizational donors (Page 2011).

The attitudes of law enforcement officers are important because they represent a sizable population with a clear self-interest in the future of American crime policy. But they are also critical because officers' attitudes influence how they conduct themselves at work (e.g., Crewe, Liebling, and Hulley 2011; Garland 1990; Kauffman 1988; Liebling 2000, 2008; Liebling, Price, and Shefer 2010; Lin 2000; Vuolo and Kruttschnitt 2008). Officers play a central role in the implementation of criminal justice policy. Their attitudes should therefore be of primary concern to scholars, advocates, and practitioners seeking political strategies that can enable long-term, meaningful reform to the correctional system.

As seminal studies on the "street-level bureaucrat" emphasize, the attitudes of public-sector workers influence how they carry out their professional obligations (e.g., Lipsky 2010) Indeed, correctional officers enjoy a great deal of discretion in how they perform their duties and responsibilities in the workplace (Liebling, Price, and Shefer 2010). Most critically, their attitudes inform the quality of their interactions with inmates and, thereby, shape the way prisons are experienced by prisoners (e.g., Crewe, Liebling, and Hulley 2011; Liebling 2008); through their actions, officers can either heighten or mitigate the "pains of imprisonment" (Sykes 1958/2007). As Alison Liebling writes, "Staff attitudes translate into regime qualities that can make the difference between a survivable experience of imprisonment and an unbearable one" (2008, 118).

More broadly, officers' actions are crucial to defining the culture of correctional institutions (e.g., Crewe, Liebling, and Hulley 2011; Liebling 2000; Liebling, Price, and Shefer 2010). Correctional officers and other front-line personnel are "primary actors in the penal system and the individuals who are directly responsible for implementing new penal policies" (Vuolo and Kruttschnitt 2008, 309) and as such are the "agents who do the most to transform cultural conceptions into penal actions" (Garland 1990, 210). Because of this, understanding officers' experiences and attitudes is crucial to understanding why prison reforms ultimately succeed or fail. As one early scholar of prison staff noted, "Failure to understand officers—their characters and motivations, problems and perspectives—has inevitably undermined efforts to reform prisons and has contributed to the everyday misery of those who live and work behind the walls" (Kauffman 1988, 3). Without securing the buy-in of correctional officers and other staff, changes in policy are unlikely to translate into meaningful differences on the ground (Lin 2000).

The Factors That Shape Officer Attitudes

Economists and sociologists have raised calls of alarm about the many harms associated with mass incarceration in America, showing that a wide range of individual, familial, and community outcomes are negatively affected by imprisonment (for a review, see Mauer and Chesney-Lind 2002). It is only more recently, however, that political scientists lent their voices to these concerns; we now have numerous studies showing that contact with the criminal justice system can have profound effects on citizens' political attitudes and behaviors (e.g., Manza and Uggen 2008; Lerman and Weaver 2014; but see also Gerber et al. 2017). For instance, Weaver and Lerman (2010; see also Lerman and Weaver 2014) find that having been stopped by police, arrested, convicted of a crime, or sentenced to imprisonment is associated with substantially lower levels of trust in government, feelings of "second-class" citizenship, and lower rates of voter registration and turnout.

We know much less about the attitudes and behaviors of other actors affected by criminal justice agencies, including the officers and front-line supervisors employed by state and local corrections. Correctional officers are among the "invisible ghosts of penality" (Liebling 2000, 337) whose attitudes and experiences have rarely been the subject of serious inquiry (Liebling, Price, and Shefer 2010, 6–13). In particular, we do not have a great deal of information about how officers' attitudes are shaped by their experiences on the job. As a result, we do not know much about the sorts of reforms that might build political capital among correctional personnel. Reformers aimed at rolling back the harms of mass incarceration are generally silent on the role of correctional officers and other staff and do little to account for how changes in institutional culture and practice will shape prison workers' attitudes and experience.

It is certainly possible that officers, as a rule, do not adapt in significant ways to the particular environments in which they work. Continuity theory (Atchley

1989), importation theory (Irwin and Cressey 1962), and representative bureaucracy theory (Mosher 1968) would all lead us to expect that officers' values, self-perceptions, and attitudes are already well established by the time they enter corrections. As a result, their experiences in the workplace do not substantially change their basic orientations toward punishment and related ideas. Instead, officers' attitudes toward rehabilitation and other criminal justice issues are predicted by demographics and earlier life experiences. Factors such as race and gender, age and level of education, as well as partisan identification, have all been shown to predict officers' orientations toward correctional work (e.g., Jurik 1985; Cullen et al. 1989; Crewe, Liebling, and Hulley 2011; Lerman 2013; Lerman and Page 2012, 2015).

Alternatively (or in addition), it might be that officers do adapt in some ways to their occupational role, but they do so in line with their shared position within the correctional system (e.g., Jacobs and Retsky 1980; Liebling 2008; Lin 2000; Sykes 1958/2007). Specifically, officers are assigned a unique job within the prison context—the maintenance of order and security—and their perspectives might reflect this fundamental responsibility, irrespective of differences they encounter in their particular workplace (Liebling 2000, 338). As Jacobs and Retsky point out, "Prevention of escape and riot is the primary task around which the role of the guard is organized. Closely related is maintenance of a modicum of internal order and security" (1980, 56). As a result, officers generally perceive inmate rehabilitation to be outside their immediate sphere of influence (Crewe, Liebling, and Hulley 2011; Lin 2000). For some, this results in cynicism about whether rehabilitation programs and other prison interventions can successfully divert adult offenders from criminality (Jacobs and Retsky 1980, 71). When officers do support rehabilitation programs for inmates, it often reflects their belief that programs can help to maintain order within the prison by reducing boredom and unstructured time (DiIulio 1991; Lin 2000).

However, we suspect that the specific policy context in which officers work can also matter for how they come to see the purpose and nature of corrections. As work by Lerman and Page (2015) suggests, "formal and informal training, daily interactions, subcultural norms and values, and institutionalized relationships shape employee orientations more than demographic or other individual-level factors" (p. 579; see also Crawley 2004; James and Retsky 1980). Some of the factors that most immediately impact an officer's work-life are related to the individuals who are incarcerated within a particular prison. This includes the type of people with whom an officer has the most direct daily contact (e.g., the security level of an institution) and how the staff-inmate relationship is structured and experienced (e.g., levels of violence). In addition, the policy environment matters by communicating the "indirectly expressed organizational goals" (Liebling 2008, 108) of the specific institution in which officers work (e.g., the extent and quality of existing rehabilitation programs).

Other policies and practices of the prison that might be salient for how officers come to view criminal justice policy are those that are directed at officers themselves. For instance, officers' orientations toward rehabilitation might be affected by how they perceive their supervisors and management, whether they have

access to the resources they need to keep themselves safe, and whether they receive the training they require to support their own health and well-being. We expect that these features of the prison context, both inmate-oriented and officer-directed, will help to determine how officers come to see the nature of corrections and criminal justice policy.

New Evidence on Officer Attitudes

To examine how both demographic and institutional factors shape the policy attitudes of public-sector criminal justice workers, we use data from two waves of the California Correctional Officer Survey (CCOS). The CCOS is an original, large-scale survey designed to measure the experiences and attitudes of law enforcement officers in the State of California. We distributed the first wave in 2006, yielding a sample of 5,670 participants—a response rate of 33 percent. We fielded the subsequent wave in 2017, resulting in a final sample of 8,436, for a response rate of 42 percent.[1] Table 1 details the demographic profile of our participants, as well as officer population demographics from 2006 and 2015 (the most recent year available). Both the proportion of female correctional officers and the racial composition of our sample are quite similar across years and to the population.

To measure policy-related attitudes, we asked four questions in both CCOS surveys: the extent to which officers agree that "Rehabilitation should be a central goal of incarceration" and "The job of a prison is to keep the public safe, not to help inmates"; and whether "The purpose of a prison is rehabilitation, punishment, or both" and "Most people who end up in prison are there because of personal failure, or because they did not have advantages like strong families, good education, and job opportunities." We created a summary additive index from these four survey questions, reverse-coded when necessary and rescaled to range from zero to one.[2] We then constructed a second index to assess officer support for providing inmates with access to specific rehabilitation programs, including academic training up to and including General Education Development (GED) preparation; vocational training; and alcohol and drug treatment. Similar to the first index, we summed the Likert-scale questions and then scaled the index from zero to one, allowing for interpretation as percent difference.[3]

We take three distinct analytical approaches to assessing the relationship between public-sector work experience and our outcomes of interest. First, we use multilevel models with random intercepts at the prison level to predict policy attitudes using data from 2017. This lets us look at the relationship between prison context and officer attitudes, all else equal. We then present results from change-over-time models, utilizing average outcomes aggregated by prison. This second analysis allows us to assess whether changes in institutional context are associated with changes in officers' attitudes toward rehabilitation. Finally, we restrict our sample to only correctional officers at the beginning of their careers. Among these new officers, assignment to different

TABLE 1
Demographic Profile of CCOS (2006/2017) and Officer Population (2006)

	Sample	Population	Sample	Population
	2006		2017	2015
Gender				
Female	914 (16.3%)	3,760 (18.0%)	1,087 (17.6%)	—
Male	4,702 (83.7%)	17,419 (82.0%)	5,088 (82.4%)	—
Race/ethnicity				
Black	481 (8.8%)	2,612 (12.3%)	581 (9.6%)	2,951 (11.4%)
White	3,235 (59.3%)	9,814 (46.2%)	2,794 (46.3%)	9.859 (38.2%)
Hispanic	1,490 (27.3%)	7,307 (34.4%)	2,103 (34.9%)	10,621 (41.2%)
Asian	163 (2.9%)	382 (1.8%)	276 (4.6%)	773 (3.0%)
Other	409 (7.2%)	1,125 (5.3%)	620 (10.3%)	1,606 (6.2%)

NOTE: Population data are drawn from a report by the Department of Corrections and Rehabilitation Office of Personnel Services on October 12, 2006, and from Bargaining Unit data as of January 1, 2015. Gender data on the officer population from 2015 were not available. Sample race sums to more than 100 percent due to some respondents identifying as more than one racial category. Proportions of nonmissing values are reported.

prison institutions is quasi-random, allowing us to more plausibly estimate the causal effect of prison context.

Results

We find substantial variation in attitudes toward rehabilitation within our sample as a whole, though attitudes skew somewhat in the direction of punitiveness (see Figure 1). For example, in 2017, roughly three in five respondents indicated the belief that most (39.8 percent) or all (21.8 percent) of the reason individuals end up in prison is due to personal failure, rather than a lack of advantages. About a quarter (27.4 percent) suggested that both personal failure and lack of advantages were equal contributors. A slightly smaller proportion of officers indicated that the purpose of prison was either mostly (39.7 percent) or totally punishment (8.4 percent), rather than rehabilitation. In response to this question, roughly one-third (35.8 percent) indicated that the purpose of prison was equally punishment and rehabilitation.

In comparison, a large majority reported agreeing that those who want access to rehabilitation programs while incarcerated should be able to receive them. Specifically, 84.8 percent of officers indicated that inmates should have access to GED preparation, and 80 percent supported giving inmates access to vocational training. Likewise, 87.9 percent agreed that inmates should be given access to alcohol and drug treatment if they want it.

FIGURE 1
Purpose of Prison and the Reason People End Up in Prison

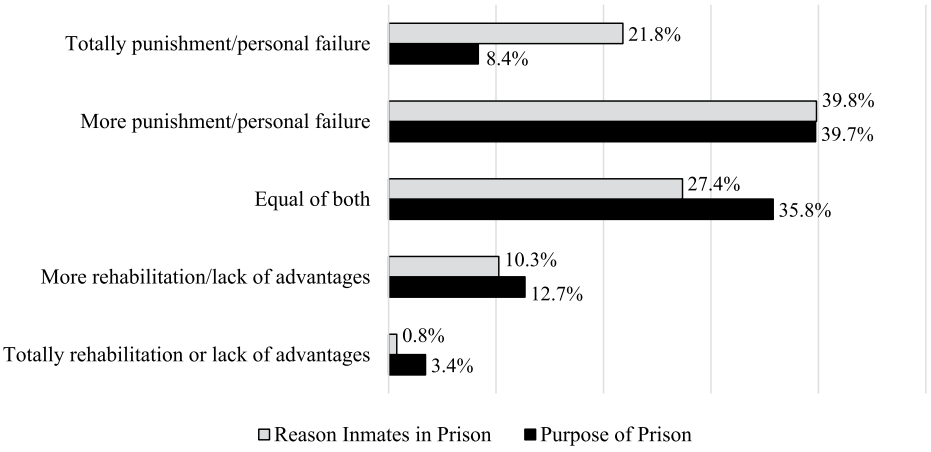

Table 2 presents results from multilevel models estimating the effects of demographics, exposure to violence, and institutional factors on officers' policy-related attitudes in the 2017 survey.[4] Higher scores on the outcome variable indicate increased support for a punitive purpose of corrections (first and second columns) or lower support for rehabilitation programs (third and fourth columns). As the table shows, a variety of demographic factors appear clearly associated with these attitudes. In particular, black correctional officers were more likely to indicate being supportive of a rehabilitative purpose of corrections compared to whites, and being a Democrat or Independent (versus identifying as a Republican) is associated with a less punitive set of beliefs. Those with more education voiced greater support for a rehabilitative purpose of corrections and rehabilitation programs. Conversely, age was negatively correlated with these outcomes.

Notably, institutional factors were also significant contributors to support for rehabilitation, controlling for other factors. For instance, the lower the perceived level of support from and competency of supervisors, the less likely an officer was to support rehabilitation as an ideology. Similarly, the better the perceived resources available to officers, the more support they voiced for providing inmates with access to rehabilitation programs. Personal experience with rehabilitation was also a correlate of officers' support for rehabilitation. Specifically, the larger the percentage of inmates currently participating in a high-quality rehabilitation program at the prison where they work, the less likely officers were to support a punitive purpose of prison and the more support they expressed for programs.

The most notable difference between the two models is in the relationship to violence. When it comes to whether officers hold a more punitive ideology of corrections, our models indicate that greater exposure to violence was associated

TABLE 2
Predicting Rehabilitation Attitudes

	More Punitive Ideology		Opposition to Rehabilitation Programs	
	Demographics and Violence	Demographics, Violence, and Institutional Factors	Demographics and Violence	Demographics, Violence, and Institutional Factors
	b (*SE*)	*b* (*SE*)	*b* (*SE*)	*b* (*SE*)
Demographics				
Male	.02* (.01)	.03** (.01)	.01 (.01)	.02* (.01)
Race/ethnicity				
Asian	.02 (.01)	.02 (.01)	.03* (.01)	.03* (.01)
Black	−.07*** (.01)	−.06*** (.01)	−.04*** (.01)	−.03* (.01)
Latino	−.01 (.01)	−.01 (.01)	.03*** (.01)	.03*** (.01)
Native Hawaiian/PI	−.02 (.02)	−.02 (.02)	.03 (.02)	.02 (.02)
Other race	−.00 (.01)	−.00 (.01)	.01 (.01)	.01 (.01)
Partisanship				
Democrat	−.07*** (.01)	−.07*** (.01)	−.03** (.01)	−.02* (.01)
Independent	−.04*** (.01)	−.04*** (.01)	−.02** (.01)	−.02* (.01)
No preference	−.03*** (.01)	−.04*** (.01)	−.01 (.01)	.00 (.01)
Education				
Some college	−.02 (.01)	−.02* (.01)	−.02* (.01)	−.02* (.01)
Associates	−.04*** (.01)	−.04*** (.01)	−.04*** (.01)	−.04*** (.01)
College plus	−.04** (.01)	−.04*** (.01)	−.05*** (.01)	−.05*** (.01)
Age	−.00*** (.00)	−.00*** (.00)	−.00*** (.00)	−.00*** (.00)
Violence				
Security level				
II	.03 (.01)	.02 (.02)	.01 (.02)	−.01 (.02)
III	.04** (.01)	.02 (.02)	.02 (.02)	.00 (.02)
IV	.04** (.01)	.01 (.02)	.02 (.02)	−.01 (.02)
Violence				
Inside	.04*** (.01)	.00 (.01)	−.01 (.01)	−.03*** (.01)
Outside	.01 (.02)	.01 (.02)	.00 (.02)	.00 (.02)
Before	.04*** (.01)	.03** (.01)	−.01 (.01)	−.01 (.01)
Safety				
Inmates very dangerous		.01*** (.00)		.02*** (.00)
Inmates not dangerous		−.00 (.00)		−.01 (.00)
Equipment index		−.03 (.02)		−.05** (.02)
Response to violence index		−.06*** (.01)		−.06*** (.01)

(continued)

TABLE 2 (continued)

	More Punitive Ideology		Opposition to Rehabilitation Programs	
	Demographics and Violence	Demographics, Violence, and Institutional Factors	Demographics and Violence	Demographics, Violence, and Institutional Factors
	b (*SE*)	*b* (*SE*)	*b* (*SE*)	*b* (*SE*)
Institutional Factors				
Management				
Supervision index		.08** (.02)		–.02 (.02)
Resources index		–.01 (.02)		–.08*** (.02)
Quality of stress management training		.02 (.00)		.01** (.00)
Inmate rehabilitation				
Proportion inmates in high-quality programs		–.02*** (.00)		–.01*** (.00)
Has received rehabilitation training		–.01* (.00)		–.01** (.00)

NOTE: Marital status (married, divorced, never married, separated, widowed) and veteran status (served in military, has not served in the military) are also included as independent variables in all models but were not significantly associated with outcomes and are not shown.
*$p < .05$. **$p < .01$. ***$p < .001$.

with lower support for rehabilitation, on average. Likewise, the higher the proportion of inmates that officers perceived as very dangerous, the more they tended to support a punitive purpose of incarceration.[5] In contrast, the greater an officer's exposure to violence inside prison, the *greater* his or her predicted support for providing inmates with rehabilitation programs. This makes sense, given the perceived role of programs in helping to maintain order and safety in the prison (DiIulio 1991; Lin 2000). Similarly, we see that the better the quality and availability of safety equipment and the stronger the organizational response to violence when it occurs, the higher officers' support for providing inmates with access to rehabilitation programs.

Change over time and causal inference

In addition to looking at predictors in 2017, the CCOS allows us to estimate how changes over time in institutional characteristics (measured by officers' perceptions of change) predict changes in policy-related views (see Table 3). Here again we find a role for experiences with violence; prisons where officers report

TABLE 3
Predicting Change in Orientations towards Rehabilitation (2006 to 2017)

Parameter	Estimate	*SE*	*t*	*p*
Intercept	66.40	28.82	2.30	.0334
Baseline proportion supporting a rehabilitative purpose of corrections	−0.89	0.43	−2.04	.0559
Change in exposure to violence	0.08	0.02	4.53	.0003

NOTE: Higher scores on the purpose of corrections index indicate greater support for a punitive purpose of corrections. Control variables included in the model but not shown: change in the proportion of female officers; change in the proportion of officers identifying as Republicans; change in the proportion of officers identifying as Democrats; change in the proportion of officers identifying as Latino/Hispanic; change in the proportion of officers identifying as black/African American; change in the average age of officers; change in the proportion of officers indicating that when a violent incident occurred, the institution's response was adequate; change in the proportion of officers who indicated they had been harassed by a supervisor or management in the last six months; change in the proportion of officers who had problems with poor performance feedback or lack of recognition in the last six months; and change in the proportion of officers who had issues with scheduling or pay in the last six months.

a larger change in exposure to violence also show modest, but greater, change in support for a rehabilitative purpose of corrections. In contrast, we do not find evidence that changes in violence or other institutional factors have implications for officers' attitudes toward the provision of specific rehabilitation programs.

In sum, the evidence thus far suggests that institutional factors play a role in predicting officers' support for rehabilitation. However, this does not yet allow us to say anything about whether these factors are *causing* the development of rehabilitation-oriented attitudes. Instead, we are limited to interpreting our results as an association between features of the prison environment and the attitudes expressed by officers who work within it. This leaves open the possibility that self-selection explains our results: officers with particularly punitive (or rehabilitation-oriented) attitudes might systematically choose to work in prisons that have different institutional characteristics.

To address this concern, we conduct one final analysis in which we narrow our focus to only early tenure correctional officers in California. Among this subgroup, job assignment to prisons with varying security levels is quasi-random. It is only as officers complete a mandatory apprenticeship period and accrue greater seniority that they can begin to sort into the prison institution that matches their preferences (Lerman 2013). This allows us to more plausibly estimate the causal effect of different work environments on support for rehabilitation among correctional officers at the beginning of their career.

Table 4 details mean differences in support for rehabilitation between apprentice officers who have been assigned to lower- versus higher-security settings. As

TABLE 4
Effects of Low versus High Security on Policy Attitudes and Behavior

	Low Security (I and II)	High Security (III and IV)	Difference (High – Low)	Effect Size
Support for rehabilitation index	0.55	0.62	0.08*	.42
Rehabilitation as central goal of prison	3.46	4.04	0.59*	.36
Keeping the public safe	3.41	2.79	–0.62*	–.39
Purpose of prison	3.07	3.45	0.37*	.41
Reason for imprisonment	3.64	3.74	0.10	.11
Inmate access to programs index	0.35	0.38	0.03	.18
GED preparation	4.79	4.45	–0.34	–.25
Vocational training	4.09	4.02	–0.07	–.04
Alcohol/drug treatment	4.85	4.62	–0.23	–.17

NOTE: *Indicates a significant difference from both a *t*-test and nonparametric Mann-Whitney at $\alpha = .05$.

the table shows, we see significantly different average scores on our ideological measures across security levels, with individuals assigned to higher-security institutions expressing substantially more punitive attitudes. In contrast, we do not find significant differences across security level in how officers think about the provision of rehabilitation programs, including GED, vocational, or drug and alcohol treatment.

We interpret these results to suggest that new officers assigned to work in higher-security prisons quickly develop different orientations toward rehabilitation. We do not know if these differences persist or strengthen over time, as officers accrue greater tenure. However, we do see evidence that attitudes toward the purpose of corrections are relatively stable across levels of tenure. When we divide officers' work tenure into quartiles, we find no substantial differences in attitudes toward a rehabilitative ideology.[6] By comparison, we do find substantial differences across these tenure cohorts when it comes to the provision of rehabilitation programs, with early career officers evidencing somewhat lower levels of support.

Questions for Future Inquiry

In line with previous work, we find that demographics are predictive of officers' attitudes. At the same time, our results indicate the potential for important feedback effects for correctional officers from experiences in the workplace. First, we find that exposure to violence is a significant predictor of support for

rehabilitation. At the same time, though, the better the quality of supervision and management, and the better the availability of equipment and access to resources, the greater the degree of expressed support for rehabilitation. We also find that experience with rehabilitation programs makes a difference. Officers who work at institutions where a larger proportion of inmates are involved in high-quality rehabilitation programs are more likely to express support for rehabilitation in both theory and practice.

Our analysis has several limitations that should be mentioned. First, our data come from surveys of officers and, thus, reflect officers' *perceptions* of their institutional context. One important question is whether these self-reported measures reflect objective differences across prisons. In future work, it might be feasible to gather administrative data on institutional and officer characteristics that parallel the subjective measures that we have reported here.

We would also hope to establish more conclusively the role of institutional factors in causing changes to officer attitudes. Though we have tried to address this issue in our analysis, much of our evidence is descriptive in nature. In future work, experimental evidence on the role of institutional context would help to further this line of inquiry. For instance, we might imagine randomly assigning some officers to participate in rehabilitation or officer wellness training, or to engage in programs aimed at improving relationships between supervisors and staff. We could then assess the causal effects of these interventions on officers' attitudes.

Despite these caveats, the results that we have presented here make an important contribution to policy feedback research and suggest a broad agenda for future scholarship. Our focus here has been on officers' ideological orientations toward rehabilitation, but other politically relevant attitudes might similarly be shaped by the policy environment in which correctional workers are embedded. For instance, preferences over specific legislative reforms—both within criminal justice as well as in related domains like education and mental health—could plausibly be affected by the learning that occurs among officers while they are interacting with inmates, other officers, and supervisors in the prison context. Scholars might also pursue questions related to the generalizability of our results. California's prison system represents a particularly compelling case, given its relative size and its prominence in national discussions of correctional reform. However, correctional systems vary widely in size, composition, and punitiveness, and this might influence the extent to which the work environment impacts officers' political attitudes (e.g., Lerman and Page 2015).

We might also examine officers' engagement with their union and other forms of political and civic participation. In places like California, officers are members of a powerful interest group, CCPOA, whose resources and advocacy help to shape the direction of criminal justice reform and state politics more broadly. Understanding how personal experience with public policies and political institutions shapes not just individual attitudes, but also the likelihood of engaging in collective action, is an important but understudied feature of policy feedback. Organizations like CCPOA help to aggregate and mobilize individual attitudes into politically consequential behavior.

Relatedly, we might look at feedbacks among other prison workers. For instance, there are roughly forty thousand counselors, educators, medical personnel, and other nonsworn staff (e.g., technical, support, or other administrative staff) working inside correctional institutions. Likewise, we might explore whether our results generalize to the approximately 175,000 officers and supervisors working in local jails and the more than 700,000 sworn officers working in police departments, sheriff's offices, highway patrol, and other general-purpose law enforcement agencies (Hyland 2018). Like officers in state prisons, these workers are represented by public-sector unions that are active in political debates over the future of crime control policy at both the state and local levels.

Considering Officers in Efforts to Reform

Our results offer clear implications for policy-makers, practitioners, and others seeking ways to reform the nation's broken criminal justice system. Namely, our findings highlight the importance of considering officers' experiences on the job when developing, implementing, and enforcing criminal justice reform. Understanding the attitudes of correctional workers and other law enforcement personnel matters for at least two distinct reasons: because they constitute a large group of citizens with a personal interest in the politics of imprisonment and because they are public-sector workers who play a key role in the implementation of criminal justice policy. Officers represent an important constituency, and reformers would be well advised to consider the likely effects of policy change on how officers perceive (and, thus, carry out) their work.

To the extent that officers' attitudes toward rehabilitation are driven by demographics, the best way to influence debates over criminal justice is by seeking changes to the composition of the officer workforce. Indeed, increasing organizational diversity has become an explicit goal for many law enforcement agencies, both to address historical inequities and in the hope of improving effectiveness (U.S. Department of Justice and U.S. Equal Employment Opportunity Commission 2015). A recent report from the Center for Quality Policing provides three recommendations for helping law enforcement agencies to increase the diversity of their personnel: (1) appointing a leader within the department who sets goals and manages outreach initiatives, (2) making diversity a key element of the organization's culture, and (3) incorporating accountability mechanisms within the organization (e.g., using organizational data to assess whether promotion practices are equitable across racial/ethnic groups, gender, and so on) (Haddad et al. 2012).

However, there is mixed evidence about whether increasing the diversity of law enforcement personnel translates into differences in officer behavior. For instance, one study of a 10-year reform of England and Wales police departments found that for a one standard deviation increase in the proportion of minority officers in the department, there was an associated 20 to 39 percent decrease in the proportion of minorities searched by the police (Hong 2017). Another study, using data from the 2005 Police-Public Contact Survey, found that minority officers tended to be

perceived more objectively and positively by minority citizens (Cochran and Warren 2012). Other evidence, however, suggests that minority officers can actually be *more* punitive than their white counterparts. In a study of the Cincinnati Police Division, white officers were, on average, more likely to make arrests than black officers. However, black officers were more likely to arrest black suspects, compared to white officers (Brown and Frank 2006). Another study using survey data and interviews from two police departments, one in Indiana and another in Florida, indicated that although black officers tended to be more responsive in resolving conflict, they were also more likely to engage in coercive action (Sun and Payne 2004).

In addition to focusing on the demographics of law enforcement personnel, it is therefore important to consider the experiences officers have in the workplace. In particular, personal experience with prison violence can shape perceptions of the purpose of imprisonment and related concerns. In our data, we find high levels of exposure to violence among officers. Specifically, 76 percent of correctional officers reported that they had seen or handled a dead body, 85 percent had seen someone seriously injured or killed, and almost 30 percent had been seriously injured themselves. Other data bear this out: correctional officers experience the second highest rate of workplace violence, surpassed only by police officers (Finn 2000). We find that violence of this kind is associated with significantly more punitive attitudes toward corrections.

Certainly, the desire to reduce prison violence has long been at the forefront of correctional administration, and efforts to reduce prison violence can be broadly categorized into initiatives that focus on inmates, on staff, and on management (Byrne and Hummer 2007). In terms of inmate-focused interventions, programs that implement cognitive-behavioral training, or where prisoners build skills that foster healthier relationships, may be especially promising (Auty, Cope, and Liebling 2017; Specter 2006). More broadly, empirical evidence supports the link between prison violence and a variety of institutional factors, including the quality and experience of staff; the extent and quality of programming for inmates; the quality of management practices; and other contextual factors, such as inmates' level of autonomy (Byrne and Hummer 2007). Our data suggest that reforms like these that are aimed at increasing prison safety might have the added effect of helping to build support for rehabilitation among officers.

It is important to note these sorts of institutional improvements are likely to be politically feasible. This is because, when it comes to institutional violence, the incentives of correctional officers and inmate advocates are well aligned, and violence reduction strategies are thus a political win-win. By reducing prison violence, advocates can achieve practical policy benefits, while also building support for rehabilitation among correctional staff. There is evidence of this in California, where union leadership has increasingly recognized their shared interests with other criminal justice stakeholders around issues of prison safety. As one commenter writes,

> Even Lance Corcoran, a longtime union leader known as a hardliner, now comes off like a bleeding heart. "I'm not saying I'm sympathetic to people who go to prison," he says,

> a little cautiously. "But I'm empathetic. I don't want them to suffer unnecessarily." Corcoran says the union has been talking with prison-reform organizations, and the two sides have found some common ground that would have seemed impossible a few years ago. As he explains, "Safer places for their loved ones to live in mean safer places for our members to work." (Abramsky 2008, para. 11.1)

Other institutional factors that predict officers' support for rehabilitation may appear less directly impactful for inmates, but they are likely to be good for the health and well-being of officers—and thus ultimately good for prisoners in the long term. These include policies that make prisons not just safer, but also better, places to work. Increasingly, researchers are recognizing the enormous stress associated with correctional work. This manifests in extraordinarily high rates of mental and physical health conditions, including elevated risks of stress-related disease (i.e., ulcers, heart disease, and hypertension) (Cheek and Miller 1983); post-traumatic stress disorder rates that rival those of combat veterans, prisoners of war, and disaster survivors (Spinaris, Denhof, and Kellaway 2012; Stadnyk 2003); and a life expectancy roughly 16 years lower than the population as a whole (Cheek and Howard 1984). Attention to the causes and correlates of these and other work-related stresses will therefore have profound importance for this group of Americans, as well as their families and communities. Yet as a recent Department of Justice report points out, "Health and wellness among those who work in correctional agencies is an issue that has always existed, but is just starting to get the increasing attention that it deserves" (Brower 2013, 1).

Research suggests that work-related stress among correctional officers is exacerbated by a lack of support or conflict with supervision and management, a lack of control over the institutional happenings that affect their day-to-day jobs, and role ambiguity (e.g., Lambert, Hogan, and Allen 2006). Targeting institutional efforts to build better relationships between correctional staff and management, and providing programs that help officers to manage stress, thus appear promising for reducing officer stress and burnout. Interventions aimed at improving the well-being of correctional staff might hold less appeal for reformers whose primary sympathies lie with the prisoner population. However, our results suggest that supporting efforts to improve officer wellness is likely to be effective as part of a broader political strategy aimed at improving correctional programs and policies for prisoners.

In sum, while more research is needed to understand the causal impact of institutional factors on officers' support for rehabilitation, it is clear that officers' attitudes are shaped by the experiences they have on the job. Taken together, our results suggest that strengthening the relationship between officers and management, ensuring officers have the equipment and training they need to keep themselves safe, and providing officers with the resources they need to resolve work-related problems will likely help to build support for prisoner rehabilitation among correctional staff. These factors will also be consequential for the future of policies aimed at scaling back the nation's decades-long trend toward mass incarceration. By improving the quality of prison work, we can increase policy feedback effects that make rehabilitation-oriented reforms more likely to succeed. In the end, a commitment to officer health and safety will be good not only

for individual officers but for the well-being of inmates and the prison system as a whole.

Notes

1. This includes 8,334 correctional officers and 102 parole officers or other sworn personnel.

2. Cronbach's alpha of the four purpose-of-corrections variables was .66. Additional details on scale construction is provided in the appendix.

3. The first of our indices measures support for rehabilitation as an ideology, while the second captures the more practical or programmatic aspect of support for rehabilitation. These are related, but distinct, dimensions of officer attitudes (Lerman and Page 2015).

4. Some questions used as controls varied from the 2006 to 2017 data given changes to the survey; all questions used for the analysis and any changes from 2006 to 2017 are detailed in the appendix.

5. Dangerousness variables are coded as quartiles of the proportion of officers that felt inmates are dangerous or very dangerous.

6. For the rehabilitation as the central goal of prison variable, we do find significant mean differences between the second tenure quartile (4 to 10 years) and the third tenure quartile (11 to 17 years).

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Appendix

Our primary outcome of interest is the extent to which officers express support for rehabilitation in criminal justice. To measure policy-related attitudes, we asked four questions in both the 2006 and 2017 CCOS. These variables include the following:

- *Rehabilitation as central goal:* Participants were asked how strongly they agreed or disagreed with the statement, "Rehabilitation should be a central goal of incarceration." The 2006 CCOS did not include a neutral response (6-point Likert), while the 2017 CCOS did (7-point Likert).
- *Keeping the public safe:* Participants were asked how strongly they agreed or disagreed with the statement, "The job of a prison is to keep the public safe, not to help inmates." The 2006 CCOS did not include a neutral response (6-point Likert), while the 2017 CCOS did (7-point Likert).

- *Purpose of prison:* Participants were asked, "Do you feel that the purpose of a prison is rehabilitation, punishment, or both?" Response options included (1) Totally rehabilitation; (2) More rehabilitation, but still punishment; (3) Equally rehabilitation and punishment; (4) More punishment, but still rehabilitation; and (5) Totally punishment.
- *Reason for imprisonment:* Participants were asked, "Do you think that most people who end up in prison are there because of personal failure, or because they did not have advantages like strong families, good education, and job opportunities?" Response options included (1) Totally lack of advantages; (2) Mostly lack of advantages, but still personal failure; (3) Equally lack of advantages and personal failure; (4) More personal failure, but still lack of advantages; and (5) Totally personal failure.

For most analyses, we created an index from these four survey questions. The indices sum the above four Likert-scale questions, reverse-coded when necessary, and scaled from zero to one. These zero-to-one scaled additive indices can be interpreted in terms of percent difference.

Our control variables used for modeling include those listed below, categorized into three groups: (1) demographics; (2) violence; and (3) institutional factors. The text used for the survey items and possible responses for each item are included below, along with details on recategorization, where relevant.

Demographics

- Gender: Participants were asked, "What is your gender?" with possible responses of female or male.
- Race/Ethnicity: Participants were asked, "Which category best describes your race or ethnicity? Please mark all that apply." Possible responses included Asian or Asian-American, Black or African American, Hispanic/Latino, White/Caucasian, Native Hawaiian or Pacific Islander, or Other.
- Partisanship: Participants were asked, "Do you consider yourself a..." to address partisanship, with possible responses of Republican, Independent, Democrat, Other Party, or No Party.
- Education: Participants were asked, "What is the highest level of education you have attained so far?" and possible responses included GED or High School degree; Some college (no degree); Associate's degree; Bachelor's degree; Master's degree; Ph.D. or professional degree (J.D., M.D.).
- Age: Participants were asked, "In what year were you born?" with an open-text, write-in response.

Violence

- Security level: Participants were asked, "With what security-level inmates have you worked most often during the past 6 months?" with possible responses of Levels I, II, III, and IV.
- Questions on exposure to violence (inside prison, outside prison, before starting at the California Department of Corrections and Rehabilitation

(CDCR) were used to create the various violence and trauma indices. Questions 8, 9, 11, and 12 asked if officers had experienced a particular type of violent incident, and possible responses to these questions are yes or no. Questions 8-A, 9-A, 11-A, and 12-A are all follow-up questions that were only presented to participants if they said they *had* experienced the particular type of violent incident posed in questions 8, 9, 11, and 12, respectively. The follow-up questions address the time and place of each incident, with possible responses including: Before I started working for CDCR; After I started working for CDCR, while working inside the prison; and After I started working for CDCR, but outside the prison while I was not working. Question text for 8, 9, 11, and 12 and the follow-up questions include the following:

- 8: "At any time in your life, have you ever been in a situation in which you were seriously injured?"
  - 8-A: "When you were in a situation in which you were seriously injured? Please mark all that apply."
- 9: "At any time in your life, have you ever been in a situation in which you feared you might be killed or seriously injured?"
  - 9-A: "When you were in a situation in which you feared you might be killed or seriously injured? Please mark all the apply."
- 11: "At any time in your life, have you ever seen dead bodies (other than at a funeral) or had to handle dead bodies for any reason?"
  - 11-A: "When did you see dead bodies (other than at a funeral) or have you had to handle dead bodies for any reason? Please mark all that apply."
- 12: "At any time in your life, have you ever seen someone seriously injured or killed?"
  - 12-A: "When did you see someone seriously injured or killed? Please mark all that apply."

- Inmate perceived dangerousness: Quartiles of the percent of inmates perceived as very dangerous, dangerous, and not dangerous were created from the following survey question: "In your opinion, what percentage of the inmates at the prison where you work do you think are. . ." Responses were open-text, write-in (with additional clarification that all items should sum to 100 percent).
- Equipment index: The equipment index was constructed from the following questions, each including responses from a 7-point Likert scale ranging from *very dissatisfied* to *very satisfied*: "How satisfied or dissatisfied are you with the availability of safety equipment at work?" and "How satisfied or dissatisfied are you with the quality of safety equipment at work?"
- Response to violence: The index for organizational response to violence was constructed from the following questions: "When a staff member has been assaulted at the prison where you work, how often has any action been taken by the institution to discipline the inmate or inmates involved?" and "When action was taken in response to an instance of inmate-on-staff violence, how often do you feel that the action taken was adequate?" Possible responses

for both questions included: never, rarely, now and then, often, very often, always, and don't know.

Institutional Factors

- Supervision index: The survey asked respondents the extent to which they agreed or disagreed with the statements: "My direct supervisor is competent in doing his or her job"; "My direct supervisor shows very little interest in the feelings of subordinates"; "There is a level of commitment to professionalism at all levels of this organization"; and "Our top management does not try to make this organization a good place to work." Agreement was measured with a 7-point Likert scale from *strongly disagree* to *strongly agree*, with a neutral option of neither agree nor disagree.
- Resources index: The index was constructed from questions concerning the availability and use of resources for work-related problem-solving, including the following:
  - "To what extent do you agree or disagree with the following statement: When I have a problem at work, there is someone I can talk to who will really help me solve it." Agreement was measured with a 7-point Likert scale from *strongly disagree* to *strongly agree*, with a neutral option of neither agree nor disagree
  - "When you have a problem at work, who do you feel you can talk to who will really help you solve it? Please mark all that apply." The variable includes the sum of all endorsed responses (i.e., different individuals that would help the participant solve their problems at work).
  - "If you were to have a work-related problem in the future, would you consider contacting someone at CCPOA to resolve it?" Possible responses include yes, no, and not sure.
  - "If you were to have concerns specifically about your personal health and well-being, who might you consider talking to in order to get help? Please mark all that apply." The variable includes the sum of all endorsed responses (i.e., different individuals that the participant would consider talking to get help with personal health and well-being).
  - 45: "Have you ever used any of the following resources to address work-related stress, anxiety, depression, or other issues related to health and well-being? Please mark all that apply." The variable includes the sum of all endorsed responses (i.e., different types of resources the participant reports having used to address work-related stress, anxiety, depression, or other issues).
  - "What concerns do you have, if any, about using resources like the Employee Assistance Program (EAP) or Peer Support Volunteer program? Please mark all that apply." The variable includes the sum of all endorsed responses (i.e., different types of concerns about utilizing resources).

  - Quality of Stress Management Training: The question used for the presence and quality of stress management training was taken from the following matrix response question: "Please evaluate the quality of training you have received on each of the following topics. Has this training been excellent, good, fair, or poor, or have you not received any training on that topic?" Specifically, the subitem utilized was 23-J: "Stress management for law enforcement officers." Possible responses included: excellent, good, fair, poor, and have not received this training.

- Inmates in high-quality rehabilitation programs: The variable includes the quartile of the response to the question, "What percentage of inmates at the prison where you work would you say are actively involved in at least one high-quality rehabilitation program?"