

Fall 1992

Well Kept: Comparing Quality of Confinement in Private and Public Prisons

Charles H. Logan

Follow this and additional works at: <https://scholarlycommons.law.northwestern.edu/jclc>

 Part of the [Criminal Law Commons](#), [Criminology Commons](#), and the [Criminology and Criminal Justice Commons](#)

Recommended Citation

Charles H. Logan, Well Kept: Comparing Quality of Confinement in Private and Public Prisons, 83 J. Crim. L. & Criminology 577 (1992-1993)

This Criminology is brought to you for free and open access by Northwestern University School of Law Scholarly Commons. It has been accepted for inclusion in Journal of Criminal Law and Criminology by an authorized editor of Northwestern University School of Law Scholarly Commons.

WELL KEPT: COMPARING QUALITY OF CONFINEMENT IN PRIVATE AND PUBLIC PRISONS

CHARLES H. LOGAN*

[ABSTRACT]

Quality of confinement is compared among three women's prisons: private, state, and federal. Defined along eight dimensions, quality of confinement is measured using 333 indicators derived from institutional records and surveys of inmates and staff. A comparative Prison Quality Index summarizes the results for each prison on each dimension. While all three prisons are regarded as having been high in quality, the private prison outperformed its governmental counterparts on nearly every dimension.

I. INTRODUCTION

In July 1988, the State of New Mexico awarded a contract to the Corrections Corporation of America (CCA) to design, site, finance, construct and operate a 200-bed, multi-security level facility for the state's entire population of sentenced female felons. Until that time, New Mexico authorities moved women prisoners to a succession of locations as appendages to male facilities. From 1984-1989, the State held females at the Western New Mexico Correctional Facility (WNMCF), which also served as the intake point for all of the state's male prisoners. On June 5, 1989, the female population at WNMCF was transferred to the CCA-New Mexico Women's Correctional Facility, in Grants, New Mexico.

This study compares the privately-operated prison during its

* Professor and Associate Head of Sociology, University of Connecticut. Ph.D. 1971, Indiana University; M.A. 1967, University of Wisconsin; B.A. 1966, University of Wisconsin. This research was supported by a grant from the National Institute of Justice (86-IJ-CX-0062-S1) and by financial and other assistance from the Bureau of Prisons and the National Institute of Corrections. The views expressed herein are those of the author and do not necessarily reflect Department of Justice policy. The cooperation of officials at the New Mexico Corrections Department, Corrections Corporation of America and the Bureau of Prisons is gratefully acknowledged here and described in more detail in the report to NIJ. Criticisms by Charles W. Thomas and Barry Ruback of a draft of this paper are also appreciated.

first six months of operation (June-November 1989) with the women's side of the state-run prison during the same six months one year earlier (June-November 1988). A third point of comparison is the federal prison for women at Alderson, West Virginia, during the six months ending with May 1988.¹ These particular facilities were chosen not because they were women's prisons, but because at the time of the study's design, New Mexico was the only state that was privatizing a multi-security level prison. The goal of this research is to measure and compare the quality of confinement in terms that would apply to any prison; the fact that these are women's prisons is incidental to the purpose and design of the study. However, there are differences between the cultures of male and female prisoners that deserve consideration when interpreting or generalizing the study's results. Thus, the general dimensions of prison quality to be outlined below are assumed to be the same for both men's and women's prisons, but there may be differences in the salience of various dimensions depending on the gender of the population.²

Few studies have attempted to determine the quality of private as compared to public prisons.³ For that matter, not many studies have attempted to evaluate prisons on a comparative basis in terms of the quality of their management and internal operations.⁴ Such research is not easy because there is no established methodology for measuring or comparing prison quality. In our everyday lives, of course, we often evaluate the quality of goods and services simply by comparing alternatives. For comparison shopping, however, one must have competition among suppliers. In the prison business, historically no market has existed in which realistic alternatives could be compared as to their quality and price. Developments over

¹ This was the period covered by a survey at the federal prison similar to one used at the two New Mexico prisons. The rationale for including the federal prison will be explained later in the paper. See text *infra*, Section V.A., *Using a Federal Prison as a Third Point of Comparison*.

² For example, issues of security may be more salient for male inmates (who have a higher risk of escape), and issues of health care may be more salient for female inmates (who have different needs and tend to take a more active role as consumers of medical services). I am grateful to one of my anonymous reviewers for drawing my attention to this. See Section V.B., *infra*, for a discussion of gender and generalizability.

³ Samuel Jan Brakel, *Prison Management, Private Enterprise Style: The Inmates' Evaluation*, 14 NEW ENG. J. ON CRIM. & CIV. CONFINEMENT 175 (1988); Robert Levinson, *Okeechobee: An Evaluation of Privatization in Corrections*, 65 PRISON J. 75 (1985); THE URBAN INSTITUTE, COMPARISON OF PRIVATELY AND PUBLICLY OPERATED CORRECTIONS FACILITIES IN KENTUCKY AND MASSACHUSETTS (1989); STATE OF TEXAS, *Public Safety and Criminal Justice* (Pt. 2), 2 BREAKING THE MOLD: NEW WAYS TO GOVERN TEXAS; A REPORT FROM THE TEXAS PERFORMANCE REVIEW 19 (Texas Comptroller of Public Accounts 1991).

⁴ For a notable example, see JOHN J. DI IULIO, JR., GOVERNING PRISONS: A COMPARATIVE STUDY OF CORRECTIONAL MANAGEMENT (1987).

the past several years have started to change this situation. Federal, state and local governments across the country have begun to contract with private firms for the operation of prisons and jails.⁵

Careful research has shown that these contracts can reduce costs substantially.⁶ Comparing the *quality* of public and private prisons, however, is more difficult than comparing *costs*. The major obstacle to such research is the difficulty of defining the "quality" of a prison. Corrections departments have policy and procedure manuals and audit guidelines. The American Correctional Association has standards for accreditation. Court orders and consent decrees, such as *Ruiz*⁷ in Texas and *Duran*⁸ in New Mexico, have produced detailed criteria for legally acceptable prison conditions and programs. However, no methodology has yet arisen for applying these guidelines, standards and criteria to particular prisons in quantitatively measuring the quality of confinement at those facilities. As a first step toward the quantitative measurement of prison quality, this article will attempt to define the essential mission of a prison and to identify both normative criteria and empirical measures appropriate to that mission.⁹

II. THE CONFINEMENT MODEL OF IMPRISONMENT

The criteria proposed here for comparative evaluation of prisons are normative, rather than consequentialist or utilitarian. They are based on a belief that individual prisons ought to be judged primarily according to the propriety and quality of what goes on inside their walls—factors over which prison officials may have considerable control. It is neither fair nor methodologically feasible to compare prison A to prison B in terms of external outcome—that is, in terms of each one's relative contribution to crime control. In contrast, it is both equitable and possible to evaluate any prison's performance in the competent, fair and efficient administration of confinement as a form of punishment. Thus, the criteria used here

⁵ CHARLES W. THOMAS & SUZANNA L. FOARD, PRIVATE CORRECTIONAL FACILITY CENSUS 1992 (University of Florida 1992).

⁶ CHARLES H. LOGAN & BILL W. MCGRIFF, COMPARING COSTS OF PUBLIC AND PRIVATE PRISONS: A CASE STUDY (National Institute of Justice 1989); STATE OF TEXAS, *Information Report on Contracts and Correctional Facilities and Services*, in SUNSET ADVISORY COMM. FINAL REP., Ch. 4 (Austin, Sunset Advisory Commission, 1991); DOUGLAS C. McDONALD, *The Costs of Operating Public and Private Correctional Facilities*, in PRIVATE PRISONS AND THE PUBLIC INTEREST 86 (Douglas McDonald ed., 1990).

⁷ *Ruiz v. Estelle*, 503 F. Supp. 1265 (S.D. Tex. 1980).

⁸ *Duran v. Apodaca*, No. Civil 77-721-C (D. N.M., filed July 17, 1980).

⁹ For a more detailed discussion, see CHARLES H. LOGAN, WELL KEPT: COMPARING QUALITY OF CONFINEMENT IN A PUBLIC AND A PRIVATE PRISON (National Institute of Justice 1991).

are based on the “doing justice” model of punishment, in which the essential purpose of imprisonment is to punish offenders—fairly and justly—through lengths of confinement proportionate to the gravity of their crimes. This philosophy generates a “confinement model” of imprisonment, the main substance of which can be summarized quite succinctly:

The mission of a prison is to keep prisoners—to keep them in, keep them safe, keep them in line, keep them healthy, and keep them busy—and to do it with fairness, without undue suffering and as efficiently as possible.¹⁰

That mission statement identifies eight distinct dimensions of quality of confinement: Security, Safety, Order, Care, Activity, Justice, Conditions and Management. The following section will operationally define these dimensions. Here, one should note only that they are proposed as normative and nonutilitarian criteria of quality. That is, the dimensions are offered as values worth pursuing in themselves because they are intrinsic to the day-to-day performance of a prison attempting to carry out its confinement mission. They are not chosen because of any hypothesized effect on some instrumental justification for imprisonment, such as rehabilitation or crime control.

Although the model de-emphasizes rehabilitation, the confinement mission of a prison is not insensitive to the welfare of prisoners. Confinement incorporates an obligation to meet the basic needs of prisoners at a reasonable standard of decency. Thus, measures of health care, safety, sanitation, nutrition and other basic living conditions are relevant. Further, confinement must meet constitutional standards of fairness and due process. Finally, programmatic activities like education, recreation and work shape the conditions of confinement regardless of their alleged effects on rehabilitation. In short, confinement is much more than just warehousing.

Although complex, prison evaluation under the confinement model is more straightforward than attempting to measure such outcomes as rehabilitation, deterrence or incapacitation. The confinement model facilitates evaluation because it focuses less on abstract goals and more on delimited tasks. Because the model adopts the view that the purpose of prison is punishment, and further, that offenders are sent to prison *as* punishment rather than *for* punishment, the criteria for prison evaluation shift. This shift moves us away from a focus on hard-to-measure outcomes and toward more

¹⁰ See LOGAN, *supra* note 9, at 5-11.

directly observable processes, adherence to measurable standards and the fulfillment of specific and immediate missions. We shift from measures of effectiveness to measures of performance in fulfillment of duty.¹¹

Unfortunately, we have neither a scientifically established set of measures for prison quality, nor any standardized scale on which to rank a prison's quality of confinement. However, we can use multiple indicators of performance and search for consistency among them, despite their divergent strengths and weaknesses. And even without the ability to produce and interpret values according to some absolute or standardized scale, it is still possible to compare two or more prisons in terms of *relative* quality on each of these dimensions. This study will measure and compare three prisons in that fashion.

III. MEASURING PRISON QUALITY

The eight dimensions of prison quality—security, safety, order, care, activity, justice, conditions and management—are relatively concrete concepts susceptible to operational dissection and empirical measurement. Empirical indicators of prison confinement quality were drawn for this study from institutional records and from surveys of staff and inmates, except at the federal prison, where inmates were not interviewed.¹² The institutional records included significant incident logs, disciplinary logs and files, grievance logs and files, inmate employment records, education records, health clinic logs, psychologist logs and personnel records. The surveys used were modified versions of the Prison Social Climate Survey, which the Bureau of Prisons uses to gather information in the man-

¹¹ Stated differently, under the confinement model a prison does not have to justify its existence by demonstrating success at rehabilitation or crime control. Because there is enormous disagreement among researchers about whether that kind of success is demonstrable, the resulting evaluative task is less ambiguous. When the mission of a prison is defined as confinement, it is most appropriate to evaluate the prison according to the *quality* of the confinement that it provides.

¹² Surveys were distributed to all inmates and staff at the state and private prisons and to a sample of staff at the federal prison. The federal survey was part of an ongoing and system-wide series administered by the Bureau of Prisons to staff, but not inmates, at all of their institutions. Here are the returned sample sizes and response rates. At the state prison: 132 inmates (95%) and 112 staff (49%). At the private prison: 134 inmates (82%) and 76 staff (72%). At the federal prison: 78 staff (40% of those surveyed). The response rate for the state prison staff is understated. While virtually all of the 112 respondents indicated that they had at least some daily contact with the female inmates, we don't know how many of the 118 nonrespondents should not have been given questionnaires in the first place because they worked only with the male inmates.

agement of its facilities.¹³

A. THE DIMENSIONS OF QUALITY

Figure 1 identifies the dimensions and subdimensions of confinement quality for which empirical indicators were derived from institutional records and survey data. The indicators themselves are presented in full in an appendix to this paper. The following comments describe and assert the significance of the dimensions of quality listed in Figure 1.

Security. A secure facility is one that is impervious in either direction, outward or inward. Escapes are an obvious indicator of a lack of security, but inward penetration, of drugs or other contraband, also represents a breakdown of external security. Security within the prison is also important. Internal security would include control over movement of prisoners within the prison and over internal movement of contraband, such as food or silverware from the dining hall, drugs from the infirmary or tools from workshops. Ratios of security staff to inmates and questions about security procedures are valid as *input* measures of security performance, as long as they supplement rather than substitute for measures of actual security outcome. As outcomes, security, safety and order are noted mostly by their absence and thus tend to have mainly negative indicators. To capture the positive aspects of performance in these areas, they must be measured in terms of process in addition to results.

Safety. Prisons must keep inmates and staff safe, not only from each other but from various environmental hazards as well. Thus, institutional measures of safety included assault statistics, safety inspection results and accidental injury reports. Survey questions asked about safety of staff and inmates, about dangerousness of inmates and about hazards in the prison environment. "Staffing adequacy" here refers to the proportion of respondents who believed that the prison employed enough staff to ensure the safety of employees, or of inmates (separate questions).

Order. Prisons run on rules, and the ability of prison administrators to enforce compliance is central to prison performance. Allowing for variation in the nature of their populations, it is appropriate to evaluate prisons according to their ability to prevent disturbances, minimize inmate misconduct and otherwise preserve order inside their walls.

¹³ WILLIAM G. SAYLOR, SURVEYING PRISON ENVIRONMENTS (Office of Research, Federal Bureau of Prisons 1984).

FIGURE 1

DIMENSIONS AND SUBDIMENSIONS OF QUALITY OF CONFINEMENT
MEASURED VIA STAFF AND INMATE SURVEYS AND
INSTITUTIONAL RECORDS

Security Security Procedures Drug Use Significant Incidents Community Exposure Freedom of Movement Staffing Adequacy	Activity Involvement and Evaluation: Work and Industry Education and Training Recreation Religious Services
Safety Safety of Inmates Safety of Staff Dangerousness of Inmates Safety of Environment Staffing Adequacy	Justice Staff Fairness Limited Use of Force Grievances, Number & Type The Grievance Process The Discipline Process Legal Resources and Access Justice Delays
Order Inmate Misconduct Staff Use of Force Perceived Control Strictness of Enforcement	Conditions Space in Living Areas Social Density and Privacy Internal Freedom of Movement Facilities and Maintenance Sanitation; Noise; Food Commissary; Visitation Community Access
Care Stress and Illness Health Care Delivered Dental Care Counseling Staffing for Programs and Services	Management Job Satisfaction Stress and Burn-Out Staff Turnover Staff and Management Relations Staff Experience Education; Training Salary and Overtime Staffing Efficiency

Care. The term "care" is used here to cover the ministrations of such personnel as doctors, dentists, psychiatrists, psychologists and dieticians. This is a difficult category to measure without errors of interpretation. In general, measures of stress, illness and *demand* for health care were given a negative interpretation while measures of *supply* were treated as positive. Interpretation was easier with indicators that measured supply for a given level of demand or that measured types of demand (e.g., emergencies) that are relatively

independent of supply. Comparisons between the two New Mexico prisons, which had overlapping populations and therefore greater commonality of baseline health, were undoubtedly more valid than between either of those prisons and the federal facility.

Activity. Humans are not meant to be idle. That simple fact, rather than any hypothesized link to rehabilitation, is what justifies programs inside prisons. Such programs may also help authorities to maintain order, but that, too, is a secondary benefit. The primary justification for work, recreation, education and other programs is that they are essential to the human condition. This does not mean that prisons must provide activities in unlimited degree or at great expense; however, their total absence would be inhumane and thus not an ordinarily intended aspect of punishment.¹⁴ Thus, meaningful activity is a component of prison quality that is essential to prisoner welfare. Institutional records indicators on this dimension were interpreted mainly on a more-is-better basis, while surveyed inmates supplied evaluations of relevance, quality and utility.

Justice. In measuring the existence of justice within prisons, the focus is not on the sentence itself, but rather the administration of that sentence. Stated more broadly, governing with justice requires adherence to the rule of law inside prisons just as it does on the outside. Rules ("laws") must be clear, sanctions for their violation must be specified in advance and applied consistently, enforcement and adjudication must follow due process, and independent review of decisions must exist. Relevant to this dimension would be procedures and practices in imposing discipline and allocating good time, grievance procedures, access to legal resources and inmate perceptions of the fairness and legitimacy of rules and their enforcement. In applying the institutional records to this dimension, negative interpretations were given to staff use of force, inmate grievances and appeals, and delays in the discipline and grievance process.

Conditions. A confinement model obviously requires some evaluation of the general conditions of confinement. These include population density, food, clothing, bedding, noise, light, air circulation and quality, temperature, sanitation, recreation, visitation and communication with the outside. As with the dimensions of care and activity, inmate surveys were used to solicit qualitative evaluations, while institutional records indicators of conditions were interpreted as a function of quantity. Whether more was better or worse

¹⁴ This is why solitary confinement, which greatly restricts an inmate's activities, constitutes a form of added punishment suitable for those who are already being punished through confinement but are not cooperating.

depended on the particular condition. Note that some of the indicators that were used as positive measures of conditions had negative interpretations under other dimensions. For example, freedom of movement and community exposure (furloughs) had negative implications under the heading of security, but they counted as positive amenities under the heading of conditions. The resulting findings of counteracting strengths and weaknesses are quite expected. Prison administrators cannot maximize all values at the same time.

Management. Quality of management is probably the single most important source of variation in the first seven dimensions of quality of confinement. As such, there may be some redundancy in evaluating management as a separate component of prison performance. However, it is better to over-measure than to under-measure, and many management variables bear a strong enough relationship to overall quality of institutional operation that they can be used as indicators of otherwise elusive concepts. For example, such management-related variables as staff morale, absenteeism and turnover are visible reflections of institutional stress and tension. Training levels may be both a *cause* of quality (through increased staff competence) and a *result* of quality (as a product of institutional concern with proper procedure in treatment and discipline of inmates). Thus, various sorts of management information can be used to measure as well as to explain confinement quality. Good management is also a legitimate end in itself. The public has an interest in seeing that the money it spends on imprisonment is not wasted through over-staffing, high turnover or other management-related problems. Management indicators were based on staff surveys and personnel records.

B. CALCULATING THE PRISON QUALITY INDEX

For the state and private prisons, 333 empirical indicators of the eight dimensions of quality were constructed, and 131 of these were available for the federal prison. This allowed a total of 595 pairwise comparisons among the three prisons.¹⁵ Each comparison was tested for significance and then categorized either as being "similar" (meaning no significant difference between the two prisons) or as being "favorable" to one and "unfavorable" to the other of the pair.¹⁶

¹⁵ The private and state prisons were compared on each of the 333 indicators. For the 131 that also were available at the federal prison, two other comparisons (state/federal and private/federal) were added to the private/state comparisons. This produced the 595 ($333 + (131 \times 2)$) pairwise comparisons.

¹⁶ Where possible, statistical significance was tested using either a difference-of-

To summarize the numerous comparisons that were made within each dimension of quality, a "Prison Quality Index" score was calculated for each prison within each dimension. The Prison Quality Index provides a method of comparing any two prisons across an unequal number of measures. One can then rank each prison relative to all the others.¹⁷ The formula for a Prison Quality Index score is:

Favorable Differences + (Similarities ÷ 2) / Total Comparisons, where "Total Comparisons" refers to all possible pairwise comparisons between that prison and each of the others on all indicators within the particular dimension. Since the maximum possible score is equal to the total number of comparisons, this measure has the advantage of ranging from 0 to 1. The Quality Index score of a prison, therefore, can be interpreted as the proportion of a perfect score, where a perfect score would result from outperforming all other prisons in a field of comparison on all applicable measures.

It is not possible to provide here the full set of tables showing comparisons on all of the indicators. Such a comparison would require fifty typewritten pages. Even an entire table for just one dimension would be too bulky for this article. However, to understand the general procedure for comparing and evaluating the

means or a difference-of-proportions test (at $p < .05$). Some of the indicators (primarily those expressed as rates or ratios) could not be tested with standard statistical tests, because they lacked information on variance. For those indicators, the spirit (though not the letter) of a statistical test was used to maintain some check on bias: differences were judged in a subjective fashion to decide if they were large enough to be accepted as "real" in the sense of stable and probably not due to chance variation or random measurement error. The reasons for using a significance test were (1) to discount differences resulting from random measurement errors, and (2) to minimize researcher bias by providing an objective decision-rule for determining how big a difference needed to be before regarding it as "real" and therefore in need of further interpretation as "favorable" or "unfavorable". Ideally, judgments like these (both the subjective assessments of "significant differences" and their interpretations as "favorable" or "unfavorable") should be made by independent raters and tested for agreement. This was not done formally, but difficult judgments were submitted by the author for review by a colleague in the Bureau of Prisons. Several indicators originally considered were dropped prior to analysis when these reviews revealed problems of interpretation. Other researchers are invited to make their own judgments. Appendix A contains a condensed list of the contents of all the comparison tables, albeit without numbers and without tabular formatting. Interested readers may request the full tables from the author, or they may obtain the full final report to the National Institute of Justice (*see supra* note 9), from which this article is drawn and which includes detailed discussions of every part of the full index in separate chapters on each dimension. To borrow a printed copy or to purchase a microfiche, call the National Criminal Justice Reference Service (800-851-3420) and ask for the document by its access number: NCJ-128800.

¹⁷ This is analogous to the method by which a set of sports teams playing an unequal number of games can be ranked as to their standing in the league as a result of a series of pairwise comparisons (games).

prisons on particular variables, see Table 1, which is a greatly abridged version of the full comparison table for dimension one: "Security."

TABLE 1—ABRIDGED

COMPARISON OF PRIVATE, STATE AND FEDERAL WOMEN'S PRISONS
ON SURVEY AND OFFICIAL RECORD MEASURES OF QUALITY
OF CONFINEMENT

Dimension 1: Security ("Keep Them In")

	<u>Private</u>	<u>State</u>	<u>Federal</u>
A. <u>Physical Design</u>			
1. Rating of how the building design affects surveillance (-2=inhibits, +2=facilitates)			
Staff mean	0.7 + +	-0.5 - +	-1.3 - -
B. <u>Freedom of Movement</u>			
1. Perceived freedom of movement for inmates (0=none at all, 4=very much)			
a. During the day			
Staff mean	2.4 + +	2.7 - +	3.8 - -
Inmate mean	0.7 +	1.3 -	N/A
b. During the evening			
Staff mean	2.0 = +	2.0 = +	3.7 - -
Inmate mean	0.8 =	0.8 =	N/A
c. During the night			
Staff mean	0.5 + +	0.8 - +	1.5 - -
Inmate mean	0.4 =	0.4 =	N/A
C. <u>Significant Incidents</u> (six months)			
1. Total incidents	1	24	13
a. Rate per capita-6 ^a	.00 + =	.10 - -	.01 = +
2. Escapes	0	0	3
a. Rate per capita-6 ^a	.00 = =	.00 = =	.00 = =
D. <u>Staffing</u>			
1. Ratio of resident population to security staff	3.1 = +	2.3 = +	8.1 - -
E. <u>Security Procedures</u>			
1. Number of urinalysis tests based on suspicion in a one-month period	30	16	48
a. Rate per inmate	.18 + +	.11 - +	.06 - -
b. Proportion testing positive for opiates	.31 = -	.40 = -	.10 + +
2. Proportion of staff who have observed:			
a. Staff ignoring inmate misconduct	.31 = -	.37 = -	.11 + +
b. Other problems	.44 = -	.28 = =	.16 + =

TABLE 1 (CONTINUED)

CALCULATING QUALITY INDEX SCORES FOR COMPARISONS ON SECURITY^b

	Favorable		Unfavorable		Similar		Quality
	#	%	#	%	#	%	Index ^c
Private	12	48%	3	12%	10	40%	.60
State	6	24%	9	36%	10	40%	.44
Federal	6	27%	12	54%	4	18%	.36

^aPer capita-6: divided by total number of residents over six months

^bFigures here differ from those in Table 1 and Figure 2 because many items were omitted from this abridged table.

^cFavorable Differences + (Similarities ÷ 2) / Total Comparisons

Symbols

- + Favored side of a "significant" difference
- Unfavored side of a "significant" difference
- = Similarity (a "nonsignificant" difference)

See footnote 16 regarding "significance." Numbers without symbols are informational only, not classified as +, -, or =.

The symbols next to each score in Table 1 show whether that prison compared favorably (+), unfavorably (-) or was similar (=) to the other prisons on that indicator. Where a score has two symbols, the position of each symbol (on the left or the right) reflects the relative position (among the table columns) of the prison to which the comparison is being made. Thus, for item A.1., the (-+) in the State column means that the state prison compared unfavorably to the private prison and favorably to the federal prison in terms of the staff's perception of the effect of facility design on surveillance of inmates.

Using a large number of indicators has the advantage of smoothing out the ambiguities of single indicators and capturing the nuances of related but differentiating items. For example, look at the two measures based on urinalysis testing in Table 1. Suspicion-based testing—interpreted as a positive indicator on security *procedures*—was most frequent in the private prison and least frequent in the federal. But the *outcome* of those tests suggested fewer *breaches* of security at the federal facility, in terms of actual drug use found. This result may justify the less vigorous testing at the federal prison, and the positive outcome score may properly offset the negative procedure score.¹⁸

In Table 1, the Quality Index scores for the private, state and

¹⁸ Some ambiguity still remains, of course. Examining the full list of indicators in Appendix A reveals another type of ambiguity. In addition to measuring the same concept with multiple indicators, some indicators were used multiple times to measure different concepts. For example, freedom of movement for inmates is a negative indicator on the dimension of Security, but a positive indicator on the dimension of Conditions. That sort of ambiguity is inevitable, so it is valid to include measures that are scored both positively and negatively on different dimensions.

federal prisons are .60, .44 and .36, respectively, indicating that the private prison substantially outperformed the other two facilities on the dimension of Security.¹⁹

IV. RESULTS

Table 2 shows how each of the three prisons compared to the other two in all possible pairwise comparisons on the relevant empirical indicators for each of the eight dimensions of quality. Based on the numbers in Table 2, Figure 2 depicts the Prison Quality Index scores graphically for each prison on each dimension.

While the methodology used here forces us to make comparative rather than absolute evaluations, it should be emphasized first that all three of the prisons evaluated in this report were well-run, safe, clean, orderly and secure institutions that provided constructive programs, decent living conditions and conscientious adherence to procedures designed to protect inmate rights. Moreover, as indicated in Table 2, results of comparisons between the prisons were as likely to be similar as to depict any prison as being either "better" or "worse" than the others. Still, the total number of favorable and unfavorable comparisons exceeded the similarities, and those differences formed a fairly consistent pattern.

As shown in Figure 2, the private prison outperformed the state and federal prisons across nearly all dimensions, often by quite substantial margins (up to +200%, with a mean of +54%).²⁰ The two exceptions were the dimensions of Care, where the state outscored the private prison by a modest amount (+18%), and Justice, where the federal and private prisons achieved equal scores. On the other dimensions, the private prison's advantage over the state ranged from a narrow edge (+3%) on Conditions to rather lopsided margins on Security (+45%), Management (+76%), Order (+92%) and Safety (+115%). The state prison took second place overall (all dimensions combined), even though the federal prison ranked second on more of the dimensions separately and tied for first on

¹⁹ Note that the Quality Index Scores given for illustration in Table 1 are not completely accurate: the federal score should actually be slightly higher than the state score. Table 1, presented here only to illustrate the methodology, is a much-abridged version of the full table of comparisons on Security, so the Index Scores at the bottom of Table 1 do not match exactly the corresponding figures in Table 2 and Figure 2, presented below.

²⁰ Figures in the rest of this section give the *added margin*, not the higher score, as a percentage of the lower score. Thus, .60 compared to .20 would be stated as an advantage, or margin, of +200% rather than as being 300% of .20. The largest margin (+200%) was for the private (.60) over the federal (.20) prison on the index scores for Conditions.

TABLE 2

NUMBER AND PERCENTAGE OF THREE-WAY COMPARISONS
AMONG PRIVATE, STATE AND FEDERAL PRISONS THAT WERE
FAVORABLE (+), UNFAVORABLE (-) AND SIMILAR (=) IN OUTCOME

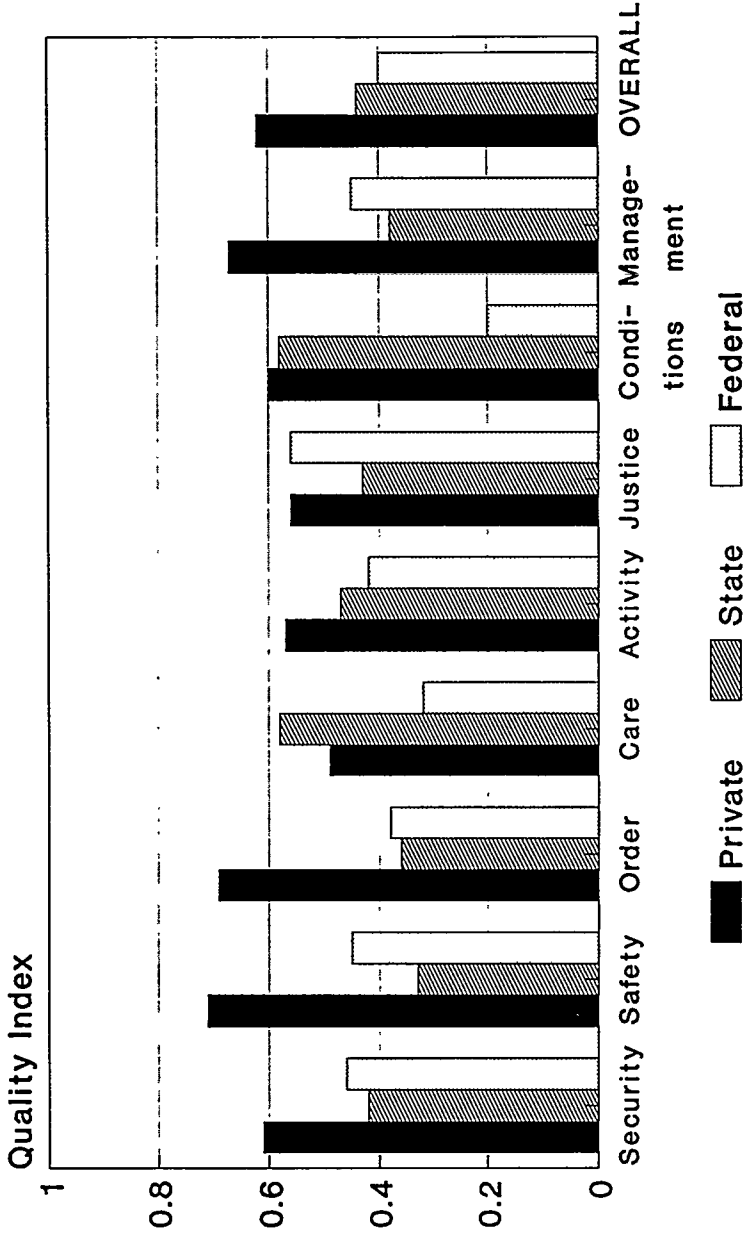
PRIVATE COMPARED TO OTHERS							Quality Index ^a
Dimension	Favorable		Unfavorable		Similar		
	#	%	#	%	#	%	
Security	18	33%	6	11%	30	56%	.61
Safety	37	49%	6	8%	32	43%	.71
Order	29	51%	7	12%	21	37%	.69
Care	11	29%	12	32%	15	39%	.49
Activity	9	24%	4	10%	25	66%	.57
Justice	19	32%	12	20%	29	48%	.56
Conditions	36	44%	20	24%	26	32%	.60
Management	28	47%	8	13%	24	40%	.67
OVERALL	187	40%	75	16%	202	44%	.62

STATE COMPARED TO OTHERS							Quality Index ^a
Dimension	Favorable		Unfavorable		Similar		
	#	%	#	%	#	%	
Security	10	19%	19	35%	25	46%	.42
Safety	8	11%	34	45%	33	44%	.33
Order	9	16%	25	44%	23	40%	.36
Care	15	39%	9	24%	14	37%	.58
Activity	6	16%	8	21%	24	63%	.47
Justice	11	18%	20	33%	29	48%	.43
Conditions	34	41%	21	26%	27	33%	.58
Management	8	13%	23	38%	29	48%	.38
OVERALL	101	22%	159	34%	204	44%	.44

FEDERAL COMPARED TO OTHERS							Quality Index ^a
Dimension	Favorable		Unfavorable		Similar		
	#	%	#	%	#	%	
Security	12	28%	15	36%	15	36%	.46
Safety	12	23%	17	33%	23	44%	.45
Order	5	21%	11	46%	8	33%	.38
Care	2	14%	7	50%	5	36%	.32
Activity	4	22%	7	39%	7	39%	.42
Justice	8	44%	6	33%	4	22%	.56
Conditions	7	15%	36	75%	5	10%	.20
Management	12	26%	17	37%	17	37%	.48
OVERALL	62	24%	116	44%	84	32%	.40

^aFavorable Differences + (Similarities ÷ 2) / Total Comparisons

FIGURE 2
QUALITY INDEX SCORES FOR PRIVATE, STATE, AND FEDERAL PRISONS



the dimension of Justice.²¹

There was one systematic discrepancy in the data that must be noted before drawing any final conclusions. The *staff survey* data and, to a lesser extent, the *official records* data strongly and consistently supported the overall superior quality of confinement at the private prison. However, when looking only at the results of *inmate surveys*, it was the state prison that outscored the private (no inmates were surveyed at the federal prison). Prison Quality Index scores calculated purely on data supplied by inmates favored the state prison on every dimension except Activity. Nevertheless, the state's advantage was large (+170%) only in the area of Care and moderate (an average margin of +38%) on most other dimensions. In contrast, when based only on the staff surveys, the Quality Index Scores of the private prison exceeded those of the state prison by moderate to massive margins (+70% to +1800%, with a mean of +525%).²² Thus, the staff's preference for the private prison was much stronger than the inmates' preference for the state prison.²³

Obviously, the staff and inmates had very different perceptions and perspectives on many indicators of confinement quality.²⁴ Much of the inmates' displeasure with the private prison, as expressed in written comments on their surveys as well as in field in-

²¹ The Prison Quality Index gives equal weight to each indicator and each comparison; hence, the overall score weights each dimension according to the number of indicators within it. This approach, used for simplicity, is vulnerable to the criticism that some dimensions, and some indicators, are more important than others. Weighting them equally undoubtedly produces errors. What is not so clear is whether there is any alternative weighting scheme that would produce fewer, rather than just different, errors. For most of the dimensions and indicators there would be legitimate differences of opinion even as to the direction of weighting, and certainly as to the proper metric. For some dimensions and indicators, we might all agree that A is more important than B and thus, the "true" ratio must be something greater than 1:1. But if we weight them in a ratio of 3:1 and the "true" (but unknown) ratio is 2:1 we end up with the same amount of error as with equal weighting.

²² It cannot be said that the study's methodology favored staff over inmates. In constructing the prison quality index scores, 96 comparison items were based on staff surveys while 127 were taken from the inmate surveys, and each item was given equal weight. Nor should the official records indicators be thought of as reflecting only the perspective of the administration or staff. Most of those items were simply factual. Some of them (such as grievances and sick calls) were generated directly by inmates, and others (such as significant incident logs and disciplinary reports) included statements of both staff and inmates.

²³ In a study comparing public and private correctional facilities in Kentucky and Massachusetts, the Urban Institute found this same divergence between staff and inmates, but not as strong as in New Mexico. In Kentucky and Massachusetts, the comparison of responses by public and private (male) inmates favored the private facilities to a lesser degree than did the staff responses, but the inmates did not diverge to the point of favoring the state, as happened in New Mexico. See THE URBAN INSTITUTE, *supra* note 3.

²⁴ These differences are discussed in detail in LOGAN, *supra* note 9.

terviews, was related to the more prison-like atmosphere and tighter administrative regimen that they encountered there, in comparison to their former conditions at the state prison. For example, when asked to make a direct comparison between the state and private prisons on "overall security," the staff, on average, said that security was "somewhat better" at the private prison. Independent experts holding opposing views of prison privatization confirmed the staff view after making site visits to both prisons. Yet the inmates, on average, described security as "somewhat better" at the state prison. In their unstructured survey comments regarding safety and security, inmates at the private prison tended to complain of overemphasized security (7 of 79 comments); at the state prison, one year earlier, more inmates had complained of lax security and inadequate protection (31% of the comments). To the inmates, looser was better, at least in retrospect, but staff favored tighter security. Thus, the stricter governance of inmates at the private prison may have been a factor behind both the more *positive* evaluations from *staff*, as well as the more *negative* evaluations from *inmates*.

If the only data available were from the staff and inmate surveys, we would have to reconcile the differing perspectives of those two groups in order to draw an overall conclusion about which institution had "objectively" higher quality of conditions and operations. However, the official records data, coming from such sources as grievance logs, significant incident and discipline logs, health clinic logs, inmate work and education records and staff personnel records, strongly tended to resolve the question in favor of the private prison. Quality Index scores calculated from the official records data consistently—and on most dimensions considerably (an average margin of +117%)—favored the private over the state prison.

In drawing a general conclusion, it should be noted that the data from all three sources—inmates, staff and official records—were mixed rather than uniform. Each data source produced both positive and negative results for each prison. Therefore, a general conclusion favoring any one of these prisons over the others on quality of confinement must be seen as the *net* effect of a large number of pluses and minuses on all sides. Moreover, one should bear in mind that these are relative scores. Separate and non-comparative evaluations show that quality was high at all three prisons.²⁵

²⁵ The federal prison had repeatedly achieved accreditation under the standards of the American Correctional Association, and the state prison was accredited soon after the women were transferred to the private prison. The private prison, too, was accredited shortly after the time of this study, and its final score—100 percent on mandatory

Despite these qualifications, the results across a wide range of evaluative measures tend to favor the privately operated prison over either of the two comparison facilities operated by governmental entities.

V. DISCUSSION OF STUDY DESIGN

In assessing the results described above, the key term is "comparison facilities." Therein lie both the weakness and the strength of this research. Lacking an experimental or even a quasi-experimental design, this chronologically and geographically disparate comparison is basically descriptive. It is impossible to identify accurately causal relationships in the differences between prisons. However, having made the hard logical point that *post hoc* is not (necessarily) *propter hoc*, the design is sufficient to draw some tentative policy inferences and to support language that carries a mild causal implication without making a strong causal claim.

At the very least, a before-and-after study can document differences correlated in time with a certain event, such as a change in prison administration. One may reasonably assume that some of those differences probably were associated with that change through more than just coincidence. The greater the comparability between the "before" and "after" prisons on contextual factors and control variables (i.e., conditions that are likely to affect the quality of imprisonment independently of prison administration), the more reasonable such an assumption becomes. However, differences independent of privatization, such as age or architecture, may weaken the comparability of public and private prisons. Certain changes in performance could be due to these factors more than to the change in administration from public to private.

The federal prison differed greatly from the other two in age, architecture and other variables. The methodological effect of those differences will be discussed shortly.²⁶ Here, the question is whether the state and private prisons were so different in age and architecture as to make them non-comparable in a before-and-after experiment design.

and 100 percent on non-mandatory criteria—was one of the few perfect scores ever received by a prison in the history of the ACA accreditation process. Moreover, the state prison at the time of the study had a high level of compliance with the terms of a very demanding consent decree (*see, supra* note 8), and in the areas where it was not in full compliance, the complaints were mostly minor. Two authorities on prisons, Charles Thomas and John DiIulio, were hired as consultants to this study on the basis of their opposing views about privatization. Their reports were highly complimentary toward both the private and the state prisons overall, though not without criticism of each.

²⁶ *See infra* section V.A.

While the private prison was brand new, the state prison was only four years old at the time it was studied. Four years is not much of an age difference for physical structures. More significantly, the private prison had a much better structural design, a circumstance readily conceded by state officials.

Physical design can have important effects on quality of confinement (e.g., on crowding, privacy, supervision, security, recreation, etc.),²⁷ and some of these effects may be independent of the prison's administration. At the same time, design itself is not completely independent of the origin, ownership and management of a prison. To object that the private prison performed better in part because it was better designed merely begs the question: Why didn't the state prison, built just a few years before (and thus not from some outdated architectural era), have the better design? Private prison companies sometimes have greater flexibility than government agencies. Private entities do not have to contract separately for design and construction, nor must they award contracts only to approved vendors or lowest bidders; and they can make changes in design more easily when problems arise during construction. So, differences resulting from superior design may be seen as concomitant to the mode of administration.

A related threat to comparability is the fact that we are comparing a well-established prison *program* with a start-up. Whatever the mode of administration, any new operation can expect a period of adjustment in which routines are established, policies are developed and challenges to authority are weathered. Although some consequences of newness—such as staff enthusiasm or the cheerfulness of fresh paint—are positive, most probably pose at least temporary impediments to smooth operation.²⁸ Either way, those interpreting differences found between the state and private prison must consider the “breaking in” factor.

In contrast, there are at least four contextual factors that enhance rather than undermine the comparability of the state and private prisons. The four factors are judicial supervision of New Mexico prisons, commitment to American Correctional Association standards, staff continuity and continuity in the character of the inmate population. Because they strongly affect the character of im-

²⁷ Some of the indicators used in this study were designed specifically to capture the effects of architecture on such quality measures as security, safety and conditions of confinement.

²⁸ Freshness and the uniqueness of private prisons may have made the private operation seem special in a positive way to the staff, but the novelty may also have been special in a negative way (as a challenge) to the inmates.

prisonment but did not change significantly from 1988 to 1989, these factors serve as methodological controls that increase the validity of the before-and-after design.

The most pervasive control condition is the fact that all prisons in New Mexico with above-minimum security (which would include the women's prison) are subject to the *Duran* consent decree, an extremely comprehensive and detailed court order.²⁹ This decree dictates procedures, standards and goals covering virtually every aspect of imprisonment: living conditions; food service; classification; inmate discipline and sanctions; legal access (law library, attorney visits); general visitation; correspondence; inmate activity and programs; medical, dental and mental health care; and staffing and training. Every New Mexico prison under the court order has a full-time, in-house compliance monitor whose primary responsibility is to help secure or maintain conformity to the decree.

The effect of the *Duran* consent decree and its continuous monitoring is to standardize the policies, expectations and performance criteria across all of the state's higher security institutions. This strengthens the design of a before-and-after comparison by providing a strict legal framework within which both the old and the new prison must operate. It helps ensure an apples-to-apples comparison by placing each prison within exactly the same climate of expectations and standards regarding all important aspects of prison operation.

A second control condition is the fact that both prisons were working toward accreditation by the American Correctional Association (ACA). Like *Duran*, the ACA standards assist comparability by providing concrete goals for all prisons. One difference on this dimension is that the state prison had almost finished the task of bringing its facility, policies, practices and records into conformity with ACA standards—it was ready, in fact, for the audit itself—whereas the private prison was just beginning the long accreditation process. In other words, the state prison had a head start. Yet, what is important for methodological comparability is that both prisons were running the same sort of race.³⁰

Two final sources of comparability are the continuity in staff between the state and private operations and the continuity in composition of the inmate population. At least 22 of the 105 staff at the private prison, including several in key positions, had previously

²⁹ See *supra* note 8.

³⁰ The fact that the state prison was farther along in preparation for ACA accreditation makes the private prison's superior score on the Prison Quality Index even more impressive.

worked for the state. Likewise, despite some growth and turnover,³¹ the inmate population in 1989 was very similar to the population in 1988. Since only six months elapsed between the end of one reference period (the state's) and the beginning of another (the private prison's), much of the population remained exactly the same. Overall, the population did not change much in age, ethnicity, commitment offense, prior commitments or lengths of sentences served and remaining.³²

A. USING A FEDERAL PRISON AS A THIRD POINT OF COMPARISON

The major focus of the study is on the before-and-after comparison of state versus private operation of a women's prison that housed virtually the same population of prisoners within a single jurisdiction subject to an extremely comprehensive consent decree. A before-and-after design having this many controls is superior in most respects to the use of a non-contemporaneous, non-random and only partially matched comparison group. However, the *addition* of such a group to a before-and-after comparison can be useful, because it adds variation within factors that are presumed to be controlled in the before-and-after situation. The unmatched group places the comparison of two well-matched groups into a more useful perspective. By this logic, adding a federal women's prison to the analysis should help contextualize the state versus private comparison that is the central focus of this study. Inclusion of the federal prison facilitates comparison of the public/private differences occurring under relatively controlled conditions with differences occurring across diverse offender populations and wide-ranging legal and policy regulations.³³

³¹ The average daily population increased from 144 in 1988 to 170 in 1989 (but rated capacity also increased, from 133 to 204). The total six-month population (i.e., offenders resident at some point during the six-month reference period) increased from 230 to 245.

³² See tables in Appendix A of LOGAN, *supra* note 9. There was a small shift in the custody mix, which probably was due to the change in architecture more than to any change in population. Minimum security units were much more secure at the private prison, which allowed those units to hold inmates that the state had housed in its seriously overcrowded medium security units. As a result, transfer of the population from the state to the private prison was marked by an increase in minimum-security custody (from 22% to 39%), along with decreases in medium-security custody (from 62% to 55%) and unclassified custody (from 16% to 6%).

³³ Although I argue here for the methodological advantage of adding a "relevant but different" case as a third point of comparison, the original rationale for including a federal prison was more substantive. The idea was to include a prison that other criminologists would be inclined to accept *a priori* as probably well-run. Federal prisons are regarded by many correctional experts as among the best-run institutions in the country. Fifty-eight percent of federal prisons in 1989 held certificates of accreditation from the

Realizing the benefits of a third point of comparison, the study incorporated data from a federal prison. In 1988, the Federal Correctional Institution at Alderson, West Virginia, was the oldest and, with a rated capacity of 609 inmates, the largest prison for women in the federal system. This prison was a multi-security facility until Fall 1988, when authorities changed it to minimum security only. In May 1988, prior to its mission change, a survey nearly identical to the one used in this study was administered to staff (but not inmates) at Alderson. That survey, along with official records data later retrieved from a longitudinal database in the Bureau of Prison's central office, allowed comparison of Alderson (for the six months ending with May 1988) to Western New Mexico state prison (for June - November 1988) and to the CCA-New Mexico (for June - November 1989).³⁴

Contrast to the federal prison illuminates the comparability of the New Mexico prisons on contextual and control variables. The difference in jurisdiction, of course, results in different correctional policies, staff training and legal requirements. The federal prison was not governed by the *Duran* decree, although all three prisons were committed to following the ACA standards. The federal prison, which opened in 1927, is older and larger and it has a much more extensive prison industries program. Finally, the inmates at Alderson were considerably different from those in New Mexico.³⁵

These differences between the two New Mexico prisons and the federal prison add significance to the private/public comparisons. They allow us to contrast the differences that are associated with privatization in New Mexico with differences that stem from a vari-

American Correctional Association; another four were in the process of accreditation (count based on listings in *FACILITIES 1990*, a Bureau of Prisons publication). This compares favorably to the 26% of all prisons (including federal) in 1989 that had such accreditation. See GEORGE M. & CAMILLE G. CAMP, *THE CORRECTIONS YEARBOOK 1989* (Criminal Justice Institute, 1989), at 21-22, 33 (presenting separate tables showing 235 adult correctional institutions accredited out of a total of 902 state and federal prisons surveyed). These figures are offered not to prove that federal prisons are ideal models but to support a more modest proposition: that a federal women's prison provides a reasonable example of a "good" prison against which to compare both the private and the state version of New Mexico's women's prison. The federal prison used for that purpose is one of those accredited by the ACA.

³⁴ If there is seasonal variation in any of the measures used in this study, this difference in reference periods would be one source of non-comparability. Other such sources are discussed in the text that follows.

³⁵ The federal inmates were an average of two or three years older, half as many were Hispanic, twice as many were black, and fewer were incarcerated for crimes against person or property, while drug offenders were more than twice as prevalent. Both sentence length and time served were much longer for the Alderson inmates, but more of them were serving their time under the classification of minimum security.

ety of other, uncontrolled factors. In this regard, it seems significant that the Quality Index scores for the private prison were generally more discrepant from at least one of the governmental prisons than either of the governmental prisons was from the other. Although there are markedly different physical characteristics and policy reference points between the state and federal prisons, the governmental prisons stand in a similar position when compared to the private on the basis of Quality Index scores.

Apart from the primacy of the private over the public operations, a secondary pattern at least partially emerges from the inclusion of federal data. The one dimension (Care) where the state fared better than the private is arguably an aspect of a theoretically coherent cluster of dimensions on which the state also outscored the federal. This cluster consists of Activity, Conditions and Care—the “Welfare Model” of prison quality dimensions. These are aspects of confinement that are likely to be of particular concern to inmates, professionals and policy makers concerned with prison reform and inmate welfare. These aspects of corrections also make obvious targets for the additional spending that New Mexico has undertaken following the 1980 riot and subsequent consent decree. The New Mexico Corrections Department has been particularly committed to the delivery of medical care, spending more per inmate than any other prison system in the country and more than twice the national average.³⁶

On a second cluster of dimensions—one that might be dubbed the “Governance Model”—the federal prison joined the private in outperforming the state. This cluster’s dimensions of Justice, Order, Security, Safety and Management are aspects of confinement that relate to governance and control. These are also dimensions on which the level of expenditure would not seem to have very much direct influence. Thus, where the Welfare Model might call for more resources, amenities and services, the Governance Model would call for better management.

It would be a mistake to make too much of these models in view of the limited data on which they are based.³⁷ However, they do seem to suggest that there may be a real rather than a random pattern to the findings of this research and that such a pattern links

³⁶ SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS—1987 (Timothy J. Flannagan & Katherine M. Jamieson eds., Bureau of Justice Statistics 1988), at 92.

³⁷ For the “Welfare Model” dimensions of Activity, Conditions and Care, the federal prison had only 9, 24 and 7 measurable indicators, respectively. In contrast, the private and state prisons each had 29, 58 and 31 indicators for those dimensions.

variations in the quality of prison confinement to the form of its administration.

B. ON GENDER AND GENERALIZABILITY

Since most prisons have male populations, and this study compared only women's prisons, a discussion of generalization is appropriate. Might the results have been different if based on a comparison of men's prisons?

It should be noted, first of all, that there *have* been comparisons among male facilities, and the trend of comparison results is consistent with that found here. A before-and-after comparison of a county prison in Tennessee, a comparison of juvenile facilities in Massachusetts, a comparison of adult facilities in Kentucky and a comparison of adult prisons in Texas all support the current finding of net advantages to private over public operation of correctional facilities.³⁸ All of the facilities analyzed in these studies housed male inmates. Thus, rather than questioning the universality of the current study, we could view it as expanding the general application of the results from previous research on male facilities.

Because of the significant differences between male and female prisoners, there may be certain dimensions of prison quality that should be given greater or lesser weight in a women's prison than they would have in a men's prison. For example, Safety, Security and Order might warrant less attention in a women's prison because females are less predatory, less violent and less prone to escape. Care might be given more weight for a women's prison because of special health care needs or more active health concerns of female inmates. Certain personal relationship aspects of Conditions, such as visitation with children and families, sanitation, density or privacy, might be more important in women's prisons. Activity is probably equally important to men and women, but the historical pattern of neglecting females in this area may make it loom larger for women right now.

However, the argument that some dimensions deserve greater or lesser salience in a women's prison—as opposed to the equal weight given to each dimension in this study—could not explain away the major finding of this research. The relative positions of the state and private prisons on the Prison Quality Index were consistent across all dimensions. Thus, no amount of weight adjustment to the dimensions would have changed the direction of the

³⁸ See *supra* note 3.

outcome.³⁹

VI. SUMMARY AND CONCLUSION

This study attempted to compare the "quality of confinement" in three prisons: a women's prison run by the State of New Mexico, a privately operated version of that prison and a federal prison for women. The research did not use any absolute scale for measuring prison quality; rather, it took a comparative approach. The study suggested that eight dimensions defined the mission of a prison under a confinement model: Security, Safety, Order, Justice, Care, Conditions, Activity and Management. Using data from institutional records, plus modified staff and inmate versions of the Prison Social Climate Survey developed by the Bureau of Prisons, 333 empirical indicators were identified for those eight dimensions. A total of 595 pairwise comparisons among the three prisons were categorized either as being "nonsignificant," suggesting no real difference between the two prisons, or as being "favorable" to one and "unfavorable" to the other of the pair. Based on these comparisons, a relative score called the Prison Quality Index was calculated for each prison, allowing the prisons to be ranked both overall and within each dimension of quality.

The private prison outperformed the state and federal prisons, often by quite substantial margins, across nearly all dimensions. The two exceptions were the dimension of Care, where the state outscored the private by a modest amount, and the dimension of Justice, where the federal and private prisons achieved equal scores. The results varied, however, across the different sources of data. The private prison compared most favorably to the state prison when using data from the staff surveys and consistently but more moderately so when using data from official records. When inmate surveys provided the data, however, the state prison moderately outscored the private on all dimensions except Activity. Regardless of the data source examined, there were many similarities among the three prisons, and for each one there were large numbers of both positive and negative indicators. Moreover, in absolute terms, quality was high at all three prisons. Despite a high level of prior performance, however, the weight of evidence in this study supports

³⁹ Setting aside the question of gender-based salience, this observation (that differential weighting of the dimensions would not have affected the outcome) serves also as a reply to the criticism raised earlier (*see supra* note 21) that equal weighting of the dimensions is a methodological weakness of the Prison Quality Index. True, it is a limitation of the measure as developed so far, but not one that is crucial to this particular application and not one that can be rectified without further research and application.

the conclusion that by privately contracting for the operation of its women's prison, the State of New Mexico improved the overall quality of that prison while lowering its costs.⁴⁰

It is too soon to generalize very broadly, but the research to date suggests that it is reasonable and realistic to expect high quality as well as low costs from commercially contracted prisons.⁴¹ This article has concentrated on identifying rather than explaining some observed differences between one private and two government-operated prisons. In a lengthy report to the National Institute of Justice, these differences are explored more thoroughly with separate chapters and detailed tables for each of the eight dimensions of quality.⁴² Based on that report, the factors that seem most likely to explain the relatively high performance of the private prison include:

- a well-designed facility;
- greater operational and administrative flexibility;
- decentralized authority;
- higher morale, enthusiasm and sense of ownership among line staff;
- greater experience and leadership among the top administrators; and
- stricter, "by the book" governance of inmates.

The private operation of the prison at least partly influenced each of these factors. However, we cannot say precisely to what extent the differences observed among the prisons were due to privatization, nor can we isolate the aspects of privatization that might account for the differences. Additional research is needed, first, to see if additional studies can replicate the private advantage discovered thus far, and second, to go beyond merely measuring differences and to begin accounting for them as well.

⁴⁰ The cost of operating WNMCF during the last year in which it held the state's female felons was estimated by the New Mexico Corrections Department to be \$80 a day per inmate. The fee paid to CCA the following year for operation of the company's newly constructed facility was \$69.75. For further information on costs, see LOGAN, *supra* note 9, at Appendix C.

⁴¹ See *supra* notes 3 and 6.

⁴² See LOGAN, *supra* note 9.

APPENDIX A—INDICATORS OF QUALITY OF CONFINEMENT

Italicized items are based on official records. Others are from surveys of staff or inmates (or both, in which case the staff and inmate means are counted as separate indicators). Items beginning with "Direct comparison of prisons on . . ." are based on questions asked at the private prison of twenty-two staff and eighty-seven inmates who had prior experience at the state prison. The "direct comparison" questions asked for responses scaled from -2 to +2, where -2 favored the state prison, +2 favored the private prison, and 0 signified "about the same." These special scores were tested for significance of difference from zero. All other data were collected separately at each prison and tested for significance of differences between the separate prison samples (see footnote 16). "Rate per capita-6" means "divided by total number of inmates resident at some time during the six month period." Scale values are omitted for all scale items ("direct comparison of. . .," "rating of. . .," "perception of. . .," etc.).

TABLE A.1
SURVEY AND OFFICIAL RECORD MEASURES OF
QUALITY OF CONFINEMENT

Dimension 1: Security ("Keep Them In")

A. *General*

1. Direct comparison of private and state prisons on overall security of the facility
2. Rating of how the building design affects surveillance of inmates

B. *Security Procedures (six-month period)*

1. Perceived frequency of shakedowns in the living area
2. Perceived frequency of body searches
3. Proportion of staff who have observed:
 - a. Any consequential problems within the institution
 - b. Lax security
 - c. Poor assignment of staff
 - d. Inmate security violations
 - e. Staff ignoring inmate misconduct
 - f. Staff ignoring disturbances
 - g. Other problems
4. *Number of cell or bunk area shakedowns conducted in a one-month period*
 - a. *Rate per inmate*
 - b. *Proportion finding contraband*
5. *Number of urinalysis tests based on suspicion in a one-month period*
 - a. *Rate per inmate*
 - b. *Proportion testing positive for opiates*

C. *Drug Use (six-month period)*

1. Direct comparison of private and state prisons on control of drug use
 2. *Drug-related incidents, number and rate per capita-6*
 3. *Discipline reports related to drugs or contraband, number and rate per capita-6*
- D. *Significant Incidents (six-month period)*
1. *Significant incidents, total and rate per capita-6*
 - a. *Proportion of six-month population involved in any incidents*
 2. *Escapes, number and rate per capita-6*
- E. *Community Exposure (six-month period)*
1. *Furloughs, number and rate per capita-6*
- F. *Freedom of Movement*
1. Perceived freedom of movement for inmates:
Day / Evening / Night
- G. *Staffing*
1. *Ratio of resident population to security staff*

Dimension 2: Safety ("Keep Them Safe")

- A. *General*
1. Direct comparison of private and state prisons on inmate and staff safety
- B. *Inmate Safety (six-month period)*
1. Perceived likelihood of an inmate being assaulted in her living area
 2. Estimated rate (per 100 population) of armed assaults involving inmates
 3. Estimated rate (per 100 population) of assaults against inmates without a weapon
 4. Estimated rate (per 100 population) of sexual assaults upon inmates
 5. Estimated rate (per 100 population) of instances inmate has been pressured for sex
 6. Inmates' perceived danger of being:
 - a. killed or injured
 - b. punched or assaulted
 7. Proportion of inmates who say they have been physically assaulted by another inmate in a six-month period
 8. Proportion of inmates who say they have been physically assaulted by staff in a six-month period
 9. *Discipline reports that involved fighting or assault, number and rate per capita-6*
 10. *Significant incidents involving inmate injury, number and rate per capita-6*
- C. *Staff Safety (six-month period)*
1. Rating of how the building design affects staff safety
 2. Perceived danger to male staff
 3. Perceived danger for female staff
 4. Rating of how often inmates use physical force against staff
 5. Perceived likelihood that a staff member would be assaulted
 6. Proportion of staff who say they have been assaulted by an inmate in a six-month period

7. *Significant incidents involving staff injury, number and rate per capita-6*
- D. *Dangerousness of Inmates*
1. Proportion of inmates perceived to be extremely dangerous
 2. Proportion of inmates perceived to be somewhat dangerous
 3. Perceived frequency of inmate possession of weapons in living quarters
- E. *Safety of Environment (six-month period)*
1. Perceived frequency of accidents:
Housing Units / Dining Hall / Work Environment
 2. Perceived occurrence in housing units of clutter that could feed a fire
- F. *Staffing Adequacy*
1. Proportion of staff and inmates who feel there are enough staff to provide for safety of inmates: Day / Evening / Night
 2. Proportion of staff who feel there are enough staff to provide for their own safety: Day / Evening / Night

Dimension 3: Order ("Keep Them In Line")

- A. *General*
1. Direct comparison of private and state prisons on order and control
 2. Direct comparison of private and state prisons on promotion of self-discipline and responsibility in inmates
- B. *Inmate Misconduct (six-month period)*
1. Perceived frequency of physical force by inmates against staff
 2. Perceived security of inmate personal property
 3. Proportion of inmates who report being punished in the last six-months:
 - a. with a major sanction
 - b. with a lesser sanction
 4. Number of inmates written up, as proportion of six-month population
 5. Discipline reports, total and rate per capita-6
 - a. Reports per inmate among those written up
 6. Significant incidents of disturbance or incitement to riot, number and rate per capita-6
- C. *Staff Use of Force (six-month period)*
1. Perceived frequency that staff have used force against inmates over a six-month period
 2. Significant incidents in which force was used, number and rate per capita-6
 3. Significant incidents in which restraint was used, number and rate per capita-6
- D. *Perceived Control*
1. Staff knows what goes on among inmates
 2. Agreement that staff has caught and punished the "real troublemakers"
 3. Perceptions of how much control *inmates* have over other inmates: Day / Evening / Night

4. Perceptions of how much control *staff* has over inmates:
Day / Evening / Night
- E. *Strictness of Enforcement* (six-month period)
 1. *Proportion of discipline reports that were:*
 - a. *Dismissed*
 - b. *Guilty of a minor report*
 - c. *Guilty of a major report*
 2. *Proportion of minor report convictions that received a sanction of:*
 - a. *Warning/reprimand*
 - b. *5-10 extra hours of duty*
 - c. *15-20 extra hours of duty*
 - d. *25-30 extra hours of duty*
 3. *Proportion of major report convictions that received a sanction of:*
 - a. *Segregation only*
 - b. *Loss of goodtime only*
 - c. *Segregation and loss of goodtime*
 4. *Average number of goodtime days taken away*
 5. *Average number of days to be spent in segregation*
 6. *Proportion of major report sanctions*
 - a. *Suspended at committee level*
 - b. *Modified by warden*

Dimension 4: Care ("Keep Them Healthy")

- A. *General*
 1. Direct comparison of private and state prisons on health care
 2. Direct comparison of private and state prisons on services for inmates
- B. *Stress and Illness* (six-month period)
 1. Inmate stress scale: average of nine items reporting feelings of mental, physical and emotional strain
 2. Average number of days an inmate was ill or injured
 3. Average number of days an inmate was seriously ill enough that medical help was needed but did not go to sick call
 4. Significant incidents involving suicide attempts or self-injury, number and rate per capita-6
 5. Significant incidents requiring first aid or infirmary visit, number and rate per capita-6
- C. *Health Care Delivered* (six-month period)
 1. Proportion of inmates who used medical facilities other than for emergency problems
 - a. Proportion of those who used the facilities who felt the problem was properly taken care of
 2. Proportion of inmates who reported having had emergency medical treatment
 - a. Proportion of those who received emergency medical treatment who felt that it was adequately handled
 3. Clinical contacts, total and rate per capita-6
 4. Sick calls, number and rate per capita-6
 5. Medical appointments, number and rate per capita-6
 6. Physicals and TB tests, number and rate per capita-6
 7. Lab appointments, number and rate per capita-6

8. Miscellaneous clinic visits, number and rate per capita-6
- D. *Dental Care* (six-month period)
 1. Proportion of inmates who received dental treatment
 - a. Proportion of those receiving dental treatment who felt it was adequately handled
 2. Dental visits, number and rate per capita-6
- E. *Counseling* (six-month period)
 1. The alcohol and drug counseling services have been satisfactory
 2. Other counseling services have been satisfactory
 3. Proportion of inmates who report having participated in some kind of counseling:
 - a. Drug/alcohol counseling
 - b. Therapy
 4. Psychologist contact cases per capita for one month
 5. Number of contact hours per contact case for one month
 6. Proportion of inmates who were involved in the following programs:
 - a. Psychology/psychiatric; includes substance abuse
 - b. Employment and pre-release counseling
 7. Psychiatric visits (over a six-month period), number and rate per capita-6
- F. *Staffing for Programs and Services*
 1. *Number of program or service delivery staff (FTE):*
 - a. *Medical clinicians*
 - b. *Education/work*
 - c. *Psychology/counseling*
 - d. *TOTAL*
 2. *Number of inmates (average daily resident population) per FTE staff position in programs or services:*
 - a. *Per medical clinician*
 - b. *Per education/work staff*
 - c. *Per psychologist/counselor*
 - d. *Per total program/service staff*
 3. *Program or service delivery staff as a proportion of total staff*

Dimension 5: Activity ("Keep Them Busy")

- A. *General*
 1. Direct comparison of private and state prisons on positive activities for inmates
 2. Inmates usually have things to do to keep them busy
- B. *Work and Industry Involvement* (six-month period)
 1. *Involvement in prison industry, work release or institutional jobs:*
 - a. *Proportion of population eligible*
 - b. *Proportion working*

2. *Among eligible inmates, proportion involved in:*
 - a. *Prison industries*
 - b. *Work release*
 - c. *Institutional jobs*
3. *Average work hours per week among employed inmates*
- C. *Work and Industry Evaluation (six-month period)*
 1. The work training program has been satisfactory (agree/disagree)
 2. Have the vocational training courses provided skills that are useful?
 - a. Perceived importance of learning the information presented in class
 - b. Perceived understanding of the information presented in class
 3. Grievances that involved problems with work, number and rate per capita-6
- D. *Education and Training Involvement (six-month period)*
 1. Proportion of inmates who report having participated in some educational program
 - a. Educational
 - b. Social education/pre-release skills
 2. Enrollment in education or vocational training classes:
 - a. Proportion of population eligible
 - b. Proportion enrolled
 3. Among eligible inmates, proportion involved in the following programs:
 - a. Adult basic education
 - b. Secondary education
 - c. College education courses
 - d. Vocational training
 4. Average class hours per week among those in education or vocational training programs
- E. *Education and Training Evaluation (six-month period)*
 1. The general education program has been satisfactory (agree/disagree)
 2. Have the academic courses provided useful skills?
 - a. Perceived understanding of the information presented in class
 - b. Perceived importance of the information presented in class
- F. *Recreation (six-month period)*
 1. Recreational activities are satisfactory (agree/disagree)
 2. Rating of how often prison recreational facilities are used
 3. Rating of how often inmates are unable to use the recreational facilities
- G. *Religious Services (six-month period)*
 1. Religious services have been satisfactory (agree/disagree)
 2. Rating of how often inmates attend religious services

Dimension 6: Justice ("Do It Fairly")

- A. *General*
 1. Direct comparison of private and state prisons on protection of inmate rights

2. Direct comparison of private and state prisons on adherence by staff to rules and procedures
- B. *Staff Fairness*
1. Direct comparison of private and state prisons on honesty and integrity of staff
 2. Direct comparison of private and state prisons on staff fairness
 3. Questions on aspects of staff fairness (agree/disagree)
 - a. Staff lets inmates know what is expected of them
 - b. Staff is fair and honest
 - c. Inmates are written up without cause
 4. Staff are too involved in their own interests to care about inmate needs (agree/disagree)
- C. *Limited Use of Force* (six-month period)
1. Staff use force only when necessary (agree/disagree)
 2. Perceived frequency with which staff have used force against inmates
 3. Significant incidents in which force was used, number and rate per capita-6
 4. Significant incidents in which restraints were used, number and rate per capita-6
- D. *Grievance Volume* (six-month period)
1. Proportion of staff reporting having a grievance filed against them in last six months
 2. Proportion of inmates who reported filing a grievance against staff or management
 3. *Inmates filing grievances, number and proportion of six-month population*
 4. *Grievances filed, total and rate per capita-6*
 5. Number of grievances directed at individual staff
 - a. Proportion of all grievances
 - b. Rate per capita-6
- E. *The Grievance Process* (six-month period)
1. Perceived effectiveness of the grievance procedure
 2. Perceived benefits of the grievance procedure
 3. Perceived effect of grievance procedure on the quality of life
 4. Proportion of inmate grievants who report their grievances were taken care of:
 - a. Completely
 - b. Partially
 - c. Not at all
 5. Proportion of inmates who did not file a grievance, who cite the following reasons:
 - a. They never had any major complaint
 - b. The problem was solved informally
 - c. They thought it would be useless
 - d. They were afraid of negative consequences
 - e. Other reasons
 6. Proportion of all grievances that were appealed
- F. *The Discipline Process* (six-month period)
1. Proportion of inmates receiving a *major* sanction who felt it was a fair punishment

2. Proportion of inmates receiving a *lesser* sanction who felt it was a fair punishment
 3. Perception of how many maximum security inmates really belong there
 4. Proportion of discipline guilty verdicts that were appealed
 - a. Minor Reports
 - b. Major Reports
 5. Proportion of major report sanctions
 - a. Suspended at committee level
 - b. Modified by warden
- G. *Legal Resources and Legal Access* (six-month period)
1. Proportion of inmates who have used the law library
 2. Proportion of inmates who feel the law library *has* supplied adequate information
 3. Proportion of inmates who feel the law library *has not* supplied adequate information.
 4. Grievances that involved legal resources or access, number and rate per capita-6
- H. *Justice Delayed* (six-month period)
1. *Average number of days from the date of the discipline report until the hearing*
 2. *Proportion of minor reports with hearings beyond seven-day limit*
 3. *From date of grievance report until resolved by grievance officer:*
 - a. *Average number of days*
 - b. *Proportion beyond twenty days*
 4. *From date of grievance report until resolution approved by warden:*
 - a. *Average number of days*
 - b. *Proportion beyond twenty-seven days*

Dimension 7: Conditions ("Without Undue Suffering")

- A. *General*
1. Direct comparison of private and state prisons on overall quality of living conditions
 2. The administration is doing its best to provide good living conditions (agree/disagree)
- B. *Crowding* (six-month period)
1. *Average resident population as percentage of capacity*
 2. *Proportion of six-month period in which capacity was exceeded*
 3. Average number of sq. ft. per inmate in housing units
 4. Perceived occurrence of crowding in the housing units
 5. Perceived occurrence of crowding outside the housing units
- C. *Social Density and Privacy*
1. *Proportion of inmates who were confined in:*
 - a. *Single occupancy units of sixty sq. ft. or more*
 - b. *Multiple occupancy units with sixty sq. ft. or more per inmate*
 - c. *Multiple occupancy units with less than sixty sq. ft. per inmate*
 2. Perceived amount of privacy within the sleeping area
 3. Perceived amount of privacy in the shower and toilet area
- D. *Internal Freedom of Movement*
1. Perceived freedom of movement for inmates:
 - Day / Evening / Night
 2. Proportion of inmates who were confined to housing units for more than ten hours per day

- E. *Facilities and Maintenance* (six-month period)
1. *Residents vs. conveniences in living areas*
 - a. *Inmates per shower*
 - b. *Inmates per sink*
 - c. *Inmates per toilet*
 - d. *Inmates per telephone*
 - e. *Inmates per television*
 2. *Grievances about maintenance, number and rate per capita-6*
- F. *Sanitation* (six-month period)
1. Perceived occurrence of insects, rodents or dirt in the housing units
 2. Perceived occurrence of insects, rodents or dirt in the dining hall
 3. Perceived occurrence of a bad odor or poor air circulation in the housing units
- G. *Noise* (six-month period)
1. Perceived noise level in the evening hours
 2. Perceived noise level in the sleeping hours
- H. *Food* (six-month period)
1. Quality of food at the institution
 2. Variety of food at the institution
 3. Proportion of inmates who feel enough food is served for the main course
 4. Proportion of inmates who feel the appearance of the food is appealing
 5. Direct comparison of private and state prisons on meals
 6. Grievances involving food complaints, number and rate per capita-6
- I. *Commissary* (six-month period)
1. There is an adequate commissary selection (agree/disagree)
 2. Proportion of inmates who reported:
 - a. No errors in their commissary account
 - b. Errors that were fixed
 - c. Errors that were not fixed
- J. *Visitation* (six-month period)
1. Proportion of inmates who find it hard to arrange visits with family and friends
 2. Proportion of inmates reporting family and friends who find it hard to arrange visits
 3. Average number of visitors reported by inmates
 4. Rating of the quality of visits
 5. Perceived occurrence of too many people in the visiting area
 6. Rating of how often it is hard to talk to a visitor because of noise in the visiting area
 7. Proportion of inmates who feel the visiting room has enough furniture
 8. Proportion of inmates who feel the visiting room has enough vending machines
 9. Grievances involving visitation and mail problems, number and rate per capita-6

- K. *Community Access* (six-month period)
1. *Furloughs, number and rate per capita-6*

Dimension 8: Management ("As Efficiently as Possible")

- A. *General*
1. Direct comparison of private and state prisons on overall work environment
 2. Direct comparison of private and state prisons on effectiveness of management
 3. Direct comparison of private and state prisons on staff morale
- B. *Job Satisfaction* (six-month period)
1. Institution Satisfaction Index: average across three items expressing positive feelings toward the institution
 2. Proportion of staff who reported filing a grievance against management
 3. Proportion of staff who have not filed a grievance, who cite the following reason:
 - a. Never had a major complaint
 - b. Problem was taken care of informally
 - c. Thought it would be useless
 - d. Afraid of negative consequences
 - e. Other reason
- C. *Stress and Burn-Out*
1. Job Stress Index: average across five items regarding how often staff experience stress on the job
 2. Hardening-Toward-Inmates Index: average across three items regarding how often staff feel indifferent or harsh toward inmates
 3. Relating-to-Inmates Index: average across seven items regarding how often staff feel positive about the way they work with inmates
- D. *Staff Turnover*
1. *Staff on reference date divided into:*
 - a. *Vacancies on reference date*
 - b. *Terminations during previous six months*
 2. *Termination rate divided by relevant BOP tenure-specific rate*
- E. *Staff and Management Relations*
1. Direct comparison of private and state prisons on staff/management relations
 2. Management & Communication Index: average across ten items expressing positive appraisals of the organization and authority of management
 3. Relationship-with-Supervisor Index: average across six items regarding how positive staff feel toward their supervisor
 4. Rating of how the building design affects communication among line staff
 5. Rating of how the building design affects communication between line staff and supervisors
- F. *Staff Experience*
1. Average number of years worked at this institution

2. Average number of other facilities worked in prior to this facility
 3. Average years in corrections
 - a. Total staff, minus services staff
 - b. Custody staff
 - c. Top administrators
- G. *Education*
1. *Average years of education (excluding services staff)*
- H. *Training*
1. Training Index: average across five items regarding the effectiveness and quality of the training program
 2. Direct comparison of private and state prisons on staff training programs
- I. *Salary and Overtime (six-month period)*
1. *Average salary (in \$1000s)*
 - a. *Total, minus services staff*
 - b. *Custody staff*
 - c. *Top administrators*
 2. Average number of overtime hours worked in a week
 3. Average proportion of overtime compensated by:
 - a. Extra pay
 - b. Compensatory time
 - c. No compensation
- J. *Staffing Efficiency*
1. *Number of resident inmates per FTE staff member*
-