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Private Versus Public Juvenile Correctional Facilities: Do Differences in Environmental Quality Exist?

Gaylene Styve Armstrong Doris Layton MacKenzie

Expansion in the operation of private sector correctional facilities has sparked a number of debates. A primary concern is that environmental quality for offenders incarcerated in privately operated facilities will be poorer than publicly operated facilities due to the profit motivation of the private sector. This study examined data collected from 48 residential juvenile correctional facilities in 19 states (16 private and 32 public facilities). Self-report surveys, including cognitive assessments of 13 conditions of confinement, were administered to juvenile delinquents (N = 4,121) incarcerated in these facilities. Data from facility records were also incorporated in the analysis. A hierarchical linear model analysis of the juveniles' cognitive assessments indicated that no significant differences between private and public facilities in environmental quality existed.

Keywords: *private prisons; conditions of confinement; environmental quality*

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The expanding role of the private sector in correctional facility operation has prompted extensive debate regarding the feasibility of private facilities as a response to the increasing offender population. Thus far, the majority of debates and empirical ventures have focused on the economic aspects of the privatization (Hodges, 1997; McDonald, 1990; Pratt & Maahs, 1999; U.S. General Accounting Office, 1991). Shichor and Sechrest (1995) asserted that the major claim [in favor of privatization] is that private companies following the profit motive can perform most services cheaper and more effectively than can the public sector, which is considered to be unmotivated, ineffective, and unresponsive to the public's needs and demands. (p. 457)

More recently, researchers have raised concerns regarding the ability of private companies to provide an environment that is of comparable quality to public facilities. The rationale for these concerns is that private companies are profit-motivated and, as a result, are more likely to cut corners to increase profit margins, thereby negatively affecting quality. As a result of this debate, scholars have questioned the impact of operating sector (public versus private) on environmental quality or "conditions of confinement" in correctional facilities (Culp, 1998; Logan, 1992).

Most of the research examining the privatization debate focuses on adult correctional facilities due to the recent dramatic growth of private correctional facilities in this sector. Between 1991 and 1999, the overall capacity of private, secure adult correctional facilities increased a dramatic 856% (Logan, 1999). Although juvenile facilities haven't experienced a dramatic increase in privatization (9% increase during the same time period), quality concerns are still applicable because private juvenile correctional facilities already hold more than 30% of the incarcerated juvenile delinquent population. The majority of the private and public juvenile facilities are reminiscent of the cottage system. They are small, nonsecure facilities holding a limited number of offenders. However, at least 70 facilities house more than 200 juveniles, and although only 20% of the private facilities are high security, about 80% of the public facilities are "closed" and secure facilities (Bartollas, 1997). In a 1990 survey of juvenile agencies in all 50 states and the District of Columbia, Levinson and Taylor (1991) found almost 90% of the jurisdictions

held at least one contract with a nonprofit private corporation, 60% contracted with a for-profit organization, and another 65% had personal service contracts with private companies. The authors of the study concluded that based on “the responses of 50 jurisdictions, an increasing number of states’ juvenile agencies are using the private sector” (p. 248).

Issues and Concerns in the Privatization Debate

Private and public correctional facilities can be examined and compared from a variety of perspectives including legal, philosophical, organizational, economic, and environmental quality perspectives (Ogle, 1999; Shichor & Sechrest, 1995). Researchers who have examined the legal implications of privatization have focused on the legal liability of private corporations and the enabling legislation that various states have enacted to regulate the authority of the private facilities over the offenders (Blakely & Bumphus, 1996; Ethridge & Marquart, 1993). Debates about privatization from a philosophical perspective have addressed whether it is appropriate for private corporations to administer punishment to citizens in the place of governmental authorities (Dilulio, 1988; Logan, 1990). Researchers who have debated organizational issues surrounding private correctional facilities have discussed the conflicting goals that are held by private facilities that must attain a strong profit margin yet maintain the legitimacy of an institutional environment (Ogle, 1999). Economic debates have focused on the cost-effectiveness of private facilities as compared to public facilities (McDonald, 1990; Pratt & Maahs, 1999).

The most recent concern is the impact of privatization on the quality of the correctional facility environment. Researchers concerned with the issue of environmental quality have commented on a variety of issues, including the potential for differences between private and public facilities in their conditions of confinement within the correctional facilities, the types of correctional population served, and the qualifications of the correctional staff.

In his book, *Private Prisons: Cons and Pros* (1990), Charles Logan presented the

environmental quality debate from both sides of the issue. The fundamental question that underlies the issue is whether privatization increases the quality of imprisonment due to innovations by private companies or whether the private sector cuts corners to save costs and thereby lowers the environmental quality of their correctional facility.

Supporters of privatization have argued that private correctional facilities provide competition for public correctional facilities, forcing both the public and private sector to raise the quality of conditions of confinement as well as to provide a comparison, or measuring rod, for public facilities. As Harding (1998) suggested, "In the long run, the most robust justification for privatization may lie in its impact on the performance of the public sector with consequential improvement of the system as a whole" (p. 647).

Opponents to privatization have suggested that contracting out to private corporations could reduce the quality of confinement because of the pressure to cut corners due to the profit-seeking nature of the private sector. They suggest the cost savings and the increase of private sector profit margins can only be realized through "cost-cutting" measures.

Others have argued that private corporations might attain a higher level of efficiency (thus cost savings) because of the public sector's mismanagement and grossly inefficient use of the same funds. It may not be drastic corner-cutting but simply more effective use of the same resources that leads to cost savings. Thus, we would expect that private correctional facilities would maintain the quality of conditions of confinement. As Logan (1992) emphasized, one aspect of this debate that cannot be ignored is that in contracting with private corporations, we could hardly do worse than the quality of the environment that already exists in many public correctional facilities.

Measuring Environmental Quality in Correctional Facilities

There are several lines of research that have begun to move in the direction of quality management for corrections: for example, Logan's quality of confinement indices, the OJJDP (Office of Juvenile Justice and Delinquency Prevention) Conditions of Confinement Study, and the Bureau of Justice Statistics/Princeton project reviewing

papers on performance-based standards for justice agencies. These projects are attempts to quantify the aspects of the environment that researchers can use as indices of environmental quality (MacKenzie, Styve, & Gover, 1998). Three examples of the more common performance-based models that are appropriate for measuring the environments of the juvenile correctional facilities are: Quality of Confinement indices used by Logan (1990), OJJDP's Conditions of Confinement Study completed by Parent (U.S. Department of Justice, 1994), and the Prison Environment Inventory (PEI) developed and tested by Wright (1985). In all of these models, the researchers developed quantitative scales to measure various social and physical aspects of the correctional environment.

Logan's Quality of Confinement Model. Logan (1993) assumed a confinement model of imprisonment. According to Logan, "the essential purpose of imprisonment is to punish offenders—fairly and justly—through lengths of confinement [that are] proportionate to the gravity of their crimes" (p. 25). This perspective ignores the mission of rehabilitation, deterrence, and incapacitation. The confinement model argues that society has sent offenders to correctional facilities *as punishment* not *for punishment*. This concept is reflected in the mission statement of the confinement model of imprisonment, which is defined by Logan as "to keep prisoners—to keep them in, keep them safe, keep them in line, keep them healthy, and keep them busy—and do it with fairness, without undue suffering and as efficiently as possible" (p. 25).

Logan (1992) also suggested that if we accept this model of confinement, it follows that we should shift our evaluation focus away from "hard to determine" outcomes to the observable processes within the correctional facility environment. He postulated eight dimensions for evaluating the quality of the correctional facility environment: security, safety, order, care, activity, justice, conditions, and management. Researchers have since implemented these indicators of the quality of the environment in a number of studies of the conditions of confinement in adult correctional facilities (Logan, 1992).

OJJDP Conditions of Confinement Model. As the result of a 1988 directive from Congress, OJJDP attempted to determine the extent to which conditions of confinement in juvenile correctional facilities throughout the United States conformed to recognized professional standards. Consequently, OJJDP researchers assessed 46 criteria that reflected existing national professional standards (from the American Correctional Association, the National Commission on Correctional Health Care, and the American Bar Association) in 12 areas that represented advisers' perceptions of confined juveniles' most important needs in four broad areas (basic needs, order and safety, programming, and juveniles' rights). They examined the association between these conditions and factors such as escapes, suicides, and injuries.

Wright's Prison Environment Indices. The Prison Environment Indices, developed by Kevin Wright, were based on one of the most well-known scales used in the measurement of institutional climates, the Correctional Institution Environment Scale (CIES). Moos (1971, 1974, 1975) developed the CIES to provide an assessment of the social milieu of an institution. However, he failed to present either theoretical or empirical indicators for the 90-item scale (Wright & Bourdouris, 1982). Furthermore, psychometric analysis failed to support Moos's categorizations.

In response to this criticism, Wright turned to the work of Hans Toch (1977) to provide guidance in developing correctional facility environment indices. Toch developed his indices based on interviews with more than 900 adult offenders. Content analysis of the data collected from the interviews led Toch to identify eight central environmental concerns held by the offenders: privacy, safety, structure, support, emotional feedback, social stimulation, activity, and freedom. Based on Toch's eight dimensions, Wright began the iterative process of developing the 42-item Prison Environment Inventory (PEI). Wright confirmed the existence of the eight dimensions originally suggested by Toch through factor analysis.

A closer examination of the questions used by Logan, OJJDP, and Wright indicated

that many similarities exist among the dimensions used to measure the environment (see MacKenzie et al., 1998). For example, Logan's Activity scale includes measures of whether offenders usually have something to do to keep them busy, such as the amount of work or industry and educational involvement. Similarly, Moos's Involvement scale considers how active the residents are while in the program. Although Logan and Moos approach this dimension from a slightly different perspective, both scales address the issue of "keeping them busy."

After examining the above-mentioned scales and other similar measures, 13 scales were developed to measure environmental quality consistent with the concepts used by these previous researchers (for further details on scale development, see MacKenzie et al., 1998; Styve, MacKenzie, Gover, & Mitchell, 2000). These scales were rationally constructed to represent 13 major dimensions of the juvenile facility: control, resident danger, danger from staff, environmental danger, activity, care, risks to residents, quality of life, structure, justice, freedom, and therapeutic programs, and they were subsequently confirmed through factor analysis and reliability testing. Scales were scored so that higher scores reflected higher perceptions in the direction of the name of the scale (e.g., more control, more danger, more activity, etc.). Each of these facets has been previously identified in the literature as an important element of juvenile residential facilities (MacKenzie et al., 1998). We used these measures of correctional facility environments to test the following research question: Do offender perceptions of environmental quality differ significantly between private and public correctional facilities?

METHOD

Participants

The participants consisted of 4,121 juvenile delinquents incarcerated in 48 residential juvenile correctional facilities. Of the 48 facilities studied, a private organization or company¹ operated 16 facilities and the public sector (local or state government) operated 32 facilities. The data used in this study were previously collected

by MacKenzie and colleagues (1998) through a grant from the National Institute of Justice (Grant No. 96-SC-LX-0001), titled *A National Evaluation of Juvenile Correctional Facilities*, for the purpose of comparing traditional and boot camp facilities; consequently, a proportionally large number of nontraditional facilities exist in the sample. To obtain their sample, MacKenzie and colleagues contacted all juvenile boot camps in the United States operating in April 1997, excluding Hawaii and Alaska. At that time, 50 privately and publicly funded secure residential boot camps were identified. All facilities were contacted by MacKenzie et al. and asked to participate, and 27 agreed. The 23 programs that did not participate did so for various reasons, including parental consent issues, staffing and resource limitations, and impending program closure. Traditional facilities for comparison were selected by identifying those secure residential facilities where the juveniles would have been confined if the boot camp programs were not in operation. Because MacKenzie et al.'s study did not intend to examine the nature of the operating sector, private facilities were not specifically sought out for inclusion or exclusion. Given this method of sampling, we unfortunately cannot consider this sample a random sample of the population of public and private facilities.

Materials

Two instruments were used for data collection. The first instrument was a self-report survey administered to every juvenile delinquent in the facility. The survey included 266 questions focusing on the assessment of the physical and social environment. Questions also collected the juvenile's demographic information, including prior criminal history and criminal attitudes. The majority of the questions were based on a 5-point, Likert-type scale with a limited number of questions in yes/no, true/false, or open-ended formats where appropriate.

The second instrument was a survey used to collect data from the facility records. The facility survey consisted of 244 questions and was completed by the authors during the site visit with the assistance of facility administrators. This survey focused on data collection of objective facility characteristics such as daily population, program

components, capacity, and numbers of staff. It did not include questions specific to organizational climate. These data were collected as summary statistics for a 1-year period prior to the time of the survey.

Procedure

Site visits were conducted at each of the 48 juvenile correctional facilities, with durations varying in length from 1 to 2.5 days depending on the size of the facility, scheduling of activities, and number of juveniles surveyed. While at the facility, researchers completed a census survey of all available juvenile delinquents² and completed the facility survey with the assistance of the administrator.

Administration of juvenile survey. Two project researchers administered surveys to groups of 15 to 20 juveniles in a classroom-type setting. Once participants received survey materials and consent forms, researchers provided a videotaped presentation of instructions and survey questions on televisions. This procedure ensured a uniform administration process and assisted juveniles with reading disabilities or lower reading levels. The average completion time of the juvenile survey was 45 minutes. Of the total number of juveniles whom investigators solicited for participation in the study, 93.5% completed the survey.³

Measurement

The primary variables that are the focus of this study include the operating sector of the facility and the juvenile perceptions of environmental quality. Numerous control variables indicative of facility characteristics, as well as juvenile demographic characteristics and risk levels, are included.

Operating sector. The independent variable of interest is the operating sector of the facility. Facilities that were operated by private companies or charitable organizations were labeled “private” facilities. Facilities operated by the local, state, or

federal government were labeled “public” facilities.⁴

Environmental quality. The dependent variable of interest is the environmental quality of the facilities as indicated by the cognitive assessments of the juvenile delinquents. Thirteen conditions of confinement scales operationalized environmental quality with Likert-type scale scores ranging from 1 to 5.⁵ Higher scores on a scale indicated a higher level of the condition. The 13 conditions of confinement scales measured control, resident danger, danger from staff, environmental danger, activity, care, risks to residents, quality of life, structure, justice, freedom, therapeutic programs, and preparation for release.^{6,7}

Facility characteristics. A number of facility characteristics that could potentially impact cognitive assessments of environmental quality were included as control variables. These variables included capacity, age of facility, admission process, security level of juvenile admitted (seriousness of criminal history), juvenile to staff ratio, and program type (traditional vs. nontraditional). Based on prior criminological literature, it was expected that these facility characteristics might impact the environment in a manner unrelated to the operating sector. For example, a newer facility may pose fewer environmental risks, and a nontraditional program such as a boot camp would be expected to exhibit more structure and control than traditional programs (see Styve et al., 2000, for further discussion). Controlling for these facility characteristics distinguished effects that are attributable to operating sector from effects attributable to institutional characteristics.

Also included as control variables were two indices: the Admission Process Index, which measured the components and extensiveness of the admission process of the facility (e.g., requirements of physical exams, etc.), and the Population Seriousness Index, which determined the classifications of juveniles admitted into the facility based on criminal history (e.g., inclusion/ exclusion of sex offenders, arsonists, etc.).

Juvenile characteristics. Individual characteristics included in the analysis were age, gender, race, sentence length, time in program, age at first arrest, and number of prior commitments. Also included were three scales that measured juvenile risk levels based on drug abuse, alcohol abuse, and family violence/child abuse. It was expected that these characteristics would affect an individual's perception of the quality of his or her correctional environment.

RESULTS

Facility Characteristics

Descriptive statistics were used to compare public ($n = 16$) and private ($n = 32$) juvenile correctional facilities on institutional-level characteristics. As Table 1 illustrates, statistically significant differences were found between the two types of facilities in their maximum capacity, age of facility, and Admission Process Index. There were no significant differences between private and public facilities in their juvenile delinquent to staff ratios, or in the Population Seriousness Index.

Results indicated that private facilities had a more extensive admission process for juvenile delinquents entering into their facilities. This process may have provided an opportunity for private facilities to be more selective through their use of more stringent criteria. The additional criteria held by private facilities that would exclude a juvenile from admission were based on factors unrelated to criminal seriousness such as suicide risks or juveniles with histories of severe abuse. In addition, results demonstrated that private facilities were significantly smaller and newer as compared to public facilities.

Juvenile Characteristics

Although the facilities were both the focus of the study and the unit of analysis, we felt that it was important to also examine differences between facilities in the control variables at the juvenile delinquent level that were hypothesized to be important mediating factors. Comparisons of juvenile demographic characteristics and risk factors

between the populations in private and public correctional facilities are presented in Table 2. Results indicated two significant differences between these populations. Private facilities were found to have a significantly higher percentage of juvenile delinquents incarcerated for property offenses. In addition, private facilities held a significantly higher percentage of males than females. The juvenile populations did not differ significantly by age, race, time spent in the facility, sentence length, or risk factors.

TABLE 1: Description of Facility Characteristics

<i>Private Facilities</i>			<i>Public Facilities</i>		
<i>Characteristic</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	
Type of program					
Nontraditional	68.8	11	40.6	13	
Traditional	31.3	5	59.4	19	
	M	SD	N	M	SD N
Maximum capacity*	60.4	16	134.4	137	32
Age of facility (years)*	4.4	4.2	16	29.6	37.7 32
Admission Process Index*	.56	.23	16	.40	.29 32
Population Seriousness Index	1.15	.48	16	1.29	.49 32
Juvenile to staff ratio	3.09	6.6	16	1.70	3.13 32

NOTE: Means tested using *t* tests, categorical variables tested using chi-square.

**p* < .05.

Environmental Quality

Environmental quality scale scores were compared between private and public facilities using *t* tests, unadjusted for any covariates. Scale scores ranged between 1 and 5, with a higher score indicating a higher level of that condition. An ideal correctional environment would have higher scores on the first eight conditions of confinement (i.e., control, activity, care, quality of life, justice, therapeutic programming, and preparation for release), and lower scores on the next five conditions of confinement (i.e., resident danger, danger from staff, environmental danger, risks to residents, freedom). Hereafter, the first set of scales is referred to as positive conditions, and the latter set of scales is referred to as negative conditions.

As indicated in Table 3, bivariate comparisons indicated a statistically significant difference between the two operating sectors in 12 of 13 conditions of confinement, with the exception being danger from staff. The means of the statistically significant conditions favored the environment of private facilities over public facilities. That is, bivariate analysis suggested that private facilities have higher environmental quality based on higher positive conditions scale scores and lower negative conditions scale scores. Investigations into environmental quality between public and private facilities generally have been limited to this type of bivariate analysis without adjustment for covariates. Given that significant differences were found between operating sectors at the facility and individual level and that there is reason to anticipate that these factors could also impact individual cognitive assessments of the environmental quality, additional analysis that includes these variables as covariates is warranted.

We analyzed the impact of operating sector on cognitive assessments of environmental quality using a hierarchical linear modeling (HLM) strategy. A two-level HLM was used to control for facility-level differences while accounting for the within-individual variation of the juvenile perceptions, thereby producing a more accurate estimate of the effect of operating sector on environmental quality. The first level in the model determined the contribution of the individual juvenile characteristics (demographic and risk factors) to the explanation of variability between facility means for each of the 13 outcome measures of environmental quality. The second level in the model determined the contribution of the facility characteristics to the explanation of the variability between facility means for each measure of environmental quality. The following equation represents the model used:

$$y_{ij} = \sum \beta_{jk} x_{ijk} + e_{ij},$$

where i is the index for the individual juvenile, j is the index for the facilities, and k is the index for the explanatory variable (operating sector) that varies across individuals. Separate models were employed for each condition of confinement, resulting in 13

models assessing environmental quality.

TABLE 2: Description of Juvenile Sample

	Private Facilities			Public Facilities		
Demographic Characteristic	%	N		%	n	
Gender (% male)* Race	97.1	1,157		92.2	2,559	
Non-White	61.6	734		70.4	1,942	
White	38.4	457		29.6	815	
Offense						
Person	21.5	256		23.7	658	
Property*	34.1	407		25.0	695	
Drug	13.9	166		13.3	371	
Other minor offenses	22.5	268		28.4	789	
	M	SD	n	M	SD	n
Age (years)	16.2	1.18	1,186	16.2	1.27	2,767
Sentence length (months)	9.07	10.3	1,125	12.6	19.02	2,323
Time in facility (months)	3.67	4.61	1,151	4.20	6.24	2,659
Alcohol abuse	1.3	.31	1,183	1.32	.31	2,743
Drug abuse	1.47	.33	1,184	1.44	.33	2,743
Family violence and child abuse	1.56	.63	1,181	1.61	.70	2,726
Age at first arrest	13.4		1,148	13.32	2.05	2,698
	1	2.0				
Previous commitments	2.44		1,146	2.87	2.54	2,647
	4	2.5	6			

NOTE: Mean differences tested using *t* test, categorical differences tested using random effect probit model.

**p* < .05.

TABLE 3: Bivariate Comparison of	Environmental Quality	
	Private (n = 16)	Public (n = 32)
Positive conditions		
Control	3.72	3.62*
Activity	3.95	3.71*
Care	3.39	3.21*
Quality of life	2.98	2.95*
Structure	3.73	3.66*
Justice	3.15	3.06*
Therapeutic programming	3.57	3.47*
Preparation for release	3.89	3.79*
Negative conditions		
Resident danger	1.99	2.25*
Danger from staff	2.41	2.36
Environmental danger	2.52	2.80*
Risks to residents	2.42	2.48*
Freedom	2.16	2.37*

NOTE: Means tested using *t* tests. Scale means range from 1 to 5.

**p* < .05.

This more complex model added a limitation to the findings. Given that the facilities are the units of analyses examined, and a relatively small number of facilities were in the study ($N = 48$), the degrees of freedom at level 2 of the model were reduced once we included the facility level covariates. The limited degrees of freedom may have affected the statistical significance of the coefficients such that they were less likely to demonstrate significance. Table 4 includes the beta coefficients for each of the facility-level variables across the 13 measures of the environment.⁸ The primary variable of interest, operating sector, is listed in the first row. Results demonstrate that there were no statistically significant differences between the private and public facilities in environmental quality once the characteristics of the facility and of the juvenile delinquents were controlled. The absolute values for the effect of operating sector on each of the 13 measures of environmental quality ranged between .013 and .186.

TABLE 4: The Effects of Facility-Level Characteristics on Juvenile Perceptions of Conditions of Confinement (B)

Positive Conditions of Confinement

	<i>Control</i>	<i>Activity</i>	<i>Care</i>	<i>Quality of Life</i>	<i>Structure</i>	<i>Justice</i>	<i>Preparation for Release</i>	<i>Therapeutic Programs</i>
Operating sector ^a	-.071	.067	-.013	-.137	-.131	-.053	.018	-.070
Capacity	-.0001	-.0009*	-.001*	-.0007*	-.0003	-.0009*	-.0002	-.0007
Age	-.001	-.000	-.001	-.004*	-.003*	-.002	-.001	-.001
Admission Process Index	.008	-.003	.01	-.281	-.033	.073	.101	-.011
Seriousness of population	.056	.048	.178	.125	.106	.235*	.011	.103
Juvenile to staff ratio	.009	.006	.005	.001	.001	-.009	.001	-.003
Program type ^b	-.444*	-.317*	-.237	-.172	-.275*	-.061	-.051	-.348*

Negative Conditions of Confinement

	<i>Resident Danger</i>	<i>Danger From Staff</i>	<i>Environmental Danger</i>	<i>Risks to Residents</i>	<i>Freedom</i>
Operating sector ^a	.055	.131	.042	.186	-.059
Capacity	.001*	.002*	.001*	.001*	-.000
Age	.001	-.000	-.002	.003*	-.000
Admission Process Index	-.121	-.25	.000	.086	-.159
Seriousness of population	-.093	-.326	-.133	-.142	.062
Juvenile to staff ratio	-.015*	.000	-.024*	-.005	-.014
Program type ^b	.426*	-.188	.575*	.384*	.388**

a. Coded as private = 1, public = 0.

b. Coded as traditional = 1, nontraditional = 0.

* $p < .05$.

DISCUSSION

The exponential growth of private industry in the operation of correctional facilities in the past decade has attracted the attention of both researchers and practitioners. This study sought to determine whether differences in environmental quality existed between private and public correctional facilities. Opponents to privatization argue that the profit-seeking nature of private corporations may compromise the quality of privately operated facilities. They argue that private correctional facilities would be more likely to have minimal provision of goods and services, hire inexperienced staff, and skim the offender population to be more cost-effective. These factors are also expected to result in compromised environmental quality. Supporters of correctional facility privatization suggest that the private sector could do no worse than the quality of the conditions that currently exist in public correctional facilities. In their opinion, the addition of new staff could breathe life into the facilities because they may be more innovative and fluid in their thinking when challenges arise. As the debate continues to develop and policy makers continue to evaluate their decisions to expand on the private sector, it is pivotal that empirical evidence is used as a tool to provide additional insight into the issue. Results of this inquiry demonstrated small but statistically significant differences in the bivariate comparisons of environmental quality between private and public juvenile correctional facilities. Subsequent analysis demonstrated that initial differences in environmental quality between private and public facilities were attributable to differences in facility characteristics and not the operating sector.

There were two facility-level characteristics that were significantly different across private and public facilities and had a significant impact on environmental quality: capacity and age of facility. The capacity of the facilities was used as a proxy for its physical size. Analysis demonstrated that private facilities were significantly smaller than public facilities. On average, private facilities held fewer juvenile delinquents ($M = 60$ juveniles) than public facilities ($M = 137$ juveniles).⁹ Overall, the capacity of private facilities ranged from 24 to 150 juvenile delinquents; the capacity of public facilities

ranged from 28 to 548 juvenile delinquents.

The capacity of the facility was related to the cognitive assessments of its environmental quality. Juveniles in smaller facilities perceived their environment to have significantly more activity, be more caring and just, and have a higher overall quality of life as compared to the perceptions of juveniles in larger facilities. In addition, juveniles in smaller facilities perceived fewer risks to residents and less danger from other residents, staff, and their physical environment. One potential explanation for this relationship is that a smaller facility affords the correctional staff the time to focus on the needs of the individual residents rather than security and control issues. With these types of circumstances, staff would be able to better prevent situations that posed significant risks to juveniles, such as physical confrontations between residents while also providing organized activities for groups of juveniles. A more individualized approach by correctional staff could lead juveniles to perceive enhanced safety and a more caring environment, which researchers have determined are important environmental characteristics conducive to an individual's positive change (Zamble & Porporino, 1988). The structures of private facilities were found to be significantly newer ($M = 4.4$ years) than the structures of public facilities ($M = 29.6$ years).¹⁰ Although newly developed programs were operated by both the public and the private sector, the programs operated by the public sector frequently used existing physical structures ranging from old correctional facilities to school campuses, whereas the private sector tended to build new structures. Differences in facility age are likely explained by operating sector differences in the funding for the construction of facilities. The private sector is often able to avoid the political process required to obtain bonds or other loans that fund the construction of new facilities by using private funds and investors (Harding, 1997), whereas the public sector utilizes tax dollars to accomplish a similar task and must justify new correctional structures to both taxpayers and politicians. The divergence in means to create new correctional facilities leads the public sector to seek out the most economical method, which often involves using existing public structures, whereas the private sector is able to build new facilities.

The age of the facility significantly affected several aspects of environmental quality. Juveniles in newer facilities perceived their environment to have a better quality of life, provide more structure, and to pose fewer risks and dangers from others, staff, and the environment itself. Older buildings, some of which in this sample dated back to the early part of the twentieth century, require extensive maintenance to avoid environmental hazards and challenge correctional staff in numerous matters of security. Newer correctional facilities offer much more security-friendly designs. Many of the new features offered in recently constructed facilities, including door handles designed to counteract suicide attempts by residents and corridors and cells monitored by staff on video cameras, may lead residents to have a greater perception of safety.

Although a statistically significant difference was not found between the type of programs in private and public facilities, the type of program in a facility did have a considerable impact on environment quality. Facilities in the sample were categorized as offering either traditional or nontraditional programs. Traditional programs were classified as juvenile detention centers or training schools. Nontraditional programs were those facilities that offered a specific type of programming such as forestry camps, wilderness programs, or boot camps. In concurrence with earlier research (Styve et al., 2000), cognitive assessments of facilities with traditional programs had significantly less control, less structure, less activity, and fewer therapeutic programs. Also, juveniles residing in the traditional facilities perceived significantly higher levels of risk and a greater ability to move about freely as compared to facilities with nontraditional programs.

The limited environmental quality differences between the private and public facilities found in this study also points to an alternative interpretation that should be considered. In contrast to existing research on the conditions of confinement debate, this study has the unique perspective of studying environmental quality between public and private *juvenile* correctional facilities. Private juvenile correctional facilities have coexisted with public facilities for juveniles since the inception of separate juvenile facilities, providing the potential for similar growth and change patterns throughout time. By comparison, private adult correctional facilities have experienced a tumultuous

history, existing for only short periods at a time with a consistent existence for only the past two decades. One potential outcome from this comparatively long history of private juvenile facilities is increased similarity to public facilities.¹¹

Implications for Policy and Research

The results of prior comparisons between private and public correctional facilities that fail to incorporate institutional characteristics should be interpreted with caution. In making aggregate comparisons between private and public sector correctional facilities, it is imperative that we are mindful of institutional characteristics that may influence outcome measures such as environmental quality. This evaluation demonstrates that differences in environmental quality between private and public juvenile correctional facilities are attributable to characteristics other than operating sector.

Researchers who have examined alternative aspects of the private versus public prisons debate in adult facilities have gained similar insight by examining the impact of operating sector on cost-effectiveness. Using a meta-analytical technique, Pratt and Maahs (1997) concluded that private correctional facilities were no more cost-effective than public correctional facilities. Similar to the conclusions of our study, Pratt and Maahs found institutional characteristics other than operating sector were the primary determinants of cost-effectiveness. In their study, the facility's economy of scale, age, and security level were the strongest predictors of offender per diem costs.

Do these findings suggest that we should no longer be concerned about the privatization of correctional facilities? If we consider the issue of environmental quality, based on this evidence, we can conclude that private correctional facilities neither add to nor detract from the level of environmental quality provided in comparable public sector facilities. Thus, the operation of correctional facilities by private corporations should not give the criminal justice community cause for concern. However, a number of other concerns about privatization remain unanswered in the literature. Although not an inclusive list, some issues that have not been completely resolved include (a) the philosophical debate regarding punishment ideologies (Dilulio, 1988, 1993; Logan,

1990), (b) the economic viability of private facilities, (c) the accountability of private facilities (Harding, 1997; McDonald, 1990), (d) skimming of the offender population, and (e) correctional staff-related issues.

We must remain apprehensive about economic viability due to cost-savings measures that may be employed by private correctional facilities until further studies are completed. There has been a limited focus on the success rate of private correctional facilities regarding recidivism rates and treatment of offenders unless specified via enabling legislation. Without contract stipulations, the private sector has limited cause to focus on therapeutic programming and other rehabilitation efforts. This is disconcerting given that one of the areas ripe for the cost-cutting knife is therapeutic programming. Systematic empirical research that compares private and government-run correctional facilities in terms of long-term impact on offenders (e.g., recidivism, return to work, etc.) is one example of the accountability assurances needed. Researchers need to monitor and compare the types of treatment programs offered by private facilities in terms of their treatment quality, quantity, and integrity. We should also further examine the training and qualifications of the treatment and correctional personnel who are engaged in service delivery. It is only once empirical evidence informs us on all of these aspects of the private sector that we can be more certain about the role that the private sector should play in the future operation of correctional facilities.

Appendix A Scales

Environmental Quality Scales

Control: Security measures exerted over the juvenile's activities within the facility and security to keep the residents in the facility ($\alpha = .70$).

Resident danger: Juveniles' perceived risk of being injured by other residents ($\alpha = .81$).

Danger from staff: Juveniles' perceived risk of being injured by staff members ($\alpha = .83$).

Environmental danger: The juvenile's perceived risk of being injured as a result of the facility ($\alpha = .73$).

Activity: Level and variety of activities available to juveniles ($\alpha = .79$).

Care: Quality of interactions between juveniles and between the staff and the juveniles ($\alpha = .73$).

Risks to residents: Risks to the juveniles as a result of facility conditions ($\alpha = .76$).

Quality of life: The general social environment including the juvenile's ability to maintain a reasonable degree of individuality ($\alpha = .67$).

Structure: The formality of daily routines and interactions with staff and other juveniles ($\alpha = .72$).

Justice: Appropriateness and constructiveness of punishments given to the juveniles ($\alpha = .77$).

Freedom: The provision of choice of activities and movement to juveniles ($\alpha = .64$).

Therapeutic programs: The availability and utility of therapeutic opportunities ($\alpha = .90$).

Preparation for release: Transition activities with juveniles prior to release ($\alpha = .45$).

Juvenile Risk Scales

Alcohol abuse: The frequency and extent of alcohol consumption as well as lifestyle difficulties experienced due to alcohol use ($\alpha = .70$).

Drug abuse: The frequency and extent of drug use as well as lifestyle difficulties experienced due to drug use ($\alpha = .54$).

Family violence and child abuse: The extent to which the juvenile was either the witness or victim of physical and/or sexual abuse ($\alpha = .85$).

APPENDIX B

The Effects of Individual-Level Juvenile Characteristics on Juvenile Perceptions of Environmental Quality (B)

Positive Conditions of Confinement

				<i>Quality of</i>			<i>Preparation for Therapeutic</i>	
	<i>Control</i>	<i>Activity</i>	<i>Care</i>	<i>Life</i>	<i>Structure</i>	<i>Justice</i>	<i>Release</i>	<i>Programs</i>
Age	-.007	-.034*	-.028*	-.013	-.013	-.007	-.015	-.047*
Gender	-.191*	.02	-.069	.099	-.008	-.097	-.100*	.063
Race	.052	.056*	.032	.005	.084*	.118*	.020	-.118*
Sentence length	.000	.000	.000	-.000	-.000	-.001	.000	.001
Time in program	-.007*	-.003	.005*	.003	-.003	.002	.002	.001
Age at first arrest	.019*	.016	.018*	.007	.024*	.023*	.017	.029*
Prior commitments	-.007	-.001	.002	-.000	.003	-.002	.005	-.010
Child abuse	-.078*	-.070*	-.106*	-.062*	-.048*	-.086*	-.092*	-.109*
Alcohol abuse	-.150*	-.055	-.028	-.118*	-.003	-.026	-.013	.001
Drug abuse	-.082	-.008	-.031	-.056	-.032	.010	.035	-.004
Offense type								
Property	.061*	.067*	.045	.068*	.065	.055	-.005	.108*
Person	.03	.025	-.016	.057*	.046	.008	-.012	.031
Drug	.044	.007	-.012	.052	.040	-.017	-.011	-.036

Negative Conditions of Confinement

	<i>Resident Danger</i>	<i>Danger from Staff</i>	<i>Environmental Danger</i>	<i>Risks to Residents</i>	<i>Freedom</i>
Age	-.040*	-.027	.013	.007	-.002
Gender	.200	.166	.066	.016	.153*
Race	.003	-.106*	-.104*	-.136*	-.030
Sentence length	.000	-.001	.001	.002	.001
Time in program	.005	.003	.001	-.002	.010*
Age at first arrest	.001	-.001	-.024*	-.018*	.006
Prior commitments	.001	-.003	-.007	-.00	-.005
Child abuse	.196*	.171*	.073*	.010*	-.039
Alcohol abuse	.020	.013	.130	.227*	-.079
Drug abuse	.00	.054	-.085	.006	.002
Offense type					
Property	.006	.014	-.076*	-.052	-.046
Person	-.000	.044	-.045	-.030	-.056
Drug	-.012	.005	-.006	-.029	-.034

* $p > .05$.

NOTES

1. The data did not include a measure to distinguish between private facilities operated by charitable organizations and private companies. The authors acknowledge that this is a limitation of the data.
2. Occasionally, some juvenile delinquents were not available due to court visits or medical visits at outside facilities.
3. It is interesting to note that juveniles found the last 105 questions in the survey more interesting because the survey asked specific, concrete questions about their experiences in the correctional facility. Most likely, this greatly helped in the high completion rate.
4. Facilities were coded as private = 1, public = 0.
5. Scale scores were calculated by summing the responses on all items (ranging from 1 to 5), then dividing the sum by the number of items in the scale. Items that contained missing data within each scale were accounted for. This approach to scale score creation returned the scale scores to the metric of the original question to ease interpretation of results in the context of the response set.
6. Copies of scale individual items are available from the authors.
7. See Appendix A for scale definitions and associated Cronbach's (1951) alpha coefficient.
8. As the outcome variables are of identical scale, standardization of the coefficients was unnecessary.
9. The majority of facilities operated near or slightly above the actual bed space allowed.
10. The age of facility variable was not an indication of the age of the program but of the physical structure itself.
11. The authors thank one of the anonymous reviewers for pointing out this alternative interpretation.

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