

## RECIDIVISM OF PUBLIC AND PRIVATE STATE PRISON INMATES IN FLORIDA\*

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### **Research Summary:**

*A fundamental claim made in support of private prisons is that they reduce state inmate recidivism. Current knowledge on this empirical question is limited to three prior studies with problematic methodologies. To test this claim better, we use multiple measures of exposure to private prisons to define and analyze multiple treatment/comparison groups of private and public prison inmates. Multivariate survival analysis, controlling for a range of recidivism covariates wider than the prior studies included, is used to compare reoffense and reimprisonment rate differences in a large cohort of Florida prison inmates released from 1995 to 2001. No significant recidivism rate differences are found between private and public prison inmates for adult males, adult females, or youthful offender males.*

### **Policy Implications:**

*This study finds no empirical justification for the policy argument that private prisons reduce recidivism better than public prisons. However, the research on this issue has been limited and similar research is needed to test this claim in states other than Florida. Future research on the topic should incorporate reliable measures of program attributes and participation, assess unique characteristics of private prisons that might affect recidivism, and determine whether certain inmate subgroups benefit from those distinctive attributes. In the meantime, until reliable evidence that private prison exposure reduces recidivism appears, public policy debate on the value of private prisons should*

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*focus on cost-savings or other arguments, not on recidivism-reduction claims.*

KEYWORDS: Private Prisons, Recidivism

Private prisons as an alternative to government-operated prisons have been at the forefront of a frequently contentious public policy debate in corrections over the past two decades. According to the Bureau of Justice Statistics (Harrison and Beck, 2003), at year-end 2002, privately operated facilities housed 73,497 (5.8%) state prison inmates in 31 states. By comparison, in 1999, private prisons housed 67,380 (5.5%) state prison inmates in 31 states and the District of Columbia (Beck, 2000). Although the total state inmate population grew 4.1% from 1999 to 2002, the number housed privately grew 9.1% and accounted for 12.7% of state prison population growth over those three years. Aggregating inmates across all corporations providing the service, private prisons held enough inmates nationwide on June 30, 2002, to constitute the third largest state-level prison system, behind California and Texas.

A monograph published by the Bureau of Justice Assistance summarized arguments in favor of private prisons in three categories: obtaining faster and cheaper bed capacity, lowering operational costs, and improving quality of service (Austin and Coventry, 2001). Some proponents of private prisons have argued that they may achieve more rehabilitation, as evidenced by lowering recidivism rates for their inmates. Austin and Coventry state that this argument includes an assertion that private prisons have incentives to improve rehabilitation to maintain funding support from legislatures. They report that some evidence appears to support a recidivism-reduction claim. Yet Austin and Coventry state that private prison providers have had little need to argue this claim, and the lack of solid evidence for recidivism reduction has clearly not prevented the initial growth of private prisons.

Using data from Florida, this outcome study thoroughly addresses the central empirical question of whether inmates exposed to private prisons, in fact, recidivate less than those exposed to public prisons. The results directly pertain to the policy debate on the benefits of private prisons, which specifically provide strong evidence regarding claims of improved recidivism reduction. Results from prior studies have drawn both support and criticism, which regardless of methodological merits, arguably derive from organizational biases. In part, to insulate this analysis from potential bias, the study involved a research collaboration of three entities: the Florida Correctional Privatization Commission (CPC), the Florida Department of Corrections (FDOC), and the Florida State University School of Criminology and Criminal Justice (FSU). This collaboration

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enhanced the study's data quality standards, methodological rigor, and objectivity in both analysis and interpretation.

This study advances the relevant prior research in three ways. First, significant improvements are made in quantifying exposure to private prisons and identifying appropriate comparison groups of public prison inmates. Multiple treatment exposure definitions and multiple methods of statistically testing for effects are used. Second, with 11,612 releases directly from five private prisons from 1995 through 2001 and 88,678 total prison releases appropriate for recidivism analysis, these Florida data provide substantially larger case sizes with reliable recidivism rate estimates that allow more confidence in the empirical conclusions. Third, greater methodological rigor is applied through: stricter methods of establishing comparable public and private inmate groups; controlling on the individual level for a wider range of recidivism-influencing covariates; and better statistical techniques for estimating recidivism rates, covariate effects, and testing for significant treatment/comparison group differences.

PRIOR STUDIES OF PRIVATE VERSUS PUBLIC  
INMATE RECIDIVISM

The paucity of literature on whether the private sector is more successful than the public sector in rehabilitating prison inmates, as measured by reducing recidivism, is apparent (Austin and Coventry, 2001). To date, only three prior studies have compared the recidivism rates of private versus public prison inmates and all utilized data from the FDOC (Farabee and Knight, 2002; Lanza-Kaduce and Maggard, 2001; Lanza-Kaduce et al., 1999). Although findings have been inconsistent, prior research has indicated that at least some inmates released from private prisons recidivated somewhat less than inmates released from state-operated facilities.

Lanza-Kaduce et al. (1999) compared the recidivism of men released from private prisons to those released from public prisons. The sample consisted of 396 males released between June 1 and September 30, 1996, half from public prisons and half from private facilities. All subjects were classified as a minimum or medium custody level at the time of release. Inmates were defined as public or private according to the type of facility from which they were released, which included two private prisons and seven public prisons. Four recidivism measures were used: arrest, felony conviction, imprisonment for technical violation, and imprisonment for new offense. Recidivism data were collected for the 12 months after release.

Lanza-Kaduce et al. (1999) matched pairs of private and public inmates based on the primary offense of the last prison commitment, race (white or nonwhite), number of prior incarcerations (0, 1, or more than 1), and

age ranges. They achieved 149 pairs exactly matched on this important, but limited set of criteria, and 198 pairs matched by relaxing the age criterion. Analyzing these matched pairs in the aggregate using a sign test, they found that releases from private prisons recidivated significantly less than those released from public institutions on three of the four recidivism measures. Specifically, within 12 months after release, 10% of the private inmates were arrested compared with 19% of the public inmates; 6% of private inmates were convicted compared with 10% of public inmates; and 10% of private inmates were imprisoned for new offenses compared with 14% of public inmates. The authors found no significant difference between private and public inmate reimprisonment for technical violations. In addition, using an aggregated measure for *any* indicator of recidivism, they found 17% of private inmates recidivated compared with 24% of public inmates. In addition, they tested for differences in time to arrest and time to any recidivism and found no significant differences in these survival functions between the private and public inmates.

In a subsequent study, Lanza-Kaduce and Maggard (2001) reanalyzed the same inmate pairs and recidivism measures from the 1999 study, extending the follow-up period through 48 months after release. In that study, the authors reported significance tests for only one recidivism measure, imprisonment for either a technical violation or a new offense. Consistent with their earlier finding, they found inmates released from private prisons recidivated at a lower rate than those released from public prisons over the longer follow-up period. Contrary to their earlier finding, however, this difference was at, best, marginally statistically significant ( $p < 0.10$ ) based again on a sign test for matched pairs and only for a smaller, "best matched" subset (149 cases).

Farabee and Knight (2002) studied Florida inmates released from January 1997 through December 2000. The inmates were released directly from public or private prisons ( $n = 8,848$ ). The authors defined inmates as public or private by the type of facility in which they had spent the last six months of their sentence. For example, an inmate who was transferred to a private facility from a public facility three months prior to release was excluded. The basis for this exclusion is the theoretical viewpoint, grounded in substantial program evaluation literature, that exposure to correctional programs for less than six months is unlikely to reduce inmate recidivism.

Farabee and Knight (2002) created a matched subsample using factors found to be significantly associated with recidivism in an FDOC (2001) study that analyzed the association between certain variables and recidivism. The authors matched public and private inmates on the primary offense of the last prison commitment, custody level at release, race, age at release, education level, prior recidivism, the number of months served in

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prison, and the number of months since their release from prison. Farabee and Knight deviated from the FDOC recidivism analysis method in two ways. First, they excluded multiple release events for the same inmate, retaining only the most recent admission and release date record within their data collection period (January 1, 1997 to December 31, 2000).<sup>1</sup> Second, and more importantly, they did not control for disciplinary history.

Recidivism was defined in two ways: *conviction* for a new offense, and *incarceration* for a new offense. The follow-up period for their study was three years after release (Farabee and Knight, 2002). The authors used a proportional hazard regression model, controlling for the same factors used to match the two groups in their subsample. The data revealed that adult males released from public prisons and private prisons displayed rates of reoffense and reimprisonment that were not statistically different. In contrast, adult females released from private facilities had significantly ( $p < 0.05$ ) lower rates of reoffense and reincarceration than adult females released from public facilities over the three-year period (Farabee and Knight, 2002). They found women released from private facilities were 25% less likely to reoffend and 34% less likely to be reincarcerated than female inmates released from public facilities. For youthful offender males (males ranging in age from 18 to 24), no significant differences were found in recidivism rates for public versus private inmates.

The current research improves on the methodology of Lanza-Kaduce et al. (1999) and Farabee and Knight (2002), especially in measuring the critical private versus public prison exposure. The first study compared inmates released directly from a private prison with those released back into the community from a public facility, with no consideration given to the length of time spent in each type of facility (Lanza-Kaduce et al., 1999). This method of measuring the private prison effect results in a smaller number of cases in the treatment group, which may limit the reliability of both recidivism rate estimates and tests for significant differences from the comparison group. This method also does not quantify the amount of time in either, or both, private and public prisons. An FDOC (1998) analysis of that study's cases found that of the 198 inmates identified as private prison inmates, 69 (35%) had also been incarcerated in a public prison, other than a reception center. Of these 69 "private" inmate

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1. Farabee and Knight claim this exclusion prevents potential biases from, for example, if inmates with multiple records in the data have higher risk of recidivism or having recidivists "over-represented in the sample." However, the authors disagree that this matters for the present study. First, although inmates with multiple records in the data may have higher recidivism risks, our analysis does control for prior recidivism events. Second, this study involves a population rather than a representative sample of that population. Finally, our results without this data exclusion using similar statistical analysis do not differ, in the main, from those of Farabee and Knight.

cases that had both private and public prison time, 52 (75%) served more time in a public facility than in a private facility. This result clearly shows that the researchers did not adequately measure exposure to private prisons, by failing to exclude inmates exposed to both private and public prisons.

Farabee and Knight (2002) used a more refined measurement of the treatment effect, but they still only analyzed inmates who had spent at least six months in the facility from which they were released to the community. Despite a theoretical basis for this method from much literature on correctional program evaluation, it is not clear that this particular time limit rather than a longer one would be more appropriate when analyzing exposure to private prisons. Also, inmates were defined as having the private prison effect *only* if they were released from a private prison facility. However, they excluded inmates who spent the entirety or a substantial portion of their total incarceration in a private prison but were transferred to a public facility just before release, which commonly occurs for medical needs, family issues, institutional needs, and disciplinary reasons. Whether excluding these cases biased their findings is unknown. Furthermore, inmates who served significantly more than six months in a public facility but served their final six months in a private facility are defined as private inmates, although, in fact, their public prison experience was greater. Although Farabee and Knight (2002) certainly improved over Lanza-Kaduce et al. (1999) on the method of identifying public and private inmates, there is not sufficient research to warrant reliance on a single definition and measurement of exposure to private prisons.

## DATA AND METHODS

Data for the current study were extracted from the FDOC's Offender Based Information System (OBIS). OBIS contains detailed offender characteristics, sentencing, and correctional experience data on all felony offenders sentenced to state prison or state supervision since 1980. Detailed data exist on all offenses, convictions, and sentencing events as well as every movement of offenders in and out of the correctional system, and between facilities. Data on demographic variables, disciplinary infractions, classification decisions, and scores on the Tests of Adult Basic Education (TABE) were also drawn from the system.

## RECIDIVISM MEASURES

To measure recidivism and account for effects of factors known to influence recidivism rates, this study relied on a comprehensive data file developed previously by the FDOC's Bureau of Research and Data Analysis (FDOC, 2003). That dataset includes 88,678 releases for 81,737 inmates

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released from July 1995 through June 2001, for which no data was missing on important inmate characteristics relevant to recidivism.<sup>2</sup> Releases subsequent to a return to prison for technical violation of supervision conditions are not treated as additional releases, because this would artificially lower the recidivism rate. The recidivism measures used a follow-up period of 60 months post-release. Reoffense and reimprisonment rates in this data are consistent with reconviction and reimprisonment rates reported in large sample studies for state prison inmates from multiple jurisdictions and over time (Beck and Shipley, 1989; Langan and Levin, 2002).<sup>3</sup>

The data have three limitations, none of which should impair their use in this study. First, some inmates released from prison in Florida who commit subsequent felonies are sentenced to local jails rather than returned to the FDOC's jurisdiction. FDOC (2003) estimates that including jail data would raise reoffense rate estimates by only 1.2 to 1.6 points at three years after release. Second, inmates released out-of-state are excluded. Based on an analysis by the Bureau of Justice Statistics (Langan and Levin, 2002), FDOC estimates that including out-of-state releases would raise reoffense rate estimates by 0.85 to 1.3 points at five years after release. Third, inmates who die subsequent to release are not excluded from the analysis, but excluding them would have a negligible effect on rate estimates according to FDOC. The only way these data limitations could bias results from this analysis is if the likelihood of jail sentences for new offenses, out-of-state releases and reconvictions, or post-prison death are different for public and private prison inmates. The authors see no theoretical reason why these factors would differ between the treatment and comparison groups analyzed for this study.

Consistent with most contemporary recidivism research, this study analyzes the length of time to recidivism for the treatment and comparison groups using two recidivism measures. Reoffense is measured as the number of months from prison release to the first felony offense. Reimprisonment is measured as the number of months from prison release to first readmission to prison for an intervening offense. Both measures require a conviction for a new offense to have occurred and the conviction resulted in either a prison or supervision sentence to the FDOC.

The length of time to reoffense or reimprisonment can be artificially long for those inmates who return to prison for a technical violation of

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2. Virtually all excluded cases were missing scores on the Tests of Adult Basic Education because they did not take the test. The FDOC's analysis indicates these missing cases had recidivism rates somewhat lower than the retained cases.

3. See FDOC (2003) for a summary comparison of these rates through three years after release. Estimated reconviction and reimprisonment rates were not statistically different between the 1983 and 1994 cohorts analyzed (Langan and Levin, 2002).

post-release supervision. FDOC accounts for this “not at risk” time for the subset of inmates who had post-release time in prison for technical violations. Both the follow-up time and time to failure are reduced by the number of months spent back in prison for a technical violation, so that both measures represent the true number of months at risk for recidivating.

#### CONTROL VARIABLES

This study uses 11 aspects of inmates’ histories to establish equivalency between public and private comparison groups. They include individual inmate data on gender, age at release, race and ethnicity, the last tested education level, offense history, the custody level at release, disciplinary history, prior recidivism, post-release supervision, and time served in prison (Anderson et al., 1991; Beck and Shipley, 1989; Farabee and Knight, 2002; FDOC, 2003; Harer, 1995a; Harer, 1995b; Jernigan and Krosnick, 1992; Langan and Levin, 2002; Maguire et al., 1988; Schmidt and Witte, 1988; Smith and Polsenberg, 1992; Uggen, 2000; Ulmer, 2001; WSDOC, 2002). Control variables used in this study met two criteria: (1) factors for which FDOC has reliable data, and (2) factors previously found to be significant recidivism predictors.

FDOC (2003) operationalized these characteristics through 18 control variables, derived from more than 100 initial potential variables including multiple measures for similar aspects. The final set used included only those with low intercorrelations and demonstrably meaningful, unique influences on the recidivism likelihoods. Continuous variables include age at release (years), last tested education level (TABE grade equivalent), disciplinary history (number or reports), time served in prison (months), and prior recidivism events. Prior recidivism is measured as the number of times an inmate was previously released from Florida’s prisons and subsequently convicted of a new offense resulting in a state prison or supervision commitment. Each measure counts only the period between the most recent prison admission and the release being analyzed for recidivism.

Offense history is measured with eight variables, including three continuous measures that count the total number of prior convictions within each category of drug, property, and weapons offenses. In addition, five dichotomous variables categorize an inmate’s offense history based on the most serious prior conviction type: from homicide, sex/lewdness, robbery, burglary, or other violent offense in descending order (for each category: 1 = most serious type, not most serious type = 0).

Dichotomous variables are employed for race, Hispanic ethnicity, post-release supervision, and custody level at release (for each variable: 1 = condition true, 0 = not true). Two variables capture release custody level as high (i.e., FDOC “close custody”) and low (FDOC “community”) or

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“minimum” custody), leaving medium custody as the comparison group. Male and female inmates are analyzed separately.

## TREATMENT MEASURES: PRIVATE PRISON EXPOSURE

The current study addresses the methodological concerns of the two previous studies, using three concepts relating to private prison exposure to develop six different treatment effect measures. First, we account for differences in time served in each facility type regardless of whether inmates were released from a private or public prison. Second, we assess the level of purity in the treatment effect, measured as actual time or percent of total time served in private prisons. Third, following Farabee and Knight (2002), we employ some definitions that require specific minimum amounts or percentages of total prison time in a private prison.

Three reasons argue for investigating multiple measurements of exposure to private prisons. First, minimal theoretical basis exists for preferring one method over reasonable alternatives. Using multiple definitions of the treatment prevents concluding whether an effect exists based simply on the choice of treatment definition. Second, the consistent presence or absence of an effect derived from more than one treatment definition lends weight to the conclusions. Third, and conversely, if only one of several treatment definitions yields an effect, that definition might suggest what aspect of private prisons exposure accounts for the effect. Such information from an empirically driven analysis may better guide future research on the relative effectiveness of private prisons. Where possible, policy-relevant recidivism research should be designed not simply to determine whether rates differ, but also point to what might explain those differences.

New data were extracted from FDOC's data files to create multiple treatment and comparison groups from among inmates based on their levels of exposure to private prisons in order to compare group recidivism rates. The exposure levels relied on detailed data on inmate movements from reception centers through public and private prisons and other FDOC facilities. Within and for the most recent prison commitment, these data establish the type of facility inmates were released from, the length and percentage of time spent in private prisons, and the proximity of private prison exposure to an inmate's release.

The current research constructed six different treatment/comparison groups of private and public prison inmates as detailed in Table 1. The A1 definition replicates the treatment/comparison group definition in Lanza-Kaduce et al. (1999), and A2 closely approximates the definition in

Farabee and Knight (2002). The B1 definition represents the purest possible exposure to private prisons in Florida's system, including in the treatment group inmates who only were housed in a reception center and a private prison, with or without a work release facility stay before release.<sup>4</sup> Two definitions expand the purest treatment group from B1 by adding into the treatment group inmates who served at least 75% of their prison time in private facilities (definition B2) or at least 12 months in private facilities (definition B3). The final definition (C1) uses the broadest reasonable definition of exposure to private prisons, including in the treatment group all inmates who spent at least either 75% or 12 months in private prisons.

Matching the data used to define treatment/comparison groups with the FDOC recidivism analysis file resulted in a data file containing 88,659 releases (losing 19 cases) for 81,719 inmates (losing 18 inmates) released from July 1995 through June 2001. Of these, an additional 1,434 young inmates releases were excluded from the analysis because they were released before May 1997, when Lake City C.I., the private prison housing youthful offenders, began releasing inmates. An insignificant loss of cases resulted from the process of classifying inmates into treatment/comparison groups. Case sizes for treatment and comparison groups resulting from each treatment exposure definition appear in Tables 3 (adult males), 5 (adult females), and 7 (youthful offender males).<sup>5</sup>

#### STATISTICAL ANALYSIS

This study uses a post hoc, quasi-experimental design to compare recidivism rates of inmates exposed to private prisons to comparable inmates without such exposure. This approach is particularly well-suited for analysis that tests for effects of exposure to a treatment, especially without *a priori* knowledge of what kind or level of exposure to private prisons should theoretically reduce recidivism. The data were divided into three inmate types: adult males, adult females, and youthful offender males,<sup>6</sup> which were analyzed separately, following the approach of Farabee and Knight (2002). Separate models were run for each inmate type (3) using

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4. All Florida inmates are received through government-managed reception centers.

5. Only one private prison each serves adult females and youthful offenders in Florida, but the adult male population is served by three separate facilities operated currently by two different corporations. We analyzed separately whether recidivism rates differed between each of the three adult male private prisons and the comparison group as well as between the two private prison providers and the comparison group using the A1 treatment/comparison definition. No significant differences in reoffense or reimprisonment rates appeared for the specific private prisons or providers, which justifies our treating adult males exposed to private prisons as a single population.

6. No private prison in Florida houses female youthful offenders.

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TABLE 1. TREATMENT AND COMPARISON GROUP DEFINITIONS

Analysis Group	Treatment Group Definition	Comparison Group Definition	Excluded Cases
A1	Released directly from a private C.I. (Lanza-Kaduce et al., 1999)	Released directly from a public C.I.	Excludes inmates released from Work Release Centers, Road Prisons, Contract Drug Facilities, Boot Camps, and Work/Forestry Camps.
A2	Released directly from a private C.I. and served at least 6 months in private C.I. (Farabee-Knight, 2002 study for CPC)	Released directly from a public C.I. and served at least 6 months in public C.I.	Excludes inmates released from WRCs, Road Prisons, Contract Drug Facilities, Boot Camps, Work/Forestry Camps, those with very short periods of incarceration, and those that spent their time in facilities other than C.I.s.
B1	Served only in reception center, private C.I., and/or work release center. No time spent in public facilities, except reception and possibly work release center.	Served only in reception center, public C.I./Work/Forestry Camp/Road Prison, and/or work release center. No time spent in private C.I.	Excludes inmates that spent time in both public and private facilities.
B2	Served only in reception center, private C.I., and/or work release center, OR served at least 75% of time in private C.I.	Served only in reception center, public C.I./Work/Forestry Camp/Road Prison, and/or work release center, OR served at least 75% of time in public C.I./Work/Forestry Camp/Road Prison.	Excludes inmates that spent some time in both private and public facilities, but less than 75% of their time in either specific type of facility.
B3	Served only in reception center, private C.I., and/or work release center, OR at least 12 months at private C.I. and less than 12 months at public C.I.	Served only in reception center, public C.I., and/or work release center, OR at least 12 months at public C.I. and less than 12 months at private C.I.	Excludes inmates with time in both private and public C.I. if time spent in either is less than 12 months (i.e., excludes mixed cases with short periods of incarceration).
C1	At least 12 months in private C.I. OR at least 75% of time in private C.I.	Less than 12 months and less than 75% of time in private C.I.	No inmates excluded.

each of the six treatment/comparison definitions (6) and each of the recidivism measures (2).

Two statistical procedures estimated treatment and comparison group

recidivism rates over a five-year follow-up period and evaluated whether treatment groups' exposures to private prisons affected recidivism. Because the dependent variables are defined as time to failure (i.e., recidivism), techniques appropriate for survival models were selected (Schmidt and Witte, 1988). First, for each treatment and comparison group, a SAS© lifetest procedure<sup>7</sup> was employed to compare the two estimated recidivism rate curves over the entire 60-month follow-up period and assess whether they differ to a statistically significant degree. Both Wilcoxon and log-rank tests were used to test for significant differences in the estimated rate curves over the entire follow-up period. These results are only summarized because tables containing the details are too extensive to report here.<sup>8</sup>

To provide an overall perspective on the characteristics of the three inmate populations and to demonstrate the extent to which the groups differ on factors that influence recidivism, bivariate (treatment vs. comparison group) descriptive statistics are presented for each of the three inmate types: Tables 2 (adult males), 4 (adult females), and 6 (youthful offender males). For brevity, these factor differences are reported for only one of the treatment-comparison group definitions. Definition B1, the purest measure of exposure to private prisons in Florida, was selected because it should most clearly demonstrate the need to control for these factors when comparing group recidivism rates.

Second, a proportional hazard regression procedure estimated the effect of "treatment" (i.e., exposure to a private prison) on the likelihood of recidivism, while controlling for several factors demonstrated to have independent effects on reoffending and reimprisonment. In these models, the treatment/comparison group dichotomy was operationalized as a dummy variable (1 = treatment group, 0 = comparison group) to measure the unique effect of that difference on each recidivism measure.<sup>9</sup> Results of the proportional hazard regressions appear in Tables 3 (adult males), 5 (adult females), and 7 (youthful offender males).

In addition, tests were conducted for any hidden multivariate patterns in

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7. The procedure generates nonparametric estimates of the survival distribution functions (recidivism rates over follow-up time) for the treatment and control groups using the Kaplan-Meier method and accounts for censored cases (those having less follow-up time). The procedure computes three statistics, including the Wilcoxon test, for determining whether the two recidivism rate functions are statistically different.

8. Tables with results from all analyses only summarized in this report are available from the authors.

9. These data were also analyzed separately with models that replaced the dummy variable with the continuous variables measuring private prison exposure (length of stay and percentage of total stay in private prisons) to ensure that the selected treatment/comparison group definitions did not obscure an effect that could adhere to these treatment measures. Results of these models showed no significant effects of the continuous measures of private prison exposure.

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the recidivism predictors that could differ between the treatment and comparison groups. Such differences might reflect a selection bias in the placement of inmates in private versus public prisons and, regardless of their source, would undermine the validity of these group comparisons. To control for this potential problem, the models for the A1, A2, and B1 definitions for the adult male, adult female, and YO groups were reanalyzed with propensity scores added as a control variable. These three treatment/comparison groups were selected because they parallel definitions used in previous studies (A1 and A2) or form the purest measure of private prison exposure (B1). Propensity scores, computed by logistic regression, are the predicted probability of each inmate being assigned to a private facility, given their recidivism-predictor values. The propensity scores were not statistically significant in any of the recidivism models; additionally, all coefficients for the treatment/comparison group indicator approximated those reported in Tables 3, 5, and 7 and were not statistically significant.

## RESULTS

## ADULT MALES

Within the six effect methods, base recidivism rates were compared for the public and private releasees, without controlling for relevant factors. The base reoffense rates for adult males show that, in the short term, through an 18-month follow-up period, public and private adult male inmates are virtually identical across all six treatment/comparison group definitions within a range of only 27.6% to 29.4%. In the longer follow-up periods of 36 and 60 months, private adult male inmates have slightly higher reoffense rates in four of the six comparisons (A1, B1, B2, and B3) and are the same as the public adult male inmates in the A2 and C1 comparisons. However, no reoffense rate differences are statistically significant at the  $p < 0.05$  level.

Base reimprisonment rates for adult males are slightly higher for the public adult male inmates in each of the six comparisons. However, out of 42 point estimates (at 6, 12, 18, 24, 36, 48, and 60 months follow-up) across the six treatment/comparison group definitions, only four differences are higher than 2.0 percentage points (A2 and C1 at 36 months, A2 at 48 months, and A1 at 56 months<sup>10</sup>), and none exceeded 3.0 points. No reimprisonment rate differences between public and private adult male inmates were statistically significant at the  $p < 0.05$  level.

Table 2 summarizes differences between private and public adult male inmates (definition B1) on the 18 variables used as statistical controls in

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10. For inmates in this comparison, the post-release follow-up period did not reach the full 60 months.

TABLE 2. ADULT MALES—DESCRIPTIVE  
STATISTICS OF PUBLIC AND PRIVATE INMATES  
TREATMENT AND COMPARISON  
GROUP DEFINITION B1

	Public (Mean)	Private (Mean)
Total Cases	58,342	2,993
Age at Release	34.0	34.2
Race—Black	58.1%	58.6%
Ethnicity—Hispanic	5.1%	5.4%
Prior Recidivism Events**	1.2	1.1
Custody Low**	48.3%	58.3%
Custody High**	17.0%	1.1%
Months in Prison	31.3	16.8
Total Disciplinary Reports**	2.9	0.8
Last TABE Score (median)**	7.1	7.6
Supervision – Yes**	36.9%	23.4%
Most Serious—Homicide**	5.2%	1.7%
Most Serious—Sex/Lewd**	9.0%	6.0%
Most Serious—Robbery**	20.8%	15.2%
Most Serious—Other Violent	25.5%	26.9%
Most Serious—Burglary*	20.1%	21.8%
Total Property Crimes	1.1	1.1
Total Drug Crimes**	1.1	1.4
Total Weapons Crimes	0.2	0.2

Significance levels based on t-tests when averages are displayed and chi-square when they are not.

\* Significant at  $p < 0.05$ ; \*\* Significant at  $p < 0.01$ .

the survival models that compare recidivism rates between the two groups. These data demonstrate that the treatment (private) group differs significantly from the comparison group on several factors, other than demographic characteristics, previously found to affect post-prison recidivism. These between-group differences support the inclusion of variables to control for these factors in the multivariate survival models, the results of which are presented in Table 3.

These results show unequivocally that controlling for variables known to have an independent effect on post-prison recidivism effectively negates bivariate findings of lower recidivism rates for inmates who spend time in private versus public prisons. For each treatment/comparison group analyses on both recidivism measures, the effect of private prison exposure is statistically no different from zero, which indicates no measurable effect when other relevant factors are taken into account.<sup>11</sup>

11. The adult male A1 definition compares with the classification of public and private inmates by Lanza-Kaduce et al. (1999), who found private inmates less likely to recidivate than a matched set of public inmates. Likely reasons our results differ from

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TABLE 3. ADULT MALES: RECIDIVISM PREDICTOR VARIABLES USING SURVIVAL ANALYSIS

DEFINITION	Maximum Likelihood Estimates (MLE's)											
	Reoffense						Reimprisonment					
	A1	A2	B1	B2	B3	C1	A1	A2	B1	B2	B3	C1
Total Cases	52,297	41,376	61,335	68,659	69,505	74,838	52,297	41,376	61,335	68,659	69,505	74,838
Treatment (Private) Cases	3,553	2,793	2,993	3,176	3,306	3,562	3,553	2,793	2,993	3,176	3,306	3,562
Comparison (Public) Cases	48,744	38,583	58,342	65,483	66,199	71,276	48,744	38,583	58,342	65,483	66,199	71,276
EFFECT MEASURE												
Treatment (Private) Group	.03	.01	.04	.03	.04	.01	.01	.00	-.01	-.01	-.01	.01
Age at Release	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**
Black	.21**	.22**	.20**	.20**	.22**	.22**	.24**	.23**	.23**	.23**	.24**	.25**
Hispanic	-.02	-.01	-.05	-.04	-.05	-.06	-.03	-.04	-.05	-.02	-.04	-.05
Prior Recidivism	.22**	.22**	.22**	.22**	.22**	.22**	.28**	.27**	.29**	.29**	.29**	.29**
Custody—Low	-.11**	-.10**	-.13**	-.14**	-.15**	-.15**	-.15**	-.16**	-.16**	-.17**	-.18**	-.18**
Custody—High	.04*	.05*	.02	.02	.03	.03	.06*	.06*	.04	.04	.05*	.06*
Months in Prison	-.01**	-.01**	-.01**	-.01**	-.01**	-.01**	-.00**	-.00**	-.00**	-.00**	-.00**	-.00**
Total Disciplinary Reports	.02**	.02**	.02**	.02**	.02**	.02**	.01**	.01**	.02**	.02**	.02**	.02**
Last TABE grade	-.02**	-.02**	-.02**	-.02**	-.02**	-.02**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**
Supervision	-.15**	-.16**	-.15**	-.14**	-.15**	-.15**	.04	.03	.05**	.06**	.06**	.07**
Most Serious—Homicide	-.29**	-.28**	-.26**	-.28**	-.28**	-.28**	-.19**	-.21**	-.14**	-.18**	-.19**	-.22**
Most Serious—Sex/Lewd	-.37**	-.36**	-.31**	-.32**	-.32**	-.35**	-.24**	-.27**	-.14**	-.17**	-.16**	-.20**
Most Serious—Robbery	.01	.02	.07**	.06**	.05*	.01	.14**	.13**	.23**	.21**	.20**	.16**
Most Serious—Other Violent	-.01	.00	.02	.01	.01	-.02	.05	.05	-.12**	-.09**	-.09**	.05
Most Serious—Burglary	.11**	.13**	.16**	.16**	.15**	.12**	.23**	.23**	.30**	.31**	.29**	.27**
Total Property Crimes	.03**	.03**	.03**	.03**	.03**	.03**	.03**	.02**	.03**	.02**	.02**	.03**
Total Drug Crimes	.03**	.03**	.03**	.03**	.03**	.03**	.02**	.02**	.02**	.02**	.02**	.02**
Total Weapons Crimes	-.02	-.02	-.01	-.02	-.02	-.02*	-.03*	-.02	-.03	-.04**	-.04**	-.04**

\* Significant at  $p < 0.05$ . \*\* Significant at  $p < 0.01$ .

## ADULT FEMALES

The base reoffense rates for adult females show that, in the short term through an 18-month follow-up period, public and private adult female inmates are virtually identical in five of the six comparisons, with differences not exceeding 1.7 percentage points. Only the B1 comparison shows base reoffense rate differences greater than 2.0 points, with public females recidivating slightly more than private female inmates (21.8% versus 19.4%). In the longer follow-up periods of 30 and 36 months, again only the B1 comparison indicates any difference greater than 2.0 percentage points, with public female inmates having higher reoffense rates (34.0% versus 31.7%). However, no reoffense rate differences are statistically significant at the  $p < 0.05$  level.

For adult females, base reimprisonment rate differences between public and private inmates in each of the six comparisons are not significant, with all groups revealing less than 2.0 percentage points up to 18 and 36 months after prison release. Only in the B1 (purest treatment exposure definition) comparison was the difference more than 2.0 points, with public female inmates re-imprisoned at a rate 2.7 points higher than that for private females at 36 months. However, no reimprisonment rate differences are statistically significant at the  $p < 0.05$  level.

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theirs include (1) they controlled for fewer factors that influence recidivism, (2) deficiencies in their private prison exposure measure, (3) their limited release cohort (four months compared with five years), and (4) their minimal case sizes (396 total, 198 private cases compared with 48,744 total, 3,553 private cases). Additionally, the Department obtained the Lanza-Kaduce et al. cases and compared their recidivism using the Department's measures of reoffense and reimprisonment. Concurrence in recidivism results was 97% for reimprisonment, but only 86% between reoffense and resentencing, which resulted, at least partially, because some of public prison releases identified by Lanza-Kaduce et al. actually had longer follow-up periods than the private releases, and their study used the date of disposition (sentencing) instead of the date of new offense.

An attempt was made with our data to replicate the Lanza-Kaduce et al. results for reoffense within one year of release. Controlling for the same or similar variables they used and analyzing only cases from their release cohort timeframe, logistic regression produced results somewhat consistent with their findings: a negative coefficient for private prison releases, but not statistically significant. The effect size declined (from  $-0.125$  to  $-0.07$ ) as we added control variables used in our study (TABE score, DR counts, etc.), which Lanza-Kaduce et al. did not. Further, we matched public and private inmates released over five years on all controls used in our study, which yielded 544 pairs that matched better and on more variables than the Lanza-Kaduce et al. set of 198 pairs. The one-year reoffense rates (19.7% for public; 19.5% for private) were not statistically different (chi-square 0.0058,  $p = 0.94$ ). Taken together, these analyses strongly suggest that the private prison recidivism effect Lanza-Kaduce et al. found for adult males resulted from failure to include sufficient control variables.

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TABLE 4. ADULT FEMALES—DESCRIPTIVE STATISTICS OF PUBLIC AND PRIVATE INMATES TREATMENT AND COMPARISON GROUP DEFINITION B1

	Public (Mean)	Private (Mean)
Total Cases	4,458	640
Age at Release	33.6	35.6
Race—Black	56.8%	56.7%
Hispanic	3.0%	2.5%
Prior Recidivism Events**	0.7	0.9
Custody Low	75.2%	70.5%
Custody High	†	†
Months in Prison**	20.1	16.4
Total Disciplinary Reports**	2.3	0.7
Last TABE Score (median)**	7.0	7.3
Supervision—Yes*	26.3%	22.0%
Most Serious—Homicide**	4.8%	1.6%
Most Serious—Sex/Lewd	1.3%	0.5%
Most Serious—Robbery*	11.4%	8.4%
Most Serious—Other Violent	27.3%	26.7%
Most Serious—Burglary	10.5%	9.5%
Total Property Crimes**	1.2	1.4
Total Drug Crimes**	1.4	1.5
Total Weapons Crimes	0.1	0.1

Significance levels based on t-tests when averages are displayed and chi-square when they are not.

\* Significant at  $p < 0.05$ ; \*\* Significant at  $p < 0.01$ .

† High custody females were excluded from the analysis because they do not appear in the private group.

Table 4 compares the private and public adult female inmates (definition B1) on control variables used in the final survival models. No meaningful differences are found in the inmate demographic characteristics of age at release, race, or ethnicity. In contrast, private female inmates had somewhat more prior recidivism events, whereas public female inmates had longer prison stays and many more disciplinary reports than private female inmates. Public female inmates had a slightly lower median TABE score than private female inmates; were more likely to have post-prison supervision; and more likely to have committed a homicide, sex/lewd offense, or a robbery. These differences in the public and private adult females on known predictors of recidivism warrant controlling for their effects with multivariate survival models presented in Table 5. In addition, the single female private prison does not house high custody inmates, so high custody female inmates were excluded from the

analysis.<sup>12</sup>

These findings for the adult female set of treatment/comparison group comparisons indicate no differences in the effect of private prisons. The results of the proportional-hazards models for adult females follow a pattern similar to that for adult males. Again, none of the maximum-likelihood coefficients for “treatment” are statistically significant, which indicates virtually no effect of private prison exposure on post-release recidivism for adult females when measured by reoffense or reimprisonment.

#### YOUTHFUL OFFENDER MALES

Base reoffense rates for youthful offender males were generated out to 36 months<sup>13</sup> after prison release, and they show that, in the short term through 18 months, no differences exceed 2.0 percentage points. In contrast, for the longer follow-up period of 36 months, public youthful offender male inmates have higher reoffense rates in all six comparisons, ranging from 4.6 points higher (B1) to 8.7 points (A2). However, none of these base reoffense rate differences are statistically significant at the  $p < 0.05$  level.

Base reimprisonment rates for youthful offender males show that, in the short term through an 18-month follow-up period, the private youthful offender male inmates have slightly lower rates than the public youthful offender males, from 0.4 percentage points (A2) to 2.5 points (C1). The greatest difference in the public and private prison reimprisonment rates was 6.0 percentage points in the C1 comparison, with private inmates having lower recidivism rates (14.6% versus 20.6%). However, no reimprisonment rate differences were statistically significant at the  $p < 0.05$  level.

Table 6 summarizes differences between private and public youthful offender male inmates (definition B1) on the 18 variables used as statistical controls in the survival models that compare recidivism rates between the two groups. The demographic characteristics of public and private youthful offender male inmates are virtually the same. However, private youthful offender males are less likely to be released at low custody (52.3% versus 59.3%); spend less time in prison (average = 16.6 versus 18.6 months); have slightly lower TABE grade equivalents (median = 7.0

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12. A government report analyzing this data, “Recidivism: An Analysis of Public and Private State Prison Releases in Florida (2003)” found a tentative effect for the B1 adult females comparison. This reanalysis used a more appropriate comparison that excludes females with high custody at release, who only appear in the control group. The earlier report’s finding of a possible effect was unwarranted.

13. Because the single private prison that houses youthful offender males did not begin releasing inmates until May 1997, recidivism rates for longer follow-up periods could not be estimated.

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TABLE 5. ADULT FEMALES: RECIDIVISM PREDICTOR VARIABLES USING SURVIVAL ANALYSIS

DEFINITION	Maximum Likelihood Estimates											
	Reoffense						Reimprisonment					
	A1	A2	B1	B2	B3	C1	A1	A2	B1	B2	B3	C1
Total Cases	5,203	3,787	5,098	6,228	6,242	7,465	5,203	3,787	5,098	6,228	6,242	7,465
Treatment (Private) Cases	1,866	1,332	640	1,447	1,133	1,712	1,866	1,332	640	1,447	1,133	1,712
Comparison (Public) Cases	3,337	2,455	4,458	4,782	5,111	5,756	3,337	2,455	4,458	4,782	5,111	5,756
EFFECT MEASURE												
Treatment (Private) Group	-.05	-.00	-.17	-.05	-.10	.01	-.01	-.00	-.07	.07	.05	.11
Age at Release	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**	-.03**
Black	-.17	-.12	-.20**	-.18**	-.19**	-.16**	-.28**	-.26*	-.30**	-.32**	-.28**	-.27**
Hispanic	-.47**	-.50*	-.28	-.32	-.37*	-.32*	-.43	-.38	-.17	-.35	-.26	-.34
Prior Recidivism	.25**	.25**	.24**	.26**	.27**	.28**	.33**	.34**	.32**	.33**	.33**	.35**
Custody—Low	-.06	-.06	.00	-.05	-.00	-.07	-.03	.01	-.02	-.06	.01	-.08
Custody—High	†	†	†	†	†	†	†	†	†	†	†	†
Months in Prison	-.01**	-.01**	-.02**	-.02**	-.02**	-.02**	-.01	-.01	-.00	-.01**	-.01**	-.01**
Total Disciplinary Reports	.03**	.02**	.03**	.03**	.03**	.03**	.02*	.02*	.02*	.02**	.02**	.02**
Last TABE grade	-.02*	-.02*	-.05**	-.04**	-.04**	-.03**	-.04**	-.05**	-.07**	-.05**	-.056*	-.05**
Supervision	-.19**	-.16*	-.21**	-.20**	-.19**	-.19**	.07	.10	-.04	-.03	.02	.03
Most Serious—Homicide	-.70**	-.83**	-.71**	-.64**	-.66**	-.58**	-.72*	-.79*	-.66	-.58	-.65*	-.50
Most Serious—Sex/Lewd	-.86*	-.114**	-.107*	-.94*	-.94*	-.74*	-.105	-.98	-.176	-.82	-.178	-.83
Most Serious—Robbery	-.10	-.20	.02	.01	.02	.01	.12	.11	.31*	.32**	.35**	.27*
Most Serious—Other Violent	-.09	-.18*	-.04	-.04	-.04	-.05	.00	-.02	.18	.15	.17	.13
Most Serious—Burglary	.18*	.15	.15	.26**	.23**	.22**	.37**	.35**	.48**	.50**	.49**	.45**
Total Property Crimes	.01	.01	.02**	.02**	.02**	.02**	.00	.00	.02**	.02**	.02*	.01*
Total Drug Crimes	.05**	.04**	.05**	.05**	.05**	.05**	.05**	.05**	.06**	.06**	.06**	.06**
Total Weapons Crimes	-.03	-.03	-.01	-.00	.01	-.01	.09	.09	.03	.07	.07	.07

\* Significant at  $p < 0.05$ ; \*\* Significant at  $p < 0.01$ .

† No high custody females were in the private group, so this variable was excluded.

TABLE 6. YOUTHFUL OFFENDER MALES—  
DESCRIPTIVE STATISTICS OF PUBLIC AND  
PRIVATE INMATES TREATMENT AND  
COMPARISON GROUP DEFINITION B1

	Public (Mean)	Private (Mean)
Total Cases	3,896	396
Age at Release**	20.3	20.9
Race—Black	56.4%	56.1%
Hispanic	8.6%	7.3%
Prior Recidivism Events	0.0	0.0
Custody Low**	59.3%	52.3%
Custody High	8.3%	9.1%
Months in Prison**	18.6	16.6
Total Disciplinary Reports**	2.9	1.8
Last TABE Score (median)*	7.8	7.0
Supervision—Yes**	39.1%	27.8%
Most Serious—Homicide	3.0%	1.3%
Most Serious—Sex/Lewd	4.3%	5.1%
Most Serious—Robbery**	21.9%	10.4%
Most Serious—Other Violent*	20.8%	26.3%
Most Serious—Burglary	28.0%	30.0%
Total Property Crimes	0.7	0.7
Total Drug Crimes*	0.5	0.7
Total Weapons Crimes	0.1	0.1

Significance levels based on t-tests when averages are displayed and chi-square when they are not.

\* Significant at  $p < 0.05$ , \*\* Significant at  $p < 0.01$ .

versus 7.8); and have less post-prison supervision (27.8% versus 39.1%). These characteristics are associated with higher recidivism rates. In contrast, public youthful offender males have more disciplinary reports (average = 2.9 versus 1.8), which is also predictive of higher recidivism. The statistical significance of these group differences demonstrates the need to control for these group differences when comparing recidivism rates.

Table 7 displays results from the proportional hazard regressions that compared reoffense or reimprisonment rates between public and private youthful offender inmates controlling for other factors. Across the six comparisons between public and private youthful offender male inmates, no reoffense or reimprisonment rate differences were statistically significant at the  $p < 0.05$  level. These results indicate that public and private prisons are equally effective for youthful offender males as measured by post-prison recidivism.

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TABLE 7. YOUTHFUL OFFENDER MALES: RECIDIVISM PREDICTOR VARIABLES USING SURVIVAL ANALYSIS

DEFINITION	Maximum Likelihood Estimates											
	Reoffense						Reimprisonment					
	A1	A2	B1	B2	B3	C1	A1	A2	B1	B2	B3	C1
Total Cases	4,083	3,399	4,292	4,834	4,981	4,628	4,083	3,399	4,292	4,834	4,981	4,628
Treatment (Private) Cases	450	376	396	631	474	439	450	376	396	631	474	439
Comparison (Public) Cases	3,633	3,023	3,896	4,203	4,507	4,189	3,633	3,023	3,896	4,203	4,507	4,189
EFFECT MEASURE												
Treatment (Private) Group	-.04	-.06	-.07	-.10	-.08	-.16	-.05	-.03	-.02	-.00	-.03	-.18
Age at Release	-.12**	-.13**	-.11**	-.12**	-.13**	-.11**	-.16**	-.18**	-.15**	-.17**	-.15**	-.13**
Black	.52**	.44**	.53**	.53**	.49**	.44**	.62**	.57**	.68**	.64**	.61**	.56**
Hispanic	.09	.08	.16	.12	.04	-.03	-.04	-.13	.03	-.00	-.10	-.15
Prior Recidivism	†	†	†	†	†	†	†	†	†	†	†	†
Custody—Low	-.04	-.05	-.07	-.11	-.08	-.12	-.06	-.05	-.14	-.15	-.12	-.12
Custody—High	.14	.15	.16	.04	.11	.06	.23	.19	.29*	.10	.21	.13
Months in Prison	-.00**	-.00	-.01	-.00	-.00	-.00	.00	.01	.00	.00	.00	.00
Total Disciplinary Reports	.05**	.04**	.06**	.04**	.04**	.03**	.03*	.03*	.05**	.04**	.04**	.02**
Last TABE grade	-.03**	-.03**	-.04**	-.04**	-.04**	-.05**	-.04*	-.04*	-.06**	-.06**	-.06**	-.06**
Supervision	-.24**	-.27**	-.33**	-.31**	-.30**	-.28**	.25**	.20*	.13	.14	.14	.14
Most Serious—Homicide	-.83**	-.93**	-.75**	-.73**	-.65**	-.53**	-.96*	-.11**	-.74*	-.61*	-.58*	-.73
Most Serious—Sex/Lewd	-.54**	-.62**	-.34	-.44*	-.46**	-.50**	-.37	-.46	-.16	-.27	-.20	-.27
Most Serious—Robbery	-.42**	-.56**	-.36**	-.41**	-.37**	-.30**	-.32*	-.51**	-.30*	-.31*	-.23	-.25
Most Serious—Other Violent	-.11*	-.25*	-.06	-.10	-.08	-.02	-.18	-.34*	-.09	-.11	-.03	-.07
Most Serious—Burglary	.09	.00	.05	.03	.02	.03	.26*	.09	.23	.22	.20	.10
Total Property Crimes	.06**	.05**	.06**	.06**	.06**	.05**	.08**	.07**	.09**	.08**	.08**	.08**
Total Drug Crimes	.07**	.06*	.08**	.08**	.07**	.09**	.07*	.06	.08**	.08**	.09**	.11**
Total Weapons Crimes	.04	.06	.05	.06	.09	.08	.02	.01	-.02	-.01	.05	.07

\* Significant at  $p < 0.05$ ; \*\* Significant at  $p < 0.01$ .  
 † All cases had a value of 0 on prior recidivism.

## CONCLUSION

This study provides several advancements in the methodologies used in previous studies to examine the effectiveness of private prisons compared with public prisons as measured by recidivism. Specifically, multiple methods of private prison exposure were used, larger case sizes were analyzed, and improvements were made in the quality and quantity of the control variables employed. The effectiveness of private prisons, relative to public prisons, in reducing recidivism was examined using two post-release measures (reoffense and reimprisonment for a new offense) important to public policy in corrections. Six separate comparisons of the levels and types of exposure to public and private prisons were quantified and analyzed for three inmate types housed in Florida private prisons: adult males, adult females, and youthful offender males. In total, 36 distinct comparisons of recidivism rates between public and private prisons were analyzed, each controlling for numerous factors known to affect recidivism rates after prison release. For adult males, adult females, and youthful offender males, no statistically significant differences in recidivism rates were found between public and private inmate groups. This analysis indicates that, at this time, public and private prisons have the same effects on reoffense and reimprisonment rates for adult males, adult females, and youthful offender males after release from Florida prisons. This study finds no empirical justification for the policy argument that private prisons reduce recidivism better than public prisons.

Although the current study is an improvement over previous research concerning whether private prisons are more effective than public prisons in reducing recidivism, clearly more research is needed on this important correctional policy question. Policymakers have an explicit expectation that private prisons will provide services to inmates that increases their chances of post-release success in terms of reoffending and reimprisonment as compared with inmates housed in publicly operated prisons.<sup>14</sup> The conventional wisdom has held that private prisons are in a unique and enviable position of having the flexibility to experiment with alternative rehabilitation modalities and community reintegration strategies. An environment comparatively rich in program options is reasonably expected to reduce recidivism better (Mears et al., 2004). The extent to which this expectation is, or is not, being met by private correctional service providers needs to be carefully documented.

The authors are aware of only one potential theoretical reason that

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14. For example, Florida Statutes, 957.03(4)(c), as recently as 2003, required the Correctional Privatization Commission to report annually on the "effectiveness of the facilities under its management" and explicitly requires "comparison of recidivism rates of private correctional facilities" to those of public prisons.

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exposure to private prisons might lower recidivism—that private prisons generally provide significantly greater enrollment and completion in academic, vocational, and substance abuse programs, as documented in Florida (Farabee and Knight, 2002). The implicit hypothesis is that exposure to private prisons may serve as a proxy for greater exposure to rehabilitative programs, which other literature finds to reduce recidivism. This research finds no evidence for this hypothesis as measured by reoffense and reimprisonment rates in Florida.

However, these programs may reduce recidivism only marginally when compared with the influence of other recidivism-influencing factors such as gender, age, prison misbehavior, and so on. If so, the methodology employed in this study would be unlikely to detect such a small effect, being entirely contingent on a broad, simplistic interpretation of private prison exposure as a proxy for greater program involvement. In addition, qualitative differences among and between the specific programs offered in private and public prisons in Florida may attenuate any recidivism-reduction effect when analyzing broad release cohorts as this research did. One may conclude from this research that measuring correctional programs' effectiveness using exposure to private prisons as a proxy is inappropriate. However, it is incorrect to conclude from this research that such programs in private or public prisons in Florida do not reduce recidivism.

Several research agendas need to be pursued to further address the issue of whether private prisons are effective in reducing recidivism relative to publicly operated facilities. First, all prior research published in journals to date has been conducted in the state of Florida. Additional research is needed in other states to determine whether the findings in Florida are supported or contradicted in other states. Particular characteristics and practices in Florida private prison operations and inmate services, possibly not present in other states, might limit their effectiveness at reducing recidivism. Second, measures of the extent and nature of inmate programs within public and private facilities should be developed and incorporated into future comparative recidivism assessments, as Farabee and Knight (2002) also recommend. Reliable assessments of the relative extent and nature of educational, vocational, and substance abuse treatment in public and private facilities could reveal important differences in these services between public and private prisons that, if accounted for, could affect recidivism rate comparisons. Third, an understanding of the characteristics and operations unique to private prisons that may influence the likelihood of post-release success would be advantageous in future research. Fourth, some evaluation research suggests that program regimes only benefit certain inmate subgroups, for example, with particular skill deficiencies, drug use or criminal histories, or combinations of such characteristics (Gendreau et al., 1996). Similarly, private prisons might have a

recidivism-reduction effect limited to certain inmate subgroups, which does not appear when analyzing all inmates exposed to them.

The policy relevance of this large scale study is simple, although direct and important. This study shows no convincing evidence that exposure to private prisons reduces recidivism. We recommend that additional research be conducted on this question, especially in jurisdictions other than Florida. In the meantime, until reliable evidence that private prison exposure appears, it is reasonable that public policy debate on the value of private prisons should focus on cost-savings or other arguments regarding private prisons, not on recidivism-reduction claims.

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