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Sentencing and Corrections in the 21st Century: Setting the Stage for the Future

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Contents

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Exhibits

Acknowledgments

Thanks are expressed to Sean Rosenmerkel and Rubie G. Mize for help with this manuscript.

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The past 30 years have seen enormous changes in the philosophy and practice of sentencing and corrections. The strong emphasis on rehabilitation that existed for the first seven decades of the 20th century gave way in the 1970s to a focus on fairness and justice, by which sentences reflected "just deserts" rather than a utilitarian motive. Sentencing practices later moved toward a crime-control model that emphasized incarceration as a way to reduce crime in the community; this crime-control model became increasingly popular during the 1980s and 1990s. Discussion of sentencing and corrections in the 21st century must begin with a review of these changes and their impact on the criminal justice system.

The historical changes in sentencing and corrections policies and practices can be characterized, in part, by the emphasis on different goals. Four major goals are usually attributed to the sentencing process: retribution, rehabilitation, deterrence, and incapacitation. Retribution refers to just deserts: people who break the law deserve to be punished. The other three goals are utilitarian, emphasizing methods to protect the public. They differ, however, in the mechanism expected to provide public safety. Deterrence emphasizes the onerousness of punishment; offenders are deterred from committing crimes because of a rational calculation that the cost of punishment is too great. The punishment is so repugnant that neither the punished offender (specific deterrence) nor others (general deterrence) commit crimes in the future. Incapacitation deprives people of the capacity to commit crimes because they are physically detained in prison. Rehabilitation attempts to modify offenders' behavior and thinking so they do not continue to commit crimes. Although sentences frequently address several of these goals in practice, the emphasis on which goal is the highest priority has changed dramatically in the past 30 years.

At the same time the goals of punishment have been changing, the number of people in the United States who are under correctional supervision has increased enormously. Changes in the practice and philosophy of sentencing and corrections have clearly had a major impact on incarceration rates. However, there is no consensus on what, specifically, has caused the changes, the impact of the changes, or their intended and unintended consequences. This paper explores these issues.

Growth of Correctional Populations

A dramatic increase in offender populations accompanied changes in sentencing and correctional philosophy; this increase was unprecedented and followed a period of relative stability (exhibit 1). From 1930 to 1975 the average incarceration rate was 106 inmates per 100,000 adults in the population. The rate fluctuated only slightly, from a low of 93 to a maximum of 137 per 100,000.[1] This was the age of indeterminate sentencing and rehabilitation.

After 1975 incarceration rates grew tremendously; by 1985 the incarceration rate for individuals in State or Federal prisons was 202 per 100,000 adults in the population. The rate continued to grow, reaching 411 in 1995 and 445 in 1997. If local jail populations are also considered, the incarceration rate in 1997 was 652. By the end of 1998, more than 1.3 million prisoners were under Federal or State jurisdiction, and more than 1.8 million were in jail or prison.[2]

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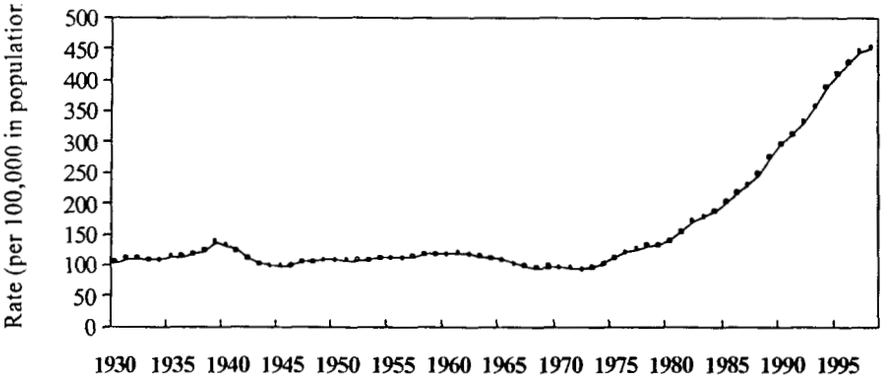
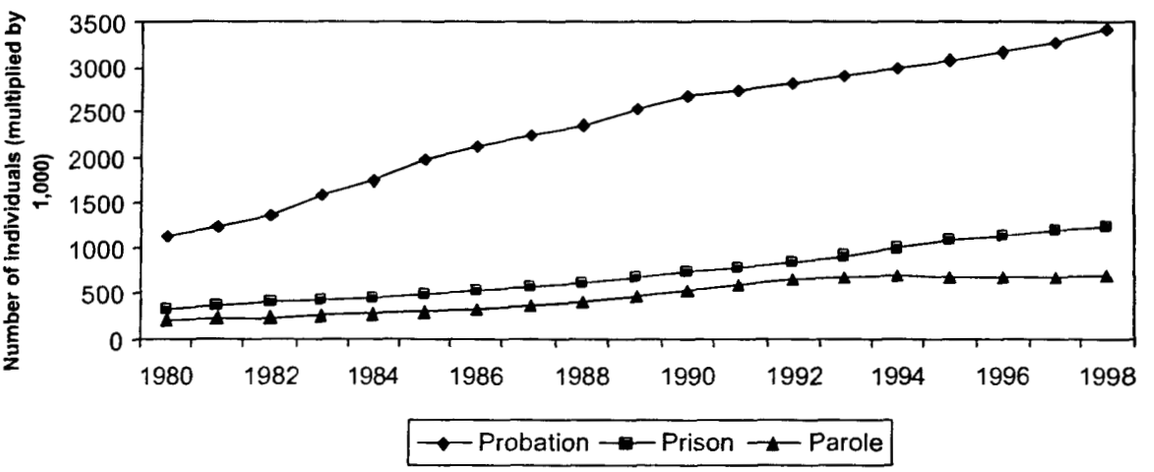
Exhibit 1. U.S. Incarceration Rates, State and Federal Institutions, 1930–98



The increases in the correctional populations were not limited to jails and prisons. The number of individuals on probation and parole also grew substantially (exhibit 2).[3] From 1980 to 1997, the national correctional population rose from 1.8 million to 5.7 million, an increase of 217 percent. During the same period, the probation population grew by 191 percent; parole, 213 percent; and the number of prisoners, 271 percent.[4] By 1998, more than 4.1 million adult men and women were on probation or parole, and there were 1,705 probationers and 352 parolees per 100,000 adults in the population.[5]

Exhibit 2. Adults on Probation and Parole and in Prison, 1980–97



Source: Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1999, NCJ 176356; Bonczar, T.P., and L.E. Glaze, *Probation and Parole in the United States, 1998*, Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1999, NCJ 178234.

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In 1998 the adult correctional population in Federal, State, and local facilities reached an all-time high of approximately 5.9 million.[6] One in 34 adults, or 2.9 percent of the adult population, were either incarcerated or on probation or parole at the end of the year.[7] The majority of these adults (69.1 percent) were on probation or parole.[8]

Differences among States

The expansion of the prison population affected all State and Federal prisons. However, it is important to note that the number of individuals in prison or in the community on probation or parole—and the changes over time in these numbers—differ greatly by jurisdiction, as shown by the following table of selected States.

Exhibit 3. Rates of Sentenced Prisoners, Selected States, 1980, 1990, 1997

STATES	1980	1990	1997
California	98	375	484
Georgia	219	327	492
Illinois	94	234	353
Louisiana	211	427	709
Minnesota	49	72	117
New York	123	304	384
Texas	210	290	700
Washington	106	162	243

*Per 100,000 adult residents.

Source: Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics,* Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1999, NCJ 176356.

Although incarceration rates in all jurisdictions have increased, the amount of increase, the timing of the changes, and the 1997 rate vary substantially by jurisdiction. Also, there are significant and relatively stable regional differences in incarceration rates.

Race, ethnicity, and gender

Overall, women made up a small percentage of the total correctional population (exhibit 4). However, the incarceration rate for women has grown faster than the rate for men. In 1980 the U.S. incarceration rate for females was 11 per 100,000 women, compared with a rate of 275 for males. By 1999 the rate

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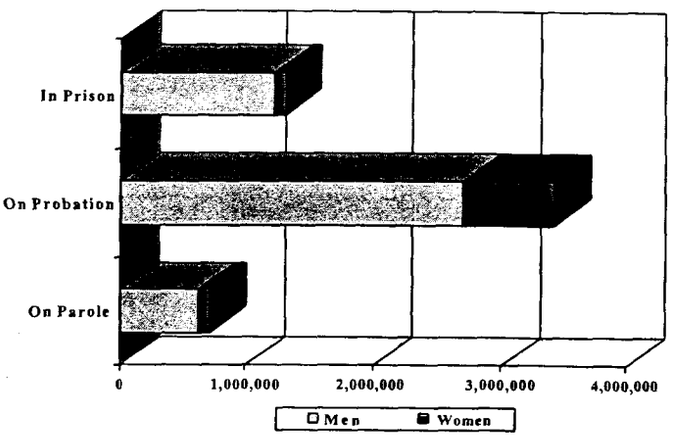
for women had grown to 59 (a 436-percent increase), while the rate for men was 913 (a 232-percent increase).[9]

Exhibit 4. Number of People in Prison, on Probation, and on Parole, by Gender



Source: Beck, A.J., *Prisoners in 1999,* Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 2000, NCJ 183476; Bonczar, T.P., and L.E. Glaze, *Probation and Parole in the United States, 1998,* Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1999, NCJ 178234.

Minority males had both the greatest overall rate of incarceration and the greatest increases in rates over time. From 1980 to 1996, the incarceration rate for African-American prisoners in State or Federal prisons grew from 554 to 1,574 per 100,000 U.S. adults (a 184-percent increase).[10] Also during this time, incarceration rates for Hispanics increased from 206 to 609 (a 196-percent increase); rates for whites rose from 73 to 193 (a 164-percent increase).[11] When both prison and jail populations are calculated, the rates for African-Americans in 1996 were 6,607 and 474 (per 100,000 U.S. adult residents) for males and females, respectively; for whites the rates were 944 for males and 73 for females.[12] Incarceration rates by gender and racial group, as well as the dramatic increase from 1985 to 1996 for African-American males, are shown in exhibit 5.

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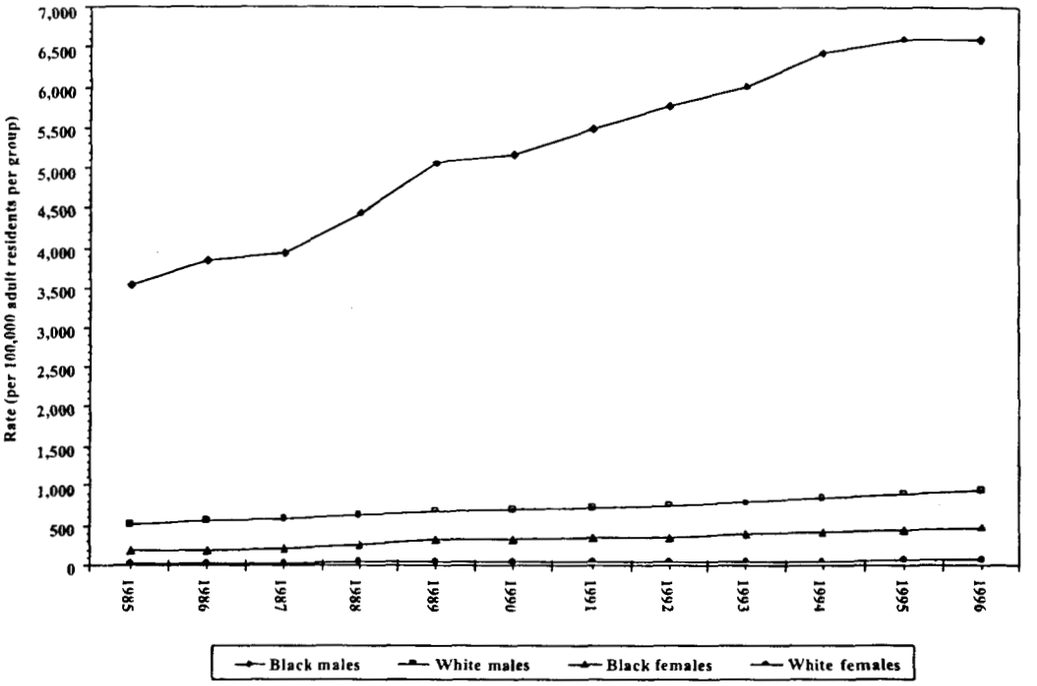
Exhibit 5. Incarceration Rates, Prisons and Jails, by Race and Gender, 1985–96



Source: Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1999, NCJ 176356.

Correctional expenditures

As a consequence of the enormous growth in correctional populations, the cost of corrections has also increased. Direct expenditures for correctional activities by State governments grew from $4.26 billion in 1980 to $21.27 billion in 1994.[13] Most expenditures supported institutions rather than correctional programs such as probation, parole, and community corrections. Furthermore, the proportion of funds allocated for institutions continued to grow during this period. In 1980 institutions accounted for 80.1 percent of total correctional expenditures, in spite of the fact that the number of probationers was growing more rapidly than the number of prisoners. By 1994 institutional spending made up 83.4 percent of correctional costs. Expenditures for other correctional programs were reduced from 19.9 to 16.6 percent during the same period.

Overall, the cost of keeping inmates in institutions is much greater than the cost of community supervision. In 1996 the average annual operating expenditure per inmate in State prisons was $20,100. The annual per-inmate costs of regular probation and parole supervision are estimated to be about $200 for probation and $975 for parole.[14]

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As an annual cost per U.S. resident, total State correctional spending rose from $53 in 1985 to $103 in 1996.[15] Although annual spending for prisons increased at a greater rate than other areas of State budgets, corrections' relative share of the total outlay remained small. For example, the annual per capita costs for State spending for education, public welfare, and health care in fiscal year 1996 were $994, $738, and $123, respectively.[16] However, there is some concern that the increased cost of corrections adversely affects States' budgets for higher education. It has been widely alleged that university and college budgets are the areas of total State budgets most likely to be targeted to cover increasing correctional expenditures.

From Indeterminacy to Crime Control

The age of indeterminate sentencing and rehabilitation

Thirty years ago, the Federal Government, all States, and the District of Columbia had indeterminate sentencing systems that emphasized the rehabilitation of juvenile delinquents and adult offenders. Legislatures set maximum authorized sentences; judges sentenced offenders to imprisonment, probation, and fines and set maximum sentences; correctional officials had power over granting good-time, earned-time, and furloughs;[17] and parole boards set release dates.[18] In some States, the indeterminacy of sentences permitted courts to sentence offenders to prison for time periods ranging from 1 day to life. After a sentence was imposed, decisionmaking was almost totally the prerogative of correctional authorities or parole boards.

The idea behind indeterminate sentencing was individualization of sentences. Judges handed down sentences with a wide range between the minimum and maximum length of time (e.g., 0 to 20 years) offenders had to serve in prison, and offenders were supposed to be released when they were rehabilitated. Release decisions were the responsibility of the prison authorities and parole board. Officials were given broad authority to tailor dispositions to the treatment needs of individual offenders. The goals of this practice were to prevent new crimes; to promote the correction and rehabilitation of the offenders; and to safeguard offenders against excessive, disproportionate, or arbitrary punishment.

Two beliefs appear to underlie the philosophy supporting indeterminate sentencing—one environmental and the other psychological.[19] Environmental explanations focused on the wretchedness of inner-city slum environments and questioned how individuals growing up in such environments could be held responsible for later criminal behavior. Fairness dictated that offenders be treated as individuals; anything else was vengeful. The psychological perspective considered offenders to be ill and in need of treatment. Both beliefs, however, maintained that the criminal justice system was responsible for changing lawbreakers into lawabiders. In his 1965 address to the U.S. Congress, President Lyndon Johnson called for "the establishment of a blue ribbon panel to probe fully and deeply into the problems of crime in our Nation."

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The strong rehabilitative perspective of the times was reflected in the panel's recommended changes for the courts and corrections, which emphasized probation and parole. Among others, these included:

- Caseloads should be reduced to an average ratio of 35 offenders per probation or parole officer.
- All releasees from institutions should receive adequate supervision.
- All jurisdictions should provide services for "felons, juveniles, and adult misdemeanants who need or can profit from community treatment."
- Probation and parole officials should develop new methods and skills to aid in reintegrating offenders through active intervention on their behalf with community institutions.[20]

A review of some of the panel's recommendations for institutions similarly reflect the emphasis on rehabilitation, services, and reintegration:

- Model, small-unit correctional institutions for flexible, community-oriented treatment should be established.
- Educational and vocational training programs should be upgraded and extended to all inmates who could profit from them.
- Modern correctional industries aimed at the rehabilitation of offenders should be instituted.
- Graduated release and furlough programs should be expanded and coordinated with community treatment services.[21]

Prosecutors were urged to make discriminating charge decisions by "assuring that offenders who merit criminal sanctions are not released and that other offenders are either released or diverted to non-criminal methods of treatment," such as community treatment. Out of these recommendations grew the Law Enforcement Assistance Act of 1965 and the Omnibus Crime Control and Safe Streets Act of 1968.

These recommendations, as well as the indeterminate sentencing structure, clearly demonstrate the emphasis at the time was on rehabilitation, with special attention to community treatment, diversion, reintegration, and education and employment programs. Despite this emphasis, however, these programs were often poorly implemented and funded.

A time of change: 1970–2000

Although the 1960s began with great optimism and promises that a new frontier would be created and a more equitable order achieved, by the end of the decade belief in a Great Society had given way to a despairing distrust of the State. This change significantly affected correctional policy because the

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rehabilitative ideal relied on trust in criminal justice officials to reform offenders. Some observers questioned the unbridled discretion of criminal justice decisionmakers to give preferential sentences to the advantaged and coerce inmates into conformity. Others wished to return to earlier times when "law and order" reigned, and they called for a "war on crime" to preserve the social order. The time was ripe for change, and the 1970s witnessed the beginning of a revolution in sentencing and corrections policies and practices.

One of the most visible influences on this revolution was Robert Martinson's 1974 summary of a more elaborate report by Douglas Lipton, Martinson, and Judith Wilks.[22] Martinson's essay described the results of the research team's assessment of 231 evaluations of treatment programs conducted between 1945 and 1967. From this research, Martinson concluded, "With few and isolated exceptions the rehabilitative efforts that have been reported so far have had no appreciable effect on recidivism."[23] These reports were widely interpreted as demonstrating that "nothing works" in the rehabilitation of offenders. Subsequently, a National Academy of Sciences panel reviewed the results and agreed with Martinson.[24]

However, critics argued that Martinson's conclusion was flawed for two reasons. First, the research methodology available was so inadequate that only a few studies warranted unequivocal interpretations, and second, the majority of studies examined programs that were so poorly implemented they would hardly have been expected to affect criminal activities. Yet, "nothing works" instantly became a cliché and exerted a powerful influence on both popular and professional thinking.

Several factors may explain why Martinson's conclusion became so widely accepted, although some argued that the time was ripe for a full-scale attack on rehabilitation and the indeterminate sentencing model.[25] The decade of social turbulence preceding the publication of Martinson's article profoundly affected many Americans. Inequities based on gender, race, and class had been exposed and challenged. Protests, riots, and bombings over issues such as civil rights and the war in Vietnam were common occurrences. Within the criminal justice system, the 1971 riot and slaughter of inmates and guards at Attica demonstrated the extent to which government officials would go to suppress offender protests over prison conditions. Could judges and correctional officials be trusted to exercise the extreme discretion permitted by the rehabilitative ideal?

For many the answer to such a question was "no," but liberals and conservatives differed in why they wanted to limit discretion in sentencing. Conservatives argued that judges and parole boards were too lenient; they released predatory criminals who continued to victimize innocent citizens. Liberals contended that the discretion given to officials was coercive and ineffective because officials could not really know when offenders were rehabilitated. If the professionals responsible for rehabilitation could not demonstrate how they effectively changed offenders, liberals claimed, then those officials' authority and autonomy in establishing the length of sentences should be severely restricted. Furthermore, they argued that wide discretion often results in disparity and unfair sentences that are not remedied through the parole release system. As a result, offenders with similar histories who were convicted of similar crimes often served widely disparate sentences; conversely, those with disparate histories and crimes served similar sentences. Critics of indeterminate sentencing argued that the system discriminated

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against poor and minority offenders, coerced imprisoned offenders into programs, and denied parole to offenders who challenged prison conditions.

The justice model of sentencing and corrections

A proposed solution to the problems raised by indeterminacy was to return to a "justice model" of sentencing and corrections[26]—a process of determining sentences according to fair and just sentencing policies. The model is based on retributive notions of deserved punishment; the sentence should fit the crime. Under the model, offenders would receive their just deserts— nothing more, nothing less. Advocates of the justice model argued that neither people nor prisons should be used to achieve any public end, such as rehabilitation. Instead, punishment should be proportionate to the crime, not a means to achieve a utilitarian motive such as rehabilitation or crime control. The only relevant factors to consider when sentencing an offender would be the crime(s) of conviction and the offender's criminal history. Individualized treatment and discretion would be eliminated, and the criminal justice system would treat all offenders similarly.

The justice model carried with it direct implications for public policy. For example, the model held that offenders should be given substantial procedural protections at all stages of the criminal justice process. Thus, the legal rights of inmates became of great importance for the courts and corrections. Rehabilitation, if used, should be voluntary. The largest policy impact grew from the need to change from indeterminate sentencing to determinate, or "flat," sentencing. Under determinate sentencing, a specific crime would carry a clearly identified sentence length, not a broad minimum and maximum. Parole release would be eliminated. Sentence lengths would be determined by guidelines that considered only the offender's current and past criminal activity.

Crime control: Incapacitation and deterrence

While proponents of the justice model argued for abandoning the rehabilitation model, others began to argue for increased crime control through incapacitation and deterrence. Escalating crime rates from 1965 to 1975 (exhibit 6) led law-and-order advocates to attack rehabilitation as coddling criminals. They wanted to implement policies that would limit the ability of judges and correctional officials to mitigate criminal sanctions and advocated "get tough" proposals for mandatory minimum sentences and lengthy determinate sentences.

The concept of incapacitation is simple—as long as offenders are incarcerated, they cannot commit crimes outside of prison. Interest in incapacitation as a crime prevention strategy grew during the mid-1970s, in part due to concerns about the efficacy of rehabilitation raised by the Martinson report, rising crime rates, and public fear of crime.

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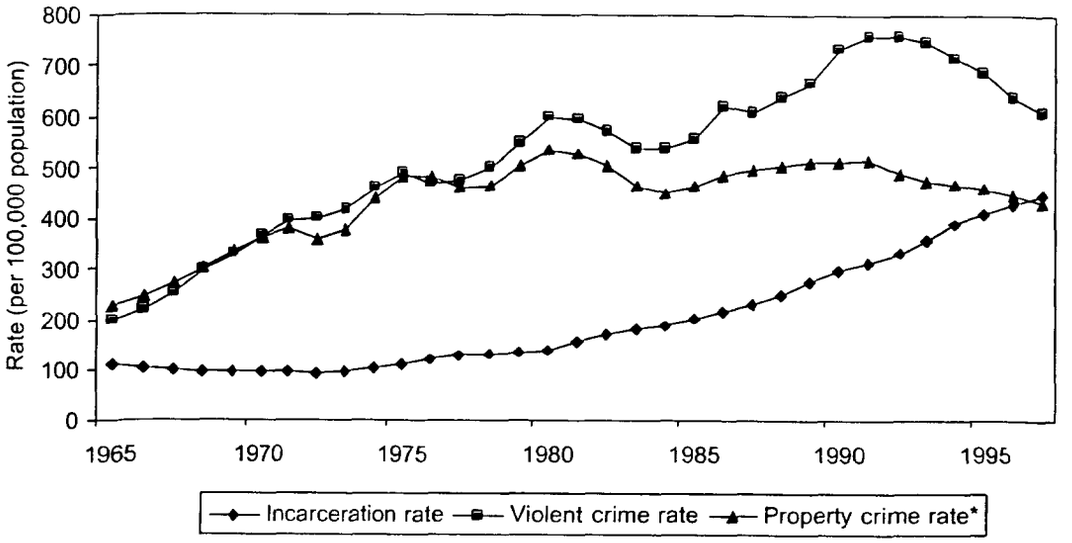
Exhibit 6. U.S. Crime and Incarceration Rates, 1965–97



* For illustration purposes, the rate of property crime was divided by 10. The actual rate of property crime far exceeds the rate of violent crime and the rate of incarceration.

Source: Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics,* Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1999, NCJ 176356.

Most people accept the notion that crime prevention through incapacitation is one primary justification of imprisonment.[27] It is also generally accepted that some individuals should be incarcerated for long periods of time both as retribution for the seriousness of their offenses and because they pose threats if released. However, questions arise over how broadly the incapacitation strategy should be applied and whether it is a cost-effective crime prevention strategy. Some who favor incapacitation and deterrence ask that prison space be reserved for only a small, carefully selected group of dangerous repeat offenders. Others support a general incapacitation strategy that would incarcerate a substantial number of felons. The success of incapacitation in reducing crime remains a controversial subject.

Both increases in prison populations and research that revealed large differences in crime committed by individual offenders directed societal attention toward a strategy of selectively incapacitating small groups of offenders. Support for selective incapacitation came from research revealing that a small number of very active offenders (6 percent) accounted for a disproportionately large number of the arrests (52 percent) in a Philadelphia birth cohort.[28] Incapacitation advocates argued that crime could be reduced if these "career criminals" were identified and incapacitated.[29] The strategy identifies the offenders who are most likely to commit serious crimes more frequently so they can be incarcerated longer. Further support for incapacitation came from the proposal that, although incarcerating large numbers of felons was enormously costly, costs were also substantial if offenders were released and continued committing crimes (i.e., the costs of ongoing criminal processing and loss to victims).[30] Some

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results attributable to the incapacitation strategy are habitual offender laws,[31] mandatory sentences, abolition of parole, and recent three-strikes laws.

War on drugs. The "war on drugs" significantly influenced sentencing and corrections. Expansion of criminal sanctions for drug crimes began in the 1970s but picked up speed in the 1980s with the declaration of "war on drugs" and the passage of the Anti-Drug Abuse Acts of 1986 and 1988. From a crime control perspective, it was thought that increasing arrests and punishments for drug offenses would reduce illegal drug use and sales. As described later in this paper, this war had—and continues to have—a profound impact on correctional populations and minorities.

Intermediate sanctions. As a result of disillusionment with rehabilitation, incapacitation, and the focus on justice, intermediate sanctions were proposed as a way to provide a range of sanctions between probation and parole.[32] Theoretically, these sanctions could be scaled up or down in severity to match the seriousness of the crimes committed. Furthermore, sanctions were expected either to deter offenders from future criminal acts or restrict (in a sense, incapacitate) their opportunities to reoffend.

Most jurisdictions in the United States have some type of intermediate sanctions programs. They have been variously called correctional alternatives, intermediate sanctions, community corrections or, more recently, correctional options. Intensive supervised probation or parole (ISP), house arrest, boot camp prisons, and day reporting centers are some of the more common intermediate sanctions. They are frequently used in conjunction with other supervisory tools such as urine testing or electronic monitoring. The sanctions are used as either "front end" options for probationers or as "back end" options for those released on parole or community supervision.

Before the 1970s, intermediate sanctions were referred to as community corrections, and the focus of sentencing and corrections was on providing services and rehabilitation. In contrast, the intermediate sanctions of the 1980s and 1990s focused on increased control over offenders. Typical requirements for offenders in ISP programs, for example, included more frequent meetings with correctional agents, periodic urine testing, substance abuse treatment, and verification of employment. A goal was to make community supervision more onerous so the punishment was perceived as retributive. This was, in part, a response to the attitude that probation was nothing more than a slap on the wrist and failed to provide either a deserved punishment or a method for reducing offenders' criminal activities while under community supervision.

Truth-in-sentencing. The amount of time offenders serve in prison is almost always shorter than the amount of time they are sentenced to serve by the court. Prisoners released in 1996, for example, served an average of 30 months in prison and jail—or 44 percent of their 85-month sentences. [33] Under indeterminate sentencing, sentencing decisions were made by professionals in low-visibility settings who were unlikely to be influenced by public sentiment. But in the past three decades, sentencing requirements and release policies have become more restrictive; pressure for longer sentences and uniform punishment has led to mandatory minimum sentences and sentencing guidelines. However, prison crowding, good-time reductions, and earned-time incentives continue to result in early release of prisoners. Many States have responded by enacting restrictions on early release. These laws,

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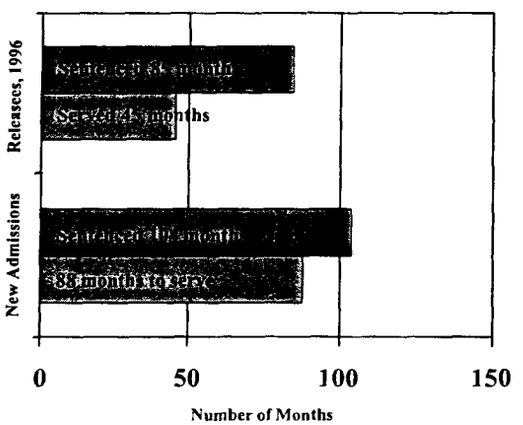
known as "truth-in-sentencing" laws, require offenders to serve a substantial portion of the sentence imposed by the court before becoming eligible for release. The laws are premised on the idea that juries, victims, and the public are entitled to know what punishments offenders will face at the time judges order them.

Truth-in-sentencing gained momentum in the 1990s. To provide States with incentives to pass truth-in-sentencing laws, the U.S. Congress authorized incentive grants for building or expanding correctional facilities through the Violent Offender Incarceration and Truth-in-Sentencing Incentive Grants Program in the 1994 Crime Act. To qualify for the grants, States had to require people convicted of violent crimes to serve no less than 85 percent of their sentences.

Two-thirds of the States established truth-in-sentencing laws under the 85-percent test. To satisfy the 85-percent requirement, States limited the power of parole boards to set release dates, the power of prison managers to award good-time, or earned-time, or both. The laws reduced the discrepancy between the sentence imposed and actual time served in prison (exhibit 7).

Most States target violent offenders under truth-in-sentencing laws. However, the definition of truth-in-sentencing varies among the States, as do both the percentage of the sentence that must be served and the crimes covered by the laws. A few States, such as Florida, Mississippi, and Ohio, require all offenders to serve a substantial portion of their sentences before being eligible for release.[34] Most States require that 50 to 100 percent of a minimum sentence be served.

Exhibit 7. Discrepancy Between Sentence and Time Served, Comparing State Prisoners Released From Prison in 1996 With Expected Time Served for New Admissions



- Violent offenders released from State prison in 1996 were sentenced to an average of 85 months; they served about an average of 45 months (50%)
- Under truth-in-sentencing laws, violent offenders would serve 85% of sentence; new admissions were sentenced to an average of 104 months; they would be expected to serve an average of 88 months (85%)

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Source: Ditton, P.M., and D.J. Wilson, *Truth in Sentencing in State Prisons*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1999, NCJ 170032.

Changes in Crime Rates

One of the questions most commonly asked after analyzing the rising incarceration rate pertains to its impact on public safety: Has the recent focus on crime control through incapacitation and deterrence been effective in reducing crime in the community, preventing crimes, or increasing public safety? The answer is unclear because other factors influence crime and incarceration rates. Furthermore, there is no simple association between the two (exhibit 6).

Exhibit 6 shows the rate of serious property and violent crimes (index crimes[35]) reported to the police and the rate of convicted offenders confined in State and Federal prisons from 1965 to 1997. The relationship between crime and incarceration rates is not simple and varies greatly by the period examined. The incarceration rate was stable from 1965 until approximately 1972, after which it moved steadily upward.

Crime rates for adults fluctuated during this period. Violent crime rose from 1971 to 1981, fell from 1981 to 1985, rose again until 1991, and has been declining ever since. As exhibit 6 shows, property crime rates (divided by 10 in the exhibit) fluctuated in much the same way as the violent crime rate. Since approximately 1991, the rates for both property and violent index crimes have been declining.

Victim surveys measure crime without depending on victims to report the crime to the police. The National Crime Victimization Survey (NCVS), conducted by the U.S. Bureau of the Census for the U.S. Bureau of Justice Statistics, obtains data from interviews with individuals in households representative of the U.S. population. It shows that changes in crime victimization rates over the past 25 years for both property and violent crime are very similar to the changes in official rates obtained through the FBI's Uniform Crime Reports (UCR).[36] From the 1970s, crime rates rose to a peak in 1980; after 1980 the rates dropped sharply and then fluctuated until 1990, when there was a substantial decline. Victimization rates in 1996 were lower than in 1973.

Both crime and incarceration rates may be influenced by some factors operating during the time they are studied, such as changes in demographics, labor markets, or other economic, social, cultural, or normative factors. Any apparent relationships between crime and incarceration may be spurious. Researchers have used complex statistical models in an attempt to study the relationships. Although almost everyone acknowledges that increased incarceration rates have affected crime rates, there is a great deal of controversy about the extent of the impact. Researchers who have studied the effects of incapacitation and deterrence, for example, have generally concluded that these policies have had a modest impact on reducing crime in the community.

Incarceration rates and the results from studies of crime rates in individual States are consistent with the above discussion. There is no simple and direct relationship between the two.

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Factors Accounting for the Growth in the Incarceration Rate

Alfred Blumstein and Alan Beck asked a somewhat different question: "What accounts for the growth in the incarceration rates?"[37] They wanted to know whether the growth in incarceration was due to an increase in crimes committed or to the policies and procedures of the criminal justice system. If the latter, then what, specifically, has changed to cause the growth? They investigated the sources of the growth in the incarceration rate from 1980 to 1996, focusing on the six crimes that account for three-quarters of State prison populations: murder, robbery, aggravated assault, burglary, drugs, and sexual assaults. For each crime, they examined whether the growth in incarceration occurred as a result of increases in offending rates, arrests per offense, commitments to prison per arrest, or time served in prison (including time served by parole recommitments).

Blumstein and Beck found that only 12 percent of the increase in incarceration rates was the result of more offenses being committed.[38] Aggravated assault was the only offense examined that displayed an upward trend, and they attributed this to an increase in the reporting of domestic assaults. Eighty-eight percent of the growth in incarceration was attributed to imposing more sanctions, incarcerating more offenders, and increasing time served.

Incarceration of drug offenders was the major component of the overall growth in incarceration rates. In 1980, the incarceration rates for State and Federal prisons for drug offenses were approximately 15 inmates for every 100,000 adults. By 1996, the drug incarceration rate had grown to 148 inmates per 100,000 adults. Drug offenders made up 60 percent of the Federal prison population and 23 percent of State prison populations.

Another way to examine the increase by type of crime is to compare the percentage of the total increase among crime types. As exhibit 8 shows, drug offenses accounted for 29 percent of the total increase, more than any other crime type. However, if violent offenses (murder, sexual assault, robbery, assault, and other violent crimes) are combined into a single category, their growth is more significant than that of drug offenses (a 43-percent versus a 29-percent increase).

As shown in exhibit 9, the number of inmates serving time for drug and violent offenses has grown dramatically since 1980. Incarceration for property and public order offenses has also risen steadily, but at a lower rate. In 1980 violent offenders made up 58.6 percent of the prison population, and in 1995 they made up 46.9 percent. In comparison, the number of drug offenders grew from 6.4 to 22.7 percent of the prison population during the same period.

According to Blumstein and Beck, for nondrug crimes, the growth in the State prison population was due first to increases in time served (60 percent of the growth) and second to increases in the number of arrests that led to prison sentences (42 percent of the growth). The new sentencing laws (e.g., mandatory-minimum, sentencing enhancements, and three-strikes) and longer delays until initial release (truth-in-sentencing) are likely contributing to this trend.

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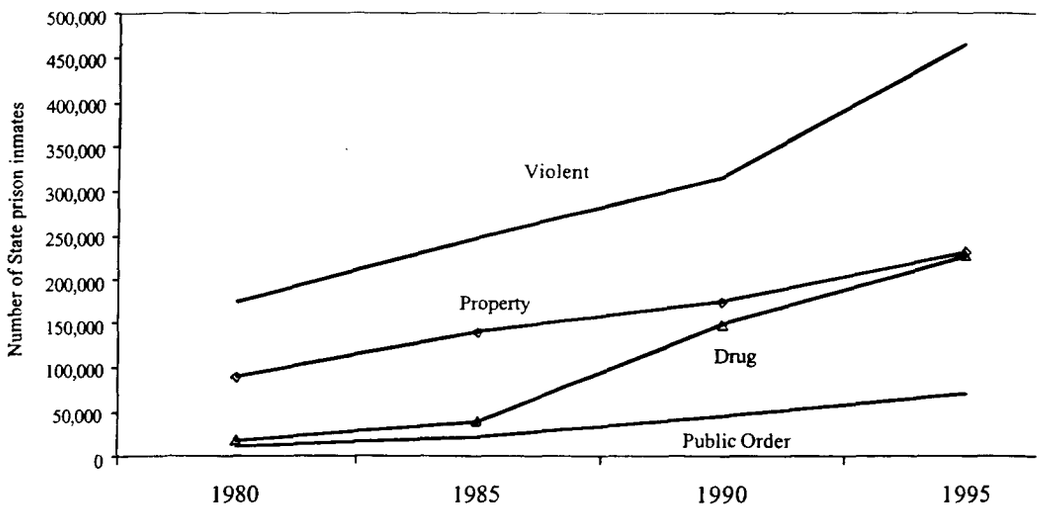
Exhibit 8. Increases in State Prison Populations, by Offense, 1980–96

	Increase 1980–1996	Percentage of Total
All Offenses	**736,621***	**100**
Six Selected Offenses		
Drugs	215,100	29
Murder	76,300	10
Sexual assault	80,400	11
Robbery	64,900	9
Assault	73,900	10
Burglary	59,200	8
Other Offenses		
Other violent	19,300	3
Other property	88,000	12
Public order	57,800	8

* Data are estimates and due to rounding errors do not equal the sum of all offenses.

Source: Blumstein, A., and A.J. Beck, "Population Growth in U.S. Prisons, 1980–1996," in *Prisons*, ed. M. Tonry and J. Petersilia, Chicago: University of Chicago Press, 1990.

Exhibit 9. Number of Prisoners in Custody of State Correctional Authorities, by Most Serious Crime, 1980–95



Source: Beck, A.J., and D.K. Gilliard, *Prisoners in 1994,* Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1995, NCJ 151654; Beck, A.J., *Prisoners*

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in 1999, Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 2000, NCJ 183476.

The factors contributing to the increase of drug offenders in prison differed from those associated with other crime types. In contrast with other offenses, the increased number of drug offenders in prison is mostly due to growth in the number of adult drug arrests and subsequent prison sentences. This increase in the use of prison may reflect the tendency to use incarceration as a principal weapon in the war on drugs. Between 1980 and 1998, there were large changes in the percentage of offenders entering prisons for drug offenses. In 1980, the most serious offense of fewer than 10 percent of prison entrants was a drug offense; by 1998, 30 percent of entrants had been convicted of drug offenses. Among incoming prisoners in 1998, the most serious offense of approximately 30 percent was a drug offense; of 30 percent, a violent offense; of 30 percent, a property offense; and of 10 percent, a public order offense.

As previously noted, the growth in incarceration was greater for minorities and women. Blumstein and Beck partitioned the growth in incarceration rates from 1980 to 1996 by gender, race, and ethnicity and found that drug offenders accounted for a far greater share of the total growth among females (43 percent of growth) compared with males (28 percent of growth), and among minorities (36 percent of African-Americans and 32 of percent Hispanics) compared with whites (17 percent).

Community supervision and revocations

Approximately 69 percent of adults under correctional supervision are in the community on probation or parole. Many of them will fail supervision and be sent to prison or jail. For example, 18 percent of those who left probation in 1998 were incarcerated for a new sentence (9 percent) or another sentence (9 percent), and 9 percent failed another way; the others successfully completed their sentence (59 percent), absconded (3 percent), or left probation or parole in another way (11 percent).[39]

In comparison with probationers, a higher percentage of parolees failed community supervision; 42 percent were returned to jail or prison with a new sentence (13 percent) or had parole revoked for technical violations or some other reason (29 percent); the remainder successfully completed parole (45 percent), absconded (9 percent), or left for another reason (4 percent).[40 41]

Parole violations have increasingly contributed to the growth in prison time served. An increasing percentage of prison admissions are parole violators (exhibit 10). Additionally, the percentage of parole violators admitted to prison differs enormously by State. In some States, a majority of those entering prison are parole violators. In California, for example, 64.7 percent of individuals admitted to prison in 1997 were parole violators.

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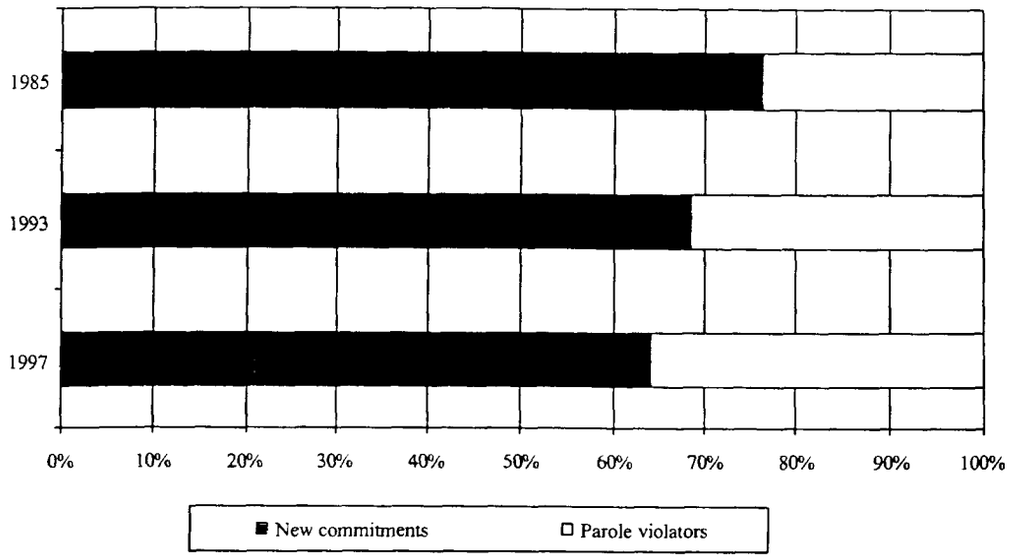
Exhibit 10. Percentage of Admissions to State Prisons, 1985, 1993, 1997*



* Includes technical and new crime violators.

Source: Beck, A.J., *Prisoners in 1999,* Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 2000, NCJ 183476; Cohen, R.L., *Probation and Parole Violators in State Prison, 1991*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1995, NCJ 149076.

Impact of the Changes

Changes in the philosophy of sentencing and corrections have had a dramatic impact on the criminal justice system. Sentencing, release decisions, and correctional populations have been transformed.

Structured sentencing

In contrast with the widespread use of the indeterminate sentencing model of 30 years ago, there is no standard approach to sentencing and corrections today. Some jurisdictions have parole; some have abolished it. Most still use good-time release, but it is more limited in scope than in the past. A minority of States have adopted structured sentencing but more than 30 retain indeterminate sentencing.

Early attempts to enact structured sentencing were designed to reduce sentencing disparities, to limit the possibility of gender or racial bias, and to achieve a form of "truth in policymaking" by linking sentencing policies to corrections spending policies. Neither increasing sentence severity nor reducing crime rates were primary goals of the justice model. Later, guidelines using incapacitation as a goal were developed, enhancing the likelihood that judges would impose harsher sentences that could not be mitigated through early release or parole.

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By 1990, substantial differences existed in sentencing and corrections in the United States. Under indeterminate sentencing structures of the 1960s, there was consistency among jurisdictions in the use of parole boards for release decisions, indeterminate sentences with wide minimum and maximum sentence ranges, and release on parole. By contrast, in sentencing and corrections today there are widely different policies and practices. Thirty-six States and the District of Columbia continue with indeterminate sentencing systems. The remaining 14 States have eliminated parole, but not necessarily parole supervision.[42] (See the Bureau of Justice Assistance classification system in exhibit 11.)

Exhibit 11. State Sentencing Structures, 1997

Number of States	Type of Sentence	Description
5	Statutory determinate sentencing	No parole release, sentencing standards in legislation
30	Indeterminate sentencing jurisdictions	Parole release, no guidelines
6	Voluntary/advisory sentencing guidelines	Voluntary guidelines, with or without parole
10	Presumptive sentencing guidelines	With or without parole release, presumptive guidelines

Source: Tonry, M., "Reconsidering Indeterminate and Structured Sentencing," in *Sentencing and Corrections Issues for the 21st Century, Papers From the Executive Sessions on Sentencing and Corrections*, No. 2, Research in Brief, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 1999, NCJ 175722.

Mandatory sentences

Although many States did not change to a determinate sentencing structure, they did make other changes to limit the individualization of sentences and court and correctional discretion. Particularly popular were statutes eliminating parole for certain offenses or requiring mandatory minimum sentences. Some States, for example, passed laws specifying that the penalty for aggravated murder must be a life term in prison without the possibility of parole. Mandatory minimum statutes eliminate discretion to choose a sentence of less, but not more than, the State minimum. For instance, a law might require a mandatory minimum sentence of 10 years for a specific drug offense. Upon conviction, the judge must impose a prison term of not less than 10 years but may impose a longer term. The penalty cannot be reduced even if, in the opinion of the judge, the individual case warrants it.

In the 1980s and 1990s, every State adopted some type of mandatory minimum sentencing law. Most of these laws applied to crimes involving serious violence, drugs, or firearms. Another type of mandatory sentencing law was tied to an individual's criminal record. Such habitual-offender laws had long been used to require heavier-than-normal sentences for career criminals because of the number and severity of their prior convictions.

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Three-strikes laws

Variants of the habitual-offender laws that emerged in the 1990s were the "three-strikes" laws. The "three strikes and you're out" baseball metaphor is used throughout the country to refer to criminal sanctions that become increasingly severe upon each conviction until the offender is considered to be "out," or in prison for life. Under these laws, each felony conviction is considered a strike, and penalties are increasingly severe; at the third strike the offender is out. The focus on tougher sentencing laws led to increasingly rigid sentencing statutes, and these had a particular impact on repeat offenders. By 1994, 30 States had introduced three-strikes legislation, and 10 had passed tougher sentencing for repeat offenders. Twenty-four States had enacted three-strikes laws by 1997.[43]

Just as with other changes in the criminal justice system, the impact of these laws differs according to their implementation. For example, some jurisdictions define the third strike as "any felony." This means that a conviction for theft can result in a sentence of life in prison without the possibility of parole. In such States, the impact on prison populations could be dramatic. Other jurisdictions define the third strike as a serious violent felony. Because many of these convictions would have resulted in a lengthy prison sentence even without the three-strikes law, the impact on the prison population is minimal.

Most three-strikes laws have had minimal impact on States' prison systems because the laws apply to only the most violent repeat offenders.[44] In the State of Washington, only 85 offenders had been admitted to the State prison system 3 years after the law took effect. California was the only State where the three-strikes law had a dramatic impact on the prison population. After the first year, the number of "strike" offenders entering prison was not as great as originally predicted; however, the numbers have had a major impact on the prisons. Most of those given lengthy sentences under the second- or third-strike provisions have been convicted of nonviolent property or drug crimes.

Parole release

Although many States continue to use parole boards, their use for discretionary release has changed dramatically. In the late 1970s, approximately 70 percent of prison releases were discretionary (resulting from a parole board decision). By 1997 only 29.3 percent of the releases from prison were a result of discretionary parole. Most (41.2 percent) of the release decisions were mandatory and not decided by a parole board (they resulted from determinate sentences, good-time provisions, and emergency releases); 17.5 percent were expiration releases (resulting from maximum court sentence served); and 12 percent were other conditional releases (the result of commutations, pardons, and deaths).[45]

All States except Maine and Virginia have some requirement for post-prison or parole supervision—though it may have a different name (e.g., controlled release, community control, supervised release, and community custody) to distance it from the negative image of parole. Nearly 80 percent of all prisoners released in 1997 were subject to some form of conditional community or supervised release.[46]

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Decisionmaking

Changes inside and outside the criminal justice system have affected the relationship of symbolic and operational influences on societal responses to crime.[47] Although politicians and decisionmakers have always been symbolically responsible for public safety and, therefore, have taken "tough-on-crime" positions, they have not always been involved in operational decisions. Thus, in the past, politicians could and did argue for severe punishments for serious and violent crime. Today, however, politicians are more directly involved in decisions that affect operations. According to Franklin Zimring, single-issue lobbies (prison guards, victims rights advocates), distrust of criminal justice officials, single-issue (crime) candidates for public office, and new sentencing structures (determinate sentencing, mandatory sentences) have pushed the public and politicians into areas where they can and do have a large impact on decisionmaking.[48]

Under the indeterminate system of sentencing, the politics of punishment were insulated from the actual operation of the criminal justice system. Judges, parole boards, and correctional officials had the power to consider individual cases and mitigate the seriousness of sentences. They could also use their decisions to regulate prison populations by paroling more offenders when prisons were crowded. Changes in the system have reduced or eliminated this authority.

Legislatively mandated sentencing terms and mandatory minimum sentencing laws have shifted punishment from criminal justice professionals to the public.[49] Much power now resides in prosecutors' offices and legislatures. Some argue that prosecutors have "unchecked" power to decide whether to file charges under mandatory provisions or to bargain to lesser charges.[50] Federal prosecutors have been selective in their use of mandatory laws and have brought charges in only a fraction of cases to which such laws apply. Politicians have been forced to take responsibility for the decisions made by criminal justice system officials. Whereas the criminal justice system formerly would have been blamed for releasing a dangerous criminal into society, politicians are now the target of public anger for the release of criminals such as Willie Horton, who after being furloughed, murdered someone. This has made politicians more sensitive to the operation of the criminal justice system.

Prison crowding

The enormous increase in prison populations has led to severe prison overcrowding, and changes in sentencing have limited the ability of criminal justice professionals to use early release mechanisms to alleviate the problem. In the past, early release from prison through good-time reductions, earned-time incentives, and parole permitted officials to individualize the amount of punishment or leniency an offender received and also provided a means to manage the prison population. Although half of all prisons in the United States have been built in the past 20 years, State prisons in 1998 were operating at 15 percent more than capacity, and Federal prisons were at 19 percent more than capacity.[51]

Behavioral, cultural, and social changes impinging on corrections

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Changes in the larger society inevitably impinge on corrections. As previously mentioned, the most dramatic influence on incarceration has been growth in the use of illegal drugs. Three other changes affecting corrections include the aging of the population, the increase in infectious diseases (particularly HIV/AIDS), and changes in the management of individuals with serious mental illness.

Aging. The fastest growing age group in the United States is people age 65 and older. This demographic change, combined with correctional policies such as life without parole and shorter prison terms, has resulted in a growing number of older offenders in prison. Planning and programming for older inmates have legal and fiscal implications; some obvious examples are increased costs for medical care and changes in prison cells and dormitories to accommodate physical disabilities and other limitations of the elderly.

Infectious diseases. HIV/AIDS, sexually transmitted diseases, and tuberculosis are disproportionately high among correctional populations, presenting serious challenges for correctional administrators and health service providers. In 1997, approximately 2.1 percent of State and Federal prison inmates were HIV positive, and 1 in 5 inmate deaths was attributed to AIDS-related causes.[52] In response to the increased numbers of terminally ill inmates, 11 jurisdictions and the Federal Bureau of Prisons have established prison hospice programs.

Serious mental illnesses. Correctional officials have had to manage an increasing number of individuals with serious mental illness.[53] Major changes in mental health policies in the United States, such as deinstitutionalization, have led to increases in the number of people in the community with serious mental illness, who frequently receive inadequate care. Many of these individuals become involved with the criminal justice system, and correctional officials struggle to provide for their care and safety. Limited funding for programs and for community services and treatment means that many mentally ill offenders are not treated while under correctional supervision. Mentally ill inmates are more likely than others to be in prison for a violent offense and to have been homeless or lived in a shelter in the year before arrest. Those with serious mental illnesses have a high prevalence of drug abuse and dependence, and this comorbidity presents additional management and treatment difficulties.

Examining the Effectiveness of Different Strategies

Incapacitation and deterrence

Understanding the relationship between sanctioning policy and crime rates has been the focus of considerable research in the areas of deterrence and incapacitation—research that requires careful measurement and control for factors that may affect crime rates. Most reviews of the literature conclude that the effect of sanctioning policies on crime reduction has been modest. This was the conclusion reached by the most famous examination of the subject, the 1978 National Academy of Sciences Panel on Research on Deterrent and Incapacitative Effects.[54] Successive panels— Criminal Careers[55] and Understanding and Control of Violence[56]—reached similar conclusions. However, many unresolved

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questions have led to a debate about how much influence incapacitation and deterrence strategies have had on the crime rate.

Most of the research uses complex statistical simulations to estimate the impact of incapacitation policies on crime in the community. Although it is generally accepted that incapacitation policies prevent crime because offenders who are imprisoned do not have the opportunity to commit crimes, estimates of the number of crimes prevented vary greatly.[57] Most researchers estimate crime savings of somewhere between 10 and 30 percent, but this depends upon the policy being examined. True estimates of the crimes prevented are difficult to calculate because both the frequency of criminal participation and the duration of criminal careers must be estimated. Large increases in the use of imprisonment, for example, may have limited returns because the additional offenders currently not incarcerated may be lower frequency offenders who would not be committing many crimes in the community. Thus, every new incarceration would reduce the return on investment for every new dollar expended. There also may be limited returns because offenders who are incarcerated for a long time may be at the end of their criminal careers and therefore might not commit any crimes in the community even if they were free to do so.

A consistent finding in the literature is that a small number of offenders commit a large number of crimes; if they could be incapacitated, a large number of crimes would be prevented. It is not yet possible to predict who will become the high-frequency offenders; therefore, targeting them for increased prison sentences is impossible. Increased use of incapacitation as a crime prevention strategy must also address the increases in imprisonment rates and the financial costs that accompany such strategies.

As a result of new sentencing structures, such as mandatory-minimum laws, sentencing enhancements, three-strikes laws, and longer delays until release under truth-in-sentencing laws, those sentenced to prison are spending more time there. Time served has been the major factor contributing to the growth of incarceration at State prisons. Research on whether certain criminal sanctions deter offenders raises some concerns about the benefits of extending the time served. Indeed, increasing the probability of commitment to prison or the certainty of punishment has a stronger impact on reducing criminal activity than increasing the severity of the sanction, such as lengthening the time served.

Some of the research examining the impact of drug policies has also led to questions about the effectiveness of incapacitation and deterrence. As long as the drug market continues to recruit replacements for those scared out of the business or locked away in prison, it will continue to provide new offenders. The drug market trade offers a lucrative financial incentive for attracting new recruits. Therefore, a new recruit is always available to replace anyone who is arrested and confined to prison. On the other hand, if those who are locked up would have been committing serious and violent crimes in the community, their imprisonment could be contributing to the incapacitative effect of incarceration.

Controversy over costs

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As incarceration rates continued to climb throughout the 1980s, people began to question whether the high cost of incarceration was worth the benefits gained. In response, Edwin Zedlewski pointed out that releasing offenders had social costs, and these costs must be weighed against the costs of incarceration.[58] If an offender is released and continues to commit crimes, for example, the criminal justice system incurs additional costs related to arrests, revocation hearings, and court proceedings; there are also costs for victims, such as property loss or the need for additional private security.

Zedlewski's argument about the social costs of releasing offenders had direct policy implications and began a controversy that still rages. If releasing offenders has its costs, then policymakers can justify additional prison construction expenditures as a way to keep offenders in prison and, thereby, save the social costs of release. The controversy is over what numbers to use in calculations. Researchers differ in what costs they believe are legitimately included and how these elements should be calculated. For example, should the calculations include criminal justice system costs, monetary costs to victims, private security costs, health care expenses, pain and suffering of victims, and risk of death? Should they include tangible and intangible costs to victims, costs to others (victim's family, insurance companies, businesses, and society), and costs of preventing crime (theft insurance and guard dogs)?

After decisions are made about what social costs to include, the number of crimes prevented by incarceration must be estimated. If each crime has social costs, the problem is to determine how many crimes offenders would commit if they were in the community rather than in prison. All evidence suggests that official statistics do not provide adequate information for these estimates, so researchers have used self-reported data for this purpose. Estimates vary from study to study, and recent findings suggest that the estimates of criminal activity will differ greatly if offenders are given a sentence of community supervision.[59] Furthermore, these estimates become more difficult to calculate because criminal careers span a number of years. Offenders are more active at some points in their careers and, as they get older, their criminal activity usually declines. Therefore, estimates of the number of crimes offenders would commit if they were in the community must take career length into consideration.

When the estimates of the cost of crime to society and the average number of crimes committed are known, the annual social costs of not imprisoning an offender can be determined. This figure is weighted against estimates of what it costs to keep an offender in prison; the result is the benefit of imprisonment.

Some in the criminal justice community reject social cost calculations completely. They argue that the imputed costs of victim pain and suffering do not take into account the suffering of imprisoned offenders or of offenders' partners, children, and communities. From these opponents' perspective, cost-benefit assessments require weighing inherently incommensurable values, and attempts to do so have reached a dead-end. They argue that it may be more productive to compare the costs and benefits of alternative crime prevention policies and not attempt to calculate the social costs of crime. Both groups in this debate include knowledgeable scientists who are aware of the complexity of the problems. At this time, there is no clear answer.

Intermediate sanctions

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Throughout the 1980s and 1990s, the National Institute of Justice funded evaluations of various intermediate sanctions and correctional alternatives, including intensive supervision and correctional boot camps, as well as tools of supervision such as electronic monitoring and urine testing. These studies permit researchers to draw some conclusions about program effectiveness.[60] Most studies of intermediate sanctions have focused on whether increased control and surveillance reduces recidivism. Few studies have focused on the rehabilitative aspects of the sanctions.

Intermediate sanctions were proposed as methods to simultaneously divert offenders from incarceration, reduce recidivism rates, and save money while providing credible punishments that could be matched to the severity of offenders' crimes. Although some jurisdictions may have achieved these goals, many have not. In particular, research has provided little evidence that intermediate sanctions successfully reduced recidivism. Intensive supervision programs, electronic monitoring, correctional boot camps, home confinement/house arrest, and urine testing were found to be ineffective in reducing recidivism unless combined with effective rehabilitation programs. In fact, sanctions requiring increased surveillance of offenders in the community often resulted in higher levels of technical violations when compared with less intensive sanctions. (Offenders sentenced to community supervision are required to adhere to certain conditions of supervision. If they violate these conditions—even without committing a new crime—they can suffer consequences. Violations of these conditions are called technical violations. These violations can result in a revocation of the community sentence and a subsequent term in prison.) There is little reason to believe that offenders who receive intermediate sanctions commit more crimes, let alone more technical violations. Most likely, they were caught more often for the violations they committed.

Intermediate sanctions also were successful in diverting offenders from prison. Use of sanctions was expected to achieve two goals: The provision of both an intermediate range of punishments and more fair and just sentences, and financial savings from giving alternative punishments to offenders who would otherwise go to prison. Those convicted of intermediate crimes could be given intermediate sanctions. Because the intermediate sanctions were between probation and prison, they were expected to draw from the populations of both probationers and prisoners. However, few policymakers and correctional officials were willing to release higher-risk offenders into the community. Thus, while policymakers supported the new intermediate sanctions, they took pains to limit eligibility to low-risk offenders—those offenders who would otherwise serve a sentence of probation and be at lower risk for recidivism. Frequently, various intermediate sanctions in the same jurisdiction competed for a limited number of eligible candidates.

Intermediate sanctions are often criticized for increasing the overall cost of corrections. In general, it costs more to keep offenders in prison than in the community, and increases in control and surveillance in the community cost more than standard probation. Because many offenders who were given alternative sanctions were drawn from the group of offenders who were given the least costly sentencing option—probation—intermediate sanctions often increased, rather than decreased, the cost of corrections.

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Additionally, by drawing from the population of offenders who would otherwise be on probation, the alternatives "widened the net" of control over a larger number of offenders. Netwidening was also a problem because increased surveillance and control over offenders increased the probability that technical violations would be detected. This is, most likely, a reason for the increase in the proportion of offenders admitted to prison as probation or parole violators.

Rehabilitation: What works in corrections?

Rehabilitation strategies attempt to change individual offender behaviors and thinking patterns so they will not continue their criminal activities. Many people continue to be interested in rehabilitation in spite of changes in the philosophy and practice of corrections. Correctional administrators struggle to continue providing rehabilitation and treatment programs, frequently combining treatment with punitive intermediate sanctions, such as boot camps, in order to obtain necessary funds.[61]

Research attempts to identify and understand the traits of individuals that explain criminal behavior and how interventions can modify behavior so people will no longer commit crime. The work is based on psychological theories of learning, cognition, and general principles of human development as applied to the analysis of illegal behavior.[62]

Although there is still some debate about the effectiveness of rehabilitation, recent literature reviews and meta-analyses demonstrate that rehabilitation can effectively change some offenders and reduce their criminal activities.[63] During the 1980s and 1990s, when many U.S. criminologists were studying the effectiveness of increases in surveillance and control over offenders, many Canadian researchers who were trained in psychology continued to study the effectiveness of rehabilitation programs.

Reviews of the research literature find that 48 to 86 percent of the studies analyzing rehabilitation programs report evidence of treatment effectiveness. The available evidence reveals that some treatment approaches are better than others. Psychological researchers emphasize that effective treatment programs must follow some basic principles. First, treatment must directly address characteristics that can be changed (dynamic factors) and that are directly associated with an individual's criminal behavior (criminogenic factors). Numerous risk factors are associated with criminal activity, such as age, gender, and early criminal involvement. In comparison with others, males who began criminal activities at a young age are at higher risk for future criminal activities. However, these static characteristics, though predictive of recidivism, cannot be changed in treatment. Instead, dynamic, or changeable factors, should be the target of treatment programs.

Equally important is the distinction between criminogenic and noncriminogenic factors. Criminogenic factors are directly associated with criminal behavior. Research has found that some dynamic factors are also criminogenic (e.g., attitudes; thoughts; behavior regarding employment, education, peers, authority, and substance abuse; and interpersonal relationships that are directly associated with an individual's criminal behavior). Treatment programs that target noncriminogenic factors will not be particularly successful in reducing recidivism. For example, less promising targets for reducing future

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criminal behavior include increasing self-esteem without addressing antisocial propensity or increasing the cohesiveness of antisocial peer groups.

A second factor influencing whether a treatment program will be effective is its design and delivery—that is, its therapeutic integrity. Poorly implemented programs delivered by untrained personnel, in which offenders spend only a minimal amount of time, can hardly be expected to successfully reduce recidivism.

A third factor in effective programming is targeting offenders who are at sufficient risk for recidivism so that a reduction is measurable. Many offenders are at low risk for future recidivism. Treatment programs that provide intensive services for such offenders will show little reduction in future criminal activities because few of these offenders would have recidivated anyway.

The final factor in effective treatment is delivery in modes that address the learning styles and abilities of offenders. For example, more effective programs follow a cognitive behavioral and social learning approach, rather than nondirective, relationship-oriented counseling or psychodynamic, insight-oriented counseling.

Meta-analyses examining treatment studies have classified treatment programs as appropriate or inappropriate according to the identified principles. In general, programs based on these principles are found to reduce recidivism, although the extent of the reduction varies by study and principle being examined.[64]

In summary, there is evidence that rehabilitation reduces the criminal behavior of at least some offenders. The meta-analyses suggest that effective correctional treatment programs appear to be based on several basic principles. To reduce recidivism, these programs should:

- Be carefully designed to target specific offender characteristics and problems both that can be changed (dynamic characteristics) and that are predictive of the individual's future criminal activities (criminogenic), such as antisocial attitudes and behavior, drug use, and anger responses.

- Be implemented in a way that is appropriate for participating offenders, use effective therapeutic techniques (e.g., techniques that are designed by knowledgeable individuals and programs that are provided by appropriately educated and experienced staff and adequately evaluated), and require offenders to spend a reasonable length of time in the program (deliver sufficient dosage).

- Offer the most intensive programs to offenders who are at the highest risk of recidivism.

- Use cognitive and behavioral treatment methods based on theoretical models such as behaviorism, social learning, or cognitive-behavioral theories of change that emphasize positive and, as much as possible, individualized reinforcement contingencies for prosocial behavior.

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More information is needed about (1) how to ensure that treatment programs have adequate integrity, (2) what should be targeted for change in treatment (antisocial attitudes, values, employment behavior, education), (3) what methods should be used to deliver the treatment (required staff training, outpatient treatment, in-prison programs), (4) what the specific characteristics of the effective programs are, and (5) what populations should be targeted.

Another method for drawing conclusions about the effectiveness of programs is an assessment technique developed by University of Maryland researchers.[65] Using this technique, my colleagues and I assessed the effectiveness of various programs for reducing the criminal activities of known offenders.[66] For each study identified within a program area, we rated the quality of the science used in the research. Decisions about "what works, what doesn't, what's promising, and what we don't know" were made using clearly described decisionmaking rules regarding the scientific merit, the direction and significance of the studies' results, and literature reviews and meta-analyses. We drew the following conclusions:

What works. The following programs will probably reduce recidivism in the social contexts in which they have been evaluated. Their findings can be generalized to similar settings in other places and times.

- Inprison therapeutic communities (TC) and inprison TCs with followup community treatment.
- Cognitive behavioral therapy: Moral Recognition Therapy (MRT) and Reasoning and Rehabilitation.[67]
- Nonprison-based sex offender treatment programs.
- Vocational education programs.
- Multicomponent correctional industry programs.
- Community employment programs.

What doesn't work. The following programs will probably *not* prevent recidivism in the social contexts in which they have been evaluated. Their findings can be generalized to similar settings in other places and times.

- Increased referral, monitoring, and management in the community.
- Correctional programs that increase control and surveillance in the community.
- Programs emphasizing structure, discipline, and challenge (e.g., boot camps using old-style military models and juvenile wilderness programs).
- Programs emphasizing specific deterrence (e.g., shock probation and "Scared Straight" programs).

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- Vague, nondirective, unstructured counseling.

What's promising. The following programs may prevent recidivism in the social contexts in which they have been evaluated; their findings *cannot* be generalized to similar settings in other places and times. There is some empirical basis for predicting that further research could support generalizing them.

- Prison-based sex offender treatment.
- Adult basic education.
- Transitional programs providing individualized employment preparation and services for high-risk offenders.
- Fines.
- Drug courts combining rehabilitation and control.
- Juvenile aftercare.
- Drug treatment combined with urine testing.

What's unknown. The following programs have not been coded in one of the three other categories and are defined as having unknown effects.

- Intensity and integrity of substance abuse treatment programs for referred offenders.
- Anger and stress management programs.
- Victim awareness programs.
- Community vocational training programs.
- Programs that include various types of sex offenders.
- Life skills training programs.
- Work ethics training, inprison work programs, and halfway houses with enhanced services.
- Combinations of treatment with either control (e.g., drug treatment in boot camps or literacy programs combined with ISP) or challenge (e.g., outward-bound programs) components.

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Rehabilitation programs that have specific characteristics as described are effective in reducing recidivism. Furthermore, research examining various types of programs can be used to determine which programs are effective with specific types of offenders and in specific contexts. In contrast to Martinson's earlier "nothing works" conclusion, most researchers in this field today agree that treatment programs can effectively reduce recidivism. However, as with the earlier Martinson findings, the quality of science is inadequate for drawing unambiguous conclusions about the programs' effects, as many of them are poorly implemented and funded.

Intended and Unintended Consequences

Risk management and the new penology

According to Malcolm Feeley and Jonathan Simon, a new penology is emerging as a direct consequence of the changes in the philosophy and practice of corrections.[68] They do not believe that the shift is reducible to any one reigning idea (e.g., crime control or getting tough on criminals) but, instead, has multiple and independent origins. This new penology has a new language, new objectives, and new techniques. It reflects a shift away from the traditional concerns of criminal law and criminology, which focused on the individual, and a redirection toward managing groups of people according to the risks they pose. The new focus on risk assessment has gained many adherents among criminal justice practitioners and in the research community. According to Feeley and Simon, this new way of perceiving the functions of criminal sanctions has contributed to the rise in prison populations.

The new penology replaces moral or clinical descriptions of individuals with actuarial discussions of probabilities and statistical distributions. Improvements in statistics and the availability of computers have greatly facilitated this trend, as has the involvement of those interested in systems theory and operations research in public policy. However, even in the 1967 report, *The Challenge of Crime in a Free Society,*[69] it is possible to see the beginnings of this change in the report's emphasis on actuarial representation and the commitment to rehabilitation.

The objective of the new penology is the identification and management of unruly people, not punishment or rehabilitation. Although recidivism rates are still viewed as important, their significance has changed. Rather than focusing on recidivism rates as evidence of individual success or failure, the new penology views return-to-prison rates as evidence of the efficiency and effectiveness of parole officials to control people. The new penology perceives probation and parole as cost-effective ways of imposing long-term management and not as methods to reintegrate individuals into the community.

New techniques of more cost-effective forms of custody have been developed to manage offenders and to identify and classify risk. Management tools such as electronic monitoring or drug testing are not designed to rehabilitate, reintegrate, retrain, or provide employment but are justified as effective risk management tools. Incarceration is justified as a method to affect crime rates. Intermediate sanctions provide a "custodial continuum" for using different control mechanisms with different groups, depending on their risk profiles.

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Feeley and Simon provide many practical examples of the shift to the new penology. Prisons are less apt to be classified according to specialized functions or populations (rehabilitation for drug users or the mentally ill, vocational training, and young adults); they are now classified according to their level of security. Drug testing is used to classify probation and parole populations within a risk group.

The shift away from a concern for individuals to managing aggregates and dangerous populations has important implications for sentencing and corrections. Feeley and Simon's most serious concern is how the new penology relates to the emergence of a new view of poverty in the United States. Some are beginning to view poverty as a problem of the "underclass," a group excluded from social mobility and economic integration. Most often this term refers to African-Americans and Hispanics who live in concentrated zones of poverty in central cities and are separated physically and institutionally from mainstream American life. In contrast to other groups, the underclass is considered to be permanently marginal, without literacy, without skills, and without hope. Nonmembers of the underclass often believe members of the underclass are dangerous and different from themselves.

If this is indeed a new view of poverty in United States, then the new penology may reflect, in part, these views and attitudes about how the underclass should be treated. From this perspective, the new penology will continue to focus on assessing risk and controlling behavior in lieu of rehabilitation, reintegration, or education. Attempts at rehabilitation would be expected to fail for the underclass population; the best that can be hoped for is management of risk. The "we versus them" philosophy will lead to neither sympathetic treatment by the criminal justice system nor a focus on rehabilitation. The impact on minority populations could be disastrous. Feeley and Simon, however, are not suggesting that such effects are inevitable and permanent. They maintain the new penology changes the goals of corrections from rehabilitating individuals toward the presumably more realistic task of monitoring and managing intractable groups. This more task-oriented view is also fraught with dangers that should be recognized.

Minority populations

Nine percent of African-American adults were under some type of correctional supervision in 1996, compared with 2 percent of the white population.[70] Of individuals ages 25 to 29, a much larger percentage (8.6) of African-American non-Hispanic males was in prison in 1997, compared with 2.7 percent of Hispanic males and 0.9 percent of white males.[71]

Whether the original intent of sentencing reforms—to reduce racial disparity and discrimination—has been accomplished is unclear. Evaluations of the effects of sentencing guidelines in both the Federal and State systems document mixed results. The principal problem does not appear to be biased decisionmaking by criminal justice officials but rather the adoption of policies that disproportionately affect minority offenders. The rapid growth in prison populations in the past 30 years has exacerbated the overrepresentation of African-Americans in the U.S. prison system. The proportion of African-Americans in Federal or State prisons or local jails increased from approximately 30 percent in the 1970s to 40 percent in the 1980s, and finally to 50 percent in the 1990s.[72] There are at least two reasons for the increases. First, the war on drugs has disproportionately affected African-Americans.

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The war was designed to be tough on crime and to ensure the arrest, prosecution, and imprisonment of street-level drug dealers. As previously reported, the war has resulted in more arrests of drug offenders and more of these arrests resulted in prison sentences. In urban areas where such arrests are common, most dealers are poor and members of a minority. Thus, the increased incarceration of African-Americans is, in part, a byproduct of deliberate strategies employed in the war on drugs.

Second, changes in sentencing—such as three-strikes laws, mandatory minimum sentences, and truth-in-sentencing laws that abolish parole release and require inmates to serve longer sentences—also disproportionately affect minority offenders. These laws increase the length of time offenders convicted of violent offenses must serve in prison. African-Americans constitute a large percentage of the people arrested for violent crimes and, thus, they are disproportionately affected by these changes in laws. Whether these policies are a result of malign neglect [73] (failure to consider the impact of the policies) or attitudes toward the underclass (as suggested by the new penology) is debated.

Impact on individual offenders

The majority of people who are convicted of crimes spend their sentences in the community under supervision and, likewise, the majority of convicted offenders who are sent to prison will one day be released back to the community. Thus, there exists a legitimate concern for how arrest, conviction, and imprisonment affect individuals and whether those experiences have lasting effects on ex-offenders. Evidence suggests that such experiences with the criminal justice system reduce ex-offenders' subsequent incomes and employment potential. (The reasons for these reductions are not always clear.) Employment is limited by various Federal and State laws that deny ex-offenders the right to vote, hold certain public offices, and engage in certain occupations. Other nonlegal influences are less obvious; the stigma of prison may reduce marriage prospects, for example.

Imprisonment has additional negative effects on offenders and their families. It often leads to a breakup of family or other social relationships and lessens parental involvement with children. Problems related to finances and single-parenting can arise for family members who remain in the community. Prisons may adversely affect individual offenders by increasing their ties to criminal compatriots or creating stress, thereby overwhelming an inmate's ability to cope. Inmates may learn antisocial and criminal attitudes from other inmates, which could lead to increased criminal activity upon release.

Although the potential negative effects of prison are many, the treatment literature demonstrates that rehabilitation programs in prison can reduce recidivism. However, problems with overcrowding and funding frequently limit the number of offenders who receive treatment. Alternatively, programs may be offered but are so poorly implemented and of such limited duration that they could not reasonably be expected to influence recidivism. This is of particular concern because there is strong evidence that many arrestees have used illegal drugs and would likely benefit from drug treatment.

Drug-involved offenders. Some observers question the wisdom of the changes in sentencing policy that have sent more offenders to prison for longer periods of time. The concern is expressed with regard to specific types of offenders. They argue that the more structured sentences (those that

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eliminate discretion) require prison sentences for some offenders who may not be best served with a lengthy period of incarceration. For example, an increasing number of individuals, many with substance abuse problems, are sent to prison for drug offenses. The results of drug testing of arrestees document the large number who have used illegal drugs shortly before their arrest. For years, the emphasis on incapacitation in prison and surveillance and control in the community meant that only a small percentage of offenders with substance abuse problems actually received treatment. However, a growing body of research evidence showing that drug treatment effectively reduces both drug use and criminal activities has led many correctional jurisdictions and the Federal Government to support treatment programs for drug-involved offenders.

Women offenders. It is also commonly argued that the elimination of discretion in sentencing and release decisions is inappropriate for many women offenders. Although a high percentage of them are serving time in prison for drug offenses or other nonviolent crimes, many do not receive treatment while in prison. Furthermore, the majority of the women in prison are single mothers. Because the number of women offenders is relatively small, they are often sent to prisons far from their homes or in other jurisdictions and are unable to see their children for long periods of time. The community supervision emphasis on control and surveillance also presents problems for women offenders when they return to the community. Upon release from prison, they must return to their family responsibilities and also complete the requirements of supervision. For many, these responsibilities present insurmountable challenges.

Unintended consequences for the community

There is growing concern that increased incarceration rates, especially the unprecedented rates in the United States today, may affect other social institutions such as families, communities, or schools in a manner that increases crime and social disruption or that, at a minimum, offsets any crime-reduction effect of increased incarceration.[74] The argument is that families, neighborhoods, communities, educational institutions, and labor markets provide and enforce norms of behavior that keep most people from engaging in criminal activity. When the ties or bonds to these institutions are weakened or lost, individuals become more marginalized; such individuals have higher rates of violence and crime.

Historical changes have particularly affected young African-American inner-city men.[75] Among African-Americans in inner cities in the past 20 years, labor force participation has declined dramatically, and the percentage of female-headed households has increased. At the same time, participation in the drug trade has increased, and the violence attendant on the drug trade has further weakened ties to social institutions.

The high rate of incarceration is thought to have exacerbated problems in the inner cities. When incarceration rates were low, the imprisonment of some inner-city family members did not appear to have a strong effect on communities. However, when the incarceration rate is so high that 10 percent of the men in a community are affected—and the majority of men in the community have been in correctional institutions at some point in their lives—incarceration may adversely affect the community in ways that it previously did not. Incarceration weakens families by removing men, and the remaining

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family members may be less effective in supervising and controlling teenage children. Furthermore, incarceration reduces the supply of marriageable men, leaving more single mothers to support and raise children. The very communities hit hardest by incarceration are those already negatively affected by recent historical changes. These low-functioning neighborhoods are depleted when every available resource is needed.

From one perspective, the removal of criminal men to prison may benefit a community because they can no longer commit crimes. However, this assumes—perhaps wrongly—that offenders are solely a drain on the community. Even while involved in criminal activities, offenders may provide important support to the community or its individual members. Some ethnographic research demonstrates that offenders represent both assets and liabilities to their communities. Although they are not model citizens, they provide some resources to the community. If such individuals are incarcerated, those resources are withdrawn and may not be restored after the offender is released because ties are loosened or broken beyond repair. Thus as a direct consequence of correctional policies, inner-city, underclass communities may experience more, not less, disorganization and crime.

Emerging Paradigms

An examination of the state of corrections at the beginning of the 21st century reveals emerging paradigms that may influence the future of corrections in the United States.

Restorative and community justice

In the past decade restorative and community justice programs have been proliferating throughout the United States.[76] Such programs offer new ways of viewing the justice system and responding to crime. Both restorative and community justice assume that crime damages individuals, communities, and relationships. Restorative justice includes all responses to crime that attempt to repair the harm or heal the wounds it causes. Under this model, justice involves the victim, the offender, and the community in a search for solutions that promote repair, reconciliation, and reassurance. From this perspective, justice requires more than punishing or treating those found guilty of lawbreaking. It recognizes that crime harms the victim and the community and that harmony should be restored between victims and offenders; victims should be repaid for tangible and emotional losses; and offenders should take responsibility, recognize the shame, and regain dignity.

Examples of the types of programs included under the restorative justice models include:

- Victim-offender mediation. Offenders and victims meet with volunteer mediators to discuss the effects of the crime and decide on restitution.

- Family group conferencing. Offenders, victims, families, and other people significant in the lives of affected individuals meet to discuss the impact of the crime and restitution. These conferences are usually organized and moderated by criminal justice officials or social service agencies.

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- Sentencing circles. Originating in Native American peacemaking, they are based on negotiation and consensus and involve victim, offender, supporters, and community members. The process is open to the whole community.

- Reparative probation and other citizen boards. Offenders are sentenced to probation, and a citizen board of volunteers draws up a contract, which the offender must carry out.

Except in a few locations, restorative programs currently are used in a limited number of cases—for example, more with juveniles than adults, and more for minor offenses than serious crimes. There is still a great deal of debate about how many of the restorative and community justice programs should be implemented, and by whom. Furthermore, it is often difficult to mobilize and involve the community, particularly in disadvantaged, inner-city environments where the need may be greatest.

Community justice has a less explicit definition and means different things to different people. At the broadest level, it includes any program involving or focusing on the community (including most restorative justice programs). The term is sometimes used to describe a new community-corrections focus on problem solving and community empowerment, similar to its use in community policing. It is also used to describe strategies that focus on neighborhood locations that offer flexible hours of operation, social services, and close contact among supervising agents and various members of the community, including offenders, victims, and offenders' families. Community service and payment of restitution by probationers and parolees may be included under the umbrella of community justice.

Community corrections. Variously named "neighborhood probation or parole," "corrections of place," or "police-corrections partnerships," the community corrections model of community supervision involves the community in offender supervision in a way similar to how community policing involves the community in policing. Key components include (1) strengthening the ties between law enforcement and the community; (2) offering a full-service model of supervision, including both services and surveillance; and (3) attempting to change the lives of offenders through personal, family, and neighborhood interventions. Rather than managing offenders in the conventional caseload model, supervision agents are responsible for more actively supervising offenders; problem solving to initiate changes in offenders; and helping offenders obtain employment, social support, and needed treatment. Unlike earlier community corrections programs that focused on rehabilitation, the new community corrections focuses on involving the community (including law enforcement agencies) to help with supervision, accountability, and rehabilitation, including coercing offenders into treatment. Thus, community corrections combines rehabilitation with strict control and uses the help of community members and technology to ensure compliance.

Interest in police-corrections partnerships has been growing. The partnerships take various forms, from enhancing supervision and apprehending fugitives to sharing information and problem solving. Critics are concerned about the due process rights of offenders because probation and parole agents have broad powers (such as conducting warrantless searches) that officers do not have. Furthermore, some

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difficulties—in coordinating activities, identifying goals, and dealing with limited resources—have arisen in the implementation of the partnerships.

Reemerging interest in treatment

With a growing body of research demonstrating the effectiveness of treatment programs with some offenders, interest in rehabilitation as a goal of sentencing and corrections has returned. Rather than accepting the rehabilitation model of the past, however, the new researchers, practitioners, administrators, and decisionmakers are focusing on how rehabilitation can be combined with more coercive or accountability-driven methods. Both the large number of drug-involved offenders in the criminal justice system and mounting evidence that treatment can be effective among this group has encouraged many jurisdictions to initiate drug treatment programs in prison and require drug treatment during community supervision.

Specialized courts

One response that has become particularly popular for managing and treating drug-involved offenders is the drug court. The wide acceptance of drug courts, as well as preliminary information about their effectiveness in reducing illegal drug use and other criminal behavior, has led some jurisdictions to develop other types of specialized courts designed to address specific groups of offenders. Jurisdictions are experimenting with specialized courts for juveniles and families, probation violators, prisoners reentering the community, and mental health clients.

Drug courts. These specialized courts were developed to manage correctional sentences given to low-level drug offenders. The courts stress rehabilitation, community integration, and accountability. A judge manages a caseload of drug-involved offenders, requiring them to make regular appearances in court, participate in some form of drug treatment, and be subjected to regular urine testing. The judge also administers a predetermined set of graduated, parsimonious sanctions for violating the drug court "contract."

Juvenile and family courts. Justice system practitioners have recognized that many youths appearing on juvenile, family, or criminal dockets are substance abusers. To address this problem, some jurisdictions have attempted to develop juvenile and family drug courts. However, this has proven to be a more complex task than the development of adult drug courts, because juveniles may be less motivated to change and are negatively influenced by peers, gangs, and family members. In addition, stringent confidentiality is required for juvenile proceedings.

Reintegration and reentry

How to facilitate the reentry and reintegration of prisoners into the community after release is a critical issue for corrections today. Approximately 500,000 prisoners are released from State prisons each year.[77] According to one Bureau of Justice Statistics study, approximately 62 percent of them will be

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rearrested for a felony or serious misdemeanor, and 41 percent will be sent back to prison within 3 years of release.[78] The risk of recidivism is highest during the first year after release.

The rapid growth in the number of parolees means that caseloads have grown correspondingly, and community supervision agents have limited time to spend with each individual. Caseloads on regular parole have grown from 30 parolees to 1 agent in the 1970s to 84 to 1 in 1995.[79]

Frequently, serious offenders are released with little or no supervision because they have completed their sentence in prison. Many of those being supervised in the community are returned to prison for a new crime or violation of the conditions of supervision. As a consequence, a high percentage of the people entering prison have failed community supervision. This "revolving door" has led many to rethink the processes of reentry and develop new concepts incorporating governmental, private, community, and individual responsibilities for reintegrating prisoners into society. Various methods have been proposed for managing reentry, including community corrections, increased use of rehabilitation programs, graduated sanctions that can be used before the offender is returned to prison, and reentry courts.

Reentry courts. Modeled after drug courts, reentry courts manage offenders' return to the community by applying graduated sanctions and positive reinforcement, as well as marshaling resources to support reintegration and promote prosocial behavior. The court essentially performs a resource triage. Releasees who are the most dangerous are identified and given the most resources during supervision. The goal is to reduce the recidivism rate of returning prisoners and establish a broad-based coalition to support successful reintegration.

Technology

Perhaps the greatest impact on corrections in the 21st century will be new technology. One of the most immediate effects is the use of computers to collect and share information. Theoretically, through the use of computer networks, information collected at one stage of criminal justice processing (e.g., arrest) can be shared as the offender progresses through the system. For example, risk and needs assessments, urine test results, and self-reported substance involvement determined pre- and post-sentencing can be share with probation agents and prison administrators. Performance during probation and parole can be used to determine management and treatment strategies for those who return to prison. Conversely, information on releasees' performance during community supervision can be fed back to prisons and treatment programs, informing program staff about what happens (e.g., recidivism, employment, treatment) to offenders after release and whether the programs are successful. New software will permit correctional facilities to record and track inmate records, bed assignments, medical data, and account information. Barcode printing and scanning can track inmate movements and perform cell checks. Information from the criminal justice system could be shared with other Federal, State, and local agencies (e.g., welfare, health, insurance) or with the public through the Internet (e.g., sex offender notification).

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Technology extends beyond computer networks, of course. Surveillance techniques will benefit from the use of video, cellular, and satellite tracking technologies. Prisons may be made safer through the use of digitized identification cards, handheld metal detectors, stab- and slash-resistant vests, and improved perimeter security systems. Hair testing, rather than more invasive urine testing, may be used to more closely monitor drug use. Problem solving and community supervision management will be aided by mapping techniques that show where most probationers and parolees reside. New medical techniques, such as chemical castration and drugs, may be used to reduce sex or violent offending or to treat other behaviors associated with criminal activity. Telemedicine might cut correctional costs. DNA databases will help identify offenders and exonerate the innocent, and additional information provided by the Human Genome Project may have psychiatric and behavioral management applications.

Technology holds many promises. However, despite its potential value in reducing crime and controlling criminals, technology also carries risks. These risks must be clearly identified and examined.[80]

Evidence-based corrections

It is generally recognized that research is needed to make reasonable, rational, cost-effective decisions regarding correctional policies. Although in the past many have expressed this interest, only recently has the field of corrections been moving toward more research and research-based decisionmaking. There is interest in using performance measures to hold departments of corrections accountable. Ideas such as criminal justice extension agents[81] and partnerships between State agencies and universities have been proposed as methods to encourage collaboration between researchers and criminal justice agencies. Criminal justice extension agents, working with local, State, and Federal agencies and the community, would facilitate and promote the close exchange of information among these constituents. University research faculty would be informed of new developments in the community; practitioners, decisionmakers, and others in the community would be informed about the latest research findings. The agents would work to facilitate interaction among university researchers to increase the amount of research, and they would communicate research results to policymakers and citizens. Federal, State, and local partnerships modeled after the land grant university agricultural extension agents (who provide a bridge between universities and the community) will ensure adequate funding for long-term continuing projects.

If we are to move ahead without repeating past mistakes, we must begin to use empirical knowledge to guide decisionmaking. We should implement programs that have been proven to work. A stronger relationship among universities and criminal justice agencies, community members, decisionmakers, and others will be necessary in the 21st century. There is every reason to believe that scientific knowledge will help us address the problems in sentencing and corrections.

Conclusion

This paper has examined sentencing and corrections in the United States over the past 30 years: the goals, the policies, and the effects of the policies. As we enter the 21st century, it is time to reflect on

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the goals of sentencing and corrections. What are they? Have we achieved them? What can we do to achieve them? It is perhaps most important to ask what society expects from corrections. Are those expectations reasonable? If not, can we educate the public to understand the challenges of sentencing and corrections? If they do not, how will we go about meeting their expectations?

Notes

1. Blumstein, A., and A.J. Beck, "Population Growth in U.S. Prisons, 1980–1996," in *Prisons*, ed. M. Tonry and J. Petersilia, Chicago: University of Chicago Press, 1999.

2. State and Federal prisons housed more than two-thirds of the incarcerated population. Jails, which are locally operated and typically hold persons awaiting trial and those with sentences of 1 year or less, held the remainder.

3. Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics, 1998,* Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, October 1999, NCJ 176356.

4. Probationers include adult offenders whom the courts place in community supervision instead of incarceration; parolees include adults conditionally released to community supervision by parole boards or who receive mandatory conditional release after incarceration.

5. Bonczar, T.P., and L.E. Glaze, *Probation and Parole in the United States, 1998*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1999, NCJ 178234.

6. Ibid.

7. Ibid.

8. Ibid.

9. Beck, A.J., *Prisoners in 1999,* Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 2000, NCJ 183476; Beck, A.J., and D.K. Gilliard, *Prisoners in 1994*, Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1995, NCJ 151654.

10. Blumstein and Beck, "Population Growth in U.S. Prisons, 1980–1996."

11. Ibid.

12. Bureau of Justice Statistics, *Correctional Populations in the United States, 1996,* Washington, D.C.: Bureau of Justice Statistics, April 1999, NCJ 170013.

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13. Bureau of Justice Statistics, *Sourcebook, 1998*; dollar comparisons are given in constant dollars.

14. Camp, G.M., and C. Camp, *The Corrections Yearbook 1995: Probation and Parole*, South Salem, NY: Criminal Justice Institute, 1995.

15. Stephan, J.J., *State Prison Expenditures, 1996*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1999, NCJ 172211.

16. Ibid.

17. Good-time and earned-time are reductions in the length of a prison sentence for satisfactory prison behavior (good-time) or incentives for participation in work or educational programs (earned-time).

18. Parole boards, in various forms, have the responsibility to set conditions of release for offenders under conditional or supervised release, the authority to return an offender to prison for violating the conditions of parole or supervised release, and the power to grant parole for medical reasons.

19. Rothman, D.J., *Conscience and Convenience: The Asylum and Its Alternatives in Progressive America,* Boston: Little, Brown, 1980.

20. Arthur D. Little, Inc., Preliminary Report to the President's Commission on Law Enforcement and Administration of Justice Precedent to Drugs and Narcotics Report, Cambridge, MA: Arthur D. Little, Inc., 1967: 166–169.

21. Ibid., 170–174.

22. Martinson, R., "What Works? Questions and Answers About Prison Reform," *Public Interest* 35 (2) (1974): 22–54; Lipton, D., R. Martinson, and J. Wilks, *The Effectiveness of Correctional Treatment: A Survey of Correctional Treatment Evaluations*, New York: Praeger, 1975.

23. Martinson, R., "What Works?", 25

24. Sechrest, L., S. White, and E. Brown, *The Rehabilitation of Criminal Offenders: Problems and Prospects,* Washington, D.C.: National Academy of Science, 1979.

25. Cullen, F.T., and P. Gendreau, "Assessing Correctional Rehabilitation: Policy, Practice, and Prospects," in *Criminal Justice 2000: Vol. 3, Policies, Processes, and Decisions of the Criminal Justice System*, ed. J. Horney, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 2000, NCJ 182410.

26. American Friends Service Committee, *Struggle For Justice,* New York: Hill and Wang, 1971; Von Hirsch, A., *Doing Justice*, New York: Hill and Wang, 1976.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

27. Zimring, F.E., and G. Hawkins, *Incapacitation: Penal Confinement and the Restraint of Crime*, New York: Oxford University Press, 1995.

28. Wolfgang, M.E., R.M. Figlio, and T. Sellin, *Delinquency in a Birth Cohort*, Chicago: University of Chicago Press, 1972.

29. See section on examining the effectiveness of incapacitation and deterrence for a discussion of the difficulties of identifying these career criminals.

30. Zedlewski, E.W., *Making Confinement Decisions*, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 1987, NCJ 105834.

31. Habitual offender laws had been enacted by many States in the 1960s; they became popular again during this time.

32. Morris, N., and M. Tonry, *Between Prison and Probation: Intermediate Punishments in a Rational Sentencing System*, New York: Oxford University Press, 1990; Tonry, M., "Intermediate Sanctions," in *The Handbook of Crime and Punishment*, ed. M. Tonry, New York: Oxford University Press, 1998.

33. Ditton, P.M., and D.J. Wilson, *Truth in Sentencing in State Prisons*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1999, NCJ 170032.

34. Ibid.

35. Index crimes are the crimes used by the FBI in the Uniform Crime Reports (UCR) as indices for recording changes in crime rates over time and consist of violent crime index offenses (murder, forcible rape, robbery, and aggravated assault) and property crime index offenses (burglary, larceny-theft, motor vehicle theft, and arson).

36. Tonry, M., "Introduction: Crime and Punishment in America," in *The Handbook of Crime and Punishment*, ed. M. Tonry, New York: Oxford University Press, 1998.

37. Blumstein, A., and A.J. Beck, "Population Growth in U.S. Prisons, 1980–1996," in *Prisons*, ed. M. Tonry and J. Petersilia, Chicago: University of Chicago Press, 1999.

38. To investigate this, index offenses known to the police were used because drug offenses are not one of the index crimes and their research could not determine if drug offenses had increased during this time.

39. Bonczar and Glaze, *Probation and Parole in the United States, 1998*.

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40. Many of those who have violated parole have been rearrested for a new crime; therefore, these are not just technical violations of conditions of parole.

41. Bonczar and Glaze, *Probation and Parole in the United States, 1998.*

42. Although discretionary release from prison by a parole board has been eliminated by these States, postrelease supervision still exists and is generally referred to as "community" or "supervised" release.

43. Clark, J., J. Austin, and D.A. Henry, *"Three Strikes and You're Out": A Review of State Legislation*, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 1997, NCJ 165369.

44. Ibid.

45. Ditton and Wilson, *Truth In Sentencing in State Prisons.*

46. Ibid.

47. Zimring, F.E., "The New Politics of Criminal Justice: Of Three Strikes, Truth-in-Sentencing and Megan's Law," paper presented to the Perspectives on Crime and Justice: 1999–2000 lecture series, National Institute of Justice, Washington, D.C., 2000.

48. Ibid.

49. Ibid.; Tonry, M., and J. Petersilia, eds., *Prisons*, Chicago: University of Chicago Press, 1999.

50. Reitz, K.R., "Sentencing," in *Handbook of Crime and Punishment*, ed. M. Tonry, New York: Oxford University Press, 1998.

51. Beck, A.J., and C.J. Mumola, *Prisoners in 1998*, Bulletin, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, August 1999, NCJ 175687; Stephan, J.J., *Census of State and Federal Correctional Facilities, 1995*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1997, NCJ 164266.

52. Maruschak, L.M., *HIV in Prisons 1997,* Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1999, NCJ 178284.

53. Lurigio, A.J., and J.A. Swartz, "Changing the Contours of the Criminal Justice System to Meet the Needs of Persons with Serious Mental Illness." in *Criminal Justice 2000: Vol. 3, Policies, Processes, and Decisions of the Criminal Justice System*, ed. J. Horney, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 2000, NCJ 182410.

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54. Blumstein, A., J. Cohen, and D. Nagin, eds., *Deterrence and Incapacitation,* report of the National Academy of Sciences Panel on Research on Deterrent and Incapacitative Effects, Washington, D.C.: National Academy Press, 1978.

55. Blumstein, A., J. Cohen, J. Roth, and C. Visher, eds., *Criminal Careers and "Career Criminals,"* Report of the National Academy of Sciences Panel on Research on Criminal Careers, Washington, D.C.: National Academy Press, 1986.

56. Reiss, A., and J. Roth, *Understanding and Control of Violence,* report of the National Academy of Sciences Panel on Research on Criminal Careers, Washington, D.C.: National Academy Press, 1993.

57. It should be noted that this research makes use of complex statistical models with reasonable estimates of the relevant factors completed by a respected group of researchers. Although there is still debate about the estimates used in the statistical models, it is important to distinguish these predictions from unscientific estimates given in some policy debates. For example, Zimring and Hawkins (see note 27) describe one unscientific estimate that would have produced a $300 billion savings in the cost of crimes prevented; as noted by Zimring and Hawkins, this unreasonable estimate was greater than the Federal deficit or the national defense budget.

58. Zedlewski, E.W., *Making Confinement Decisions.*

59. MacKenzie, D.L., K. Browning, and S. Skroban, et al., "The Impact of Probation on the Criminal Activities of Offenders," *Journal of Research in Crime and Delinquency* 36 (4) (1999).

60. MacKenzie, D.L., "Criminal Justice and Crime Prevention," in *Preventing Crime: What Works, What Doesn't, What's Promising: A Report to the United States Congress,* ed. L.W. Sherman, D. Gottfredson, D. Mackenzie, et al., Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 1997, NCJ 165366.

61. MacKenzie, D.L., and C. Souryal, *A "Machiavellian" Perspective on the Development of Boot Camp Prisons: A Debate,* University of Chicago Roundtable, Chicago: University of Chicago Press, 1995.

62. Andrews, D.A., and J. Bonta, *The Psychology of Criminal Conduct,* Cincinnati: Anderson Publishing Company, 1998.

63. Cullen, F.T., and P. Gendreau, "Assessing Correctional Rehabilitation."

64. Andrews, D.A., I. Zinger, and R.D. Hoge, et al., "Does Correctional Treatment Work? A Psychologically Informed Meta-analysis," *Criminology* 28 (1990): 369–404; Lipton, D.S., and F.S. Pearson, *What Works in Correctional Intervention? The CDATE Project*, unpublished manuscript, New York: National Development and Research Institutes, 1996; M. Lipsey, "Juvenile Delinquency

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Treatment: A Meta-analytic Inquiry into the Variability of Effects," in *Meta-Analysis for Explanation: A Casebook,* ed. T.D. Cook, H. Cooper, and D.S. Cordray, et al., New York: Russell Sage Foundation, 1992.

65. Sherman, L.W., D. Gottfredson, D. Mackenzie, et al., *Preventing Crime: What Works, What Doesn't, What's Promising: A Report to the United States Congress.* Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 1997, NCJ 165366.

66. MacKenzie, D.L., "Criminal Justice and Crime Prevention"; MacKenzie, D.L., and L. Hickman, *What Works in Corrections?,* unpublished report to the State of Washington Legislature Joint Audit and Review Committee, 1998; MacKenzie, D.L., "Evidence-based Corrections," *Crime and Delinquency* 46 (4) (2000): 457–471.

67. For a discussion of MRT, see Finn, P., *The Delaware Department of Correction Life Skills Program*, Program Focus, Washington, D.C., U.S. Department of Justice, National Institute of Justice, August 1998, NCJ 169589.

68. Feeley, M.M., and J. Simon, "The New Penology: Notes on the Emerging Strategy of Corrections and Its Implications," *Criminology* 30 (4) (1992): 449–475.

69. *The Challenge of Crime in a Free Society,* Washington, D.C.: President's Commission on Law Enforcement and Administration of Justice in the United States, 1967.

70. Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics, 1998.*

71. Beck, *Prisoners in 1999.*

72. Most of this discussion refers to African-Americans, not Hispanics, because only recently have statistics been reported for Hispanics. However, many of the problems discussed for African-Americans appear to also affect Hispanics.

73. Tonry, M., *Malign Neglect—Race, Crime and Punishment in America*, New York: Oxford University Press, 1995.

74. Lynch, J.P., and W.J. Sabol, "Prison Use and Social Control," in *Criminal Justice 2000: Vol. 3, Policies, Processes, and Decisions of the Criminal Justice System*, ed. J. Horney, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 2000, NCJ 182410; Rose, D.R., and T.R. Clear, "Incarceration, Social Capital, and Crime: Implications for Social Disorganization Theory," *Criminology* 36 (3) (1998): 441–479.

75. Wilson, W.J., *When Work Disappears*, New York: Knopf, 1996.

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76. Bazemore, G., "Community Justice and a Vision of Collective Efficacy: The Case of Restorative Conferencing," in *Criminal Justice 2000: Vol. 3, Policies, Processes, and Decisions of the Criminal Justice System*, ed. J. Horney, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 2000, NCJ 182410; Braithwaite, J., "Restorative Justice," in *The Handbook of Crime & Punishment*, ed. M. Tonry, New York: Oxford University Press, 1998; Kurki, L., *Incorporating Restorative and Community Justice Into American Sentencing and Corrections*, Research in Brief, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, September 1999, NCJ 175723.

77. Beck, *Prisoners in 1999.*

78. Beck, A., and B. Shipley, *Recidivism of Prisoners Released in 1983,* Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 1989, NCJ 116261.

79. Petersilia, J., "Probation and Parole," in *Handbook of Crime and Punishment*, ed. M. Tonry, New York: Oxford University Press, 1998.

80. Fabela, T., "Technocorrections," in *Sentencing and Corrections for the 21st Century, Papers From the Executive Sessions on Sentencing and Corrections*, Volume 5, Washington, D.C: U.S. Department of Justice, National Institute of Justice, May 2000, NCJ 181411.

81. MacKenzie, D.L., "Using Science and the U.S. Land-Grant University System to Attack This Nation's Crime Problem," *The Criminologist* 23 (2) (1998): 1–4.

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U.S. Department of Justice
Office of Justice Programs
National Institute of Justice

National Institute of Justice

Research in Brief

August 2001

Issues and Findings

Discussed in this Brief: A comparison of 27 boot camps to 22 more traditional facilities by measuring components of the institutional environment to determine the impact of juvenile correctional institutions and programs.

Key issues: Despite their growth in popularity in the 1990s, correctional boot camps remain controversial. Critics question whether their military-style methods are appropriate to managing and treating juvenile delinquents and positively affecting juvenile behavior while they are confined and after their release. Boot camp advocates contend that the facilities' program structure gives staff more control over the participants and provides the juveniles with a safer environment than traditional facilities.

Key findings: Using site visits, 14-point scale surveys of juveniles and staff in both types of facilities, and structured interviews with facility administrators, this study revealed:

- Juveniles in boot camps more frequently reported positive responses to their institutional environment. Boot camp juveniles said they were better prepared for release, were given more therapeutic programming, had more structure and control, and were more active than comparison facility youths. The one exception was that boot camp youths were

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A National Study Comparing the Environments of Boot Camps With Traditional Facilities for Juvenile Offenders

By Doris Layton MacKenzie, Angela R. Gover, Gaylene Styve Armstrong, and Ojmarrh Mitchell

During the 1990s, correctional boot camps became an increasingly popular sentencing option for juvenile delinquents. In 1996, 48 residential boot camps for adjudicated juveniles were operating in 27 States. Only one of those boot camps opened prior to 1990.

Boot camp programs are modeled after military basic training. Offenders often enter the programs in groups that are referred to as platoons or squads. They are required to wear military-style uniforms, march to and from activities, and respond rapidly to the commands of the "drill instructors." The rigorous daily schedule requires youths to wake up early and stay active throughout the day. Although programs differ somewhat, the schedule usually includes drill and ceremony practice, strenuous physical fitness activities, and challenge programs (e.g., ropes courses) as well as required academic education. Frequently, youths in the camps receive summary punishments, such as having to do pushups, for misbehavior.

Pros and cons of boot camps

Despite their growing popularity, correctional boot camps are controversial. The controversy primarily is over whether the camps are an appropriate way to manage and treat juvenile delinquents and what impact the camps have on the adjustment and behavior of juveniles while they are confined and after they are released. Many people who visit or work in boot camps, as well as many youths in the camps, say the camp atmosphere is conducive to positive growth and change. Proponents of the camps believe that the structure of the programs and the control staff have over the participants create a safe environment in which the youths are less likely to fight with or be victimized by other youths than they would be in traditional correctional facilities. Furthermore, advocates argue that the incorporation of the military model builds camaraderie among youths and fosters respect for staff.

In contrast, boot camp critics say that the camps' confrontational environment is in direct opposition to the type of positive interpersonal relationships and supportive atmosphere that are needed for youths' positive development. From their perspective, the boot camp environment is antithetical to quality therapeutic programming. The boot camp atmosphere itself—strict control over juveniles' activities and confrontational interactions between drill instructors and

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Issues and Findings

...continued

more likely to report that they were in danger from staff.

- Staff in boot camps more frequently reported favorable perceptions of their institutional environments, such as a caring and just environment and more structure and control compared with traditional facility staff. Additionally, boot camp staff more frequently reported favorable working conditions, such as less personal stress and better communication among staff.

- Overall, juvenile and staff perceptions of the institutions' environments were similar. The five juvenile and staff scales with the highest correlations were environmental danger, resident danger, care, quality of life, and control.

- Initial levels of anxiety were slightly higher for boot camp youths; initial levels of depression were higher for comparison facility juveniles. Anxiety and depression decreased over time for juveniles in both facilities. Juveniles in both types of facilities experienced a decrease in their social bonds with family, school, and work while they were institutionalized. These changes, however, were statistically insignificant.

- In general, boot camps were more selective about the juveniles admitted to the facility. Boot camps admitted fewer juveniles who had psychological problems or were suicide risks, and they required psychological, medical, and physical evaluations before allowing juveniles to enter. In 25 percent of the boot camps, juveniles had to volunteer for the program.

Target audience: Correctional policymakers and practitioners.

youths—may cause juveniles to fear the correctional staff, which would create a negative environment for therapy and educational achievement.

Furthermore, critics argue, the camps' emphasis on group activities does not allow programs to address individual youths' problems. According to critics, juveniles' needs vary greatly, and effective programs should assess each individual's needs and provide appropriate individual programming. Many boot camps, however, manage juveniles in units or platoons. Youths enter the facility in a unit and remain with that unit for educational classes and treatment programs. Moreover, the military philosophy and highly structured daily schedule may not permit the flexibility needed to address individual problems.

Certain components of boot camps are also suspected of making it more difficult for juveniles to make the transition back to the community. Most delinquents will return to the community after being institutionalized for a relatively short time. For juveniles to succeed in the community, they need to receive help while they are institutionalized. Critics are concerned that boot camps, with their focus on group activities, regimentation, and military drill and ceremony, will not address what juveniles need to successfully make the transition back to the community. When returning to an environment that lacks such regimentation and positive group activities, the juveniles may revert to their old ways of surviving in and relating to the community in which they live.

Another problem critics find with group orientation is that it may cause youths to view the system as unjust. For example, juveniles may think the program is unfair or abusive if their entire platoon is punished because one member of the group misbehaved or because of the controversial nature of the interactions between themselves and drill instructors.

What research shows. Although the boot camp environment appears to be radically different from that of traditional residential facilities and some fear its potentially negative impact, studies have not shown that either type of facility is more effective in reducing recidivism. In general, no significant differences have been found for either adults or juveniles when recidivism rates of boot camp participants have been compared with others receiving more traditional correctional options.[1]

In recent years, the importance of understanding the institutional environment or conditions of confinement has become a focus of attention in corrections. One reason for this interest is that research has shown that the prison environment has an impact on inmate adjustment and behavior. Facilities "possess unique and enduring characteristics that impinge on and shape individual behavior."[2] Because increasing numbers of juveniles are being confined in institutions, it is important to understand the effect this confinement is having on juveniles' behavior while they are confined and after they are released.

Furthermore, considerable research shows that correctional treatment programs can successfully change behavior. Results from meta-analyses, literature reviews, and assessments of the quality of the research on the effects of treatment show that treatment programs with particular characteristics are successful in reducing future delinquent and criminal activities.[3] Effective programs target offenders who are at risk of recidivism, are modeled after cognitive-behavior theoretical models and are sensitive to juveniles' learning styles and characteristics, and address the characteristics of youths directly associated with criminal activity. Youths should receive sufficient dosage of treatment (e.g., amount of contact, length of program), and the

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Treatment should have therapeutic integrity (e.g., appropriately trained staff). From this perspective, measuring the conditions of confinement becomes important to understanding which program components are necessary for effective treatment.

Focus on outcomes. Another justification for the interest in the conditions of confinement in juvenile institutions is the recent attention given to quality management and performance-based standards. Quality management has played an important role in the restructuring of private organizations and corporations, and these concepts are currently being applied to public agencies.[4] Quality management focuses on outcome-based decisionmaking. Traditionally, standards for correctional institutions have been based on expert opinions about "best practices" in the field of corrections. Total quality management and performance-based standards change the focus from views on best practices to desired outcomes. From this perspective, the focus shifts from what is thought to be the best way to manage a facility to the actual outcomes desired. Broadly defined, outcomes include client and staff

Methodology

In 1996, the researchers surveyed juvenile correctional agencies and identified 48 boot camps in operation; another 2 jurisdictions were developing boot camp programs. Two programs were eliminated because they were nonresidential facilities. Of the remaining 46 programs, 27 in 20 States participated in the study. Although it was not possible to compare program aspects of those that were not in the study with those that were, the participating programs were geographically representative of the United States.

A matched comparison facility in the same State was identified for each participating boot camp. Each comparison facility was selected in consultation with the agency responsible for and/or the administrator of the boot camp. The comparison facility was selected as the most likely facility to which juveniles would have been sent had they not gone to boot camp. Comparison facilities were traditional institutions such as training schools and detention centers. For the study, 22 traditional institutions were compared with 27 boot camps.*

The 49 participating correctional facilities were visited between April 1997 and August 1998. During the site visits, 4,121 juveniles and 1,362 staff were surveyed. Structured interviews also were conducted with facility administrators to obtain data from institutional records and information on policies and procedures.

The juvenile survey contained 266 questions about demographic information, previous criminal history, attitudes, and experiences in the facility. The survey was administered in group settings of 15 to 20 juveniles. The informed consent and all items on the survey were videotaped and played on a VCR to reduce the amount of reading required of the youths.

The 216-item staff survey asked respondents to describe their demographic, background, and occupational characteristics. Both the juvenile and staff surveys included a series of items about perceptions of the facility's environmental conditions. Staff were asked additional questions about working conditions. Both surveys included items presented as statements (e.g., staff treat residents fairly; punishments given are fair), to which respondents answered according to a five-point scale ranging from "never" to "always."

The structured interviews with facility administrators consisted of 244 questions. Information was obtained about the facilities' policies and procedures, population characteristics, screening and admission criteria, the emphasis placed on programming components, staff and education issues, and visitation. The survey also requested statistical information from institutional records.

Fourteen scales were formed using factor analyses: control, resident danger, staff danger, environmental danger, activity, care, risks to residents, quality of life, structure, justice, freedom, therapeutic programming, preparation for release, and individual planning (see "Perceptual Environmental Conditions Scales" for scale descriptions). These scales were used to measure how staff and juveniles viewed the environment of the facility in which they lived or worked.

Across all facilities, juvenile and staff perceptions of the environments in boot camps were compared with perceptions of those in the comparison facilities using analysis-of-variance models. Overall differences between juveniles in the boot camps and those in the comparison facilities were compared on the 14 environmental scales. Similarly, boot camp staff perceptions were compared with traditional facility staff perceptions. Demographics (e.g., age, race/ethnicity, sex) were used as controls.

* The number of boot camps exceeded the number of traditional facilities because two boot camps participated in one State, but there were no comparison sites for these facilities. One comparison site and two boot camps were selected in three other States.

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experiences, short-term changes, and long-term impacts.

In trying to understand the impact of correctional institutions and programs, many researchers have argued that outcomes must be broadened for various measures of effectiveness. The focus of the study described here was to compare boot camps with more traditional facilities by measuring conditions of the institutional environment (see "Methodology"). The environments of the institutions were measured from several perspectives: the perceptions of staff and juveniles, data in institutional records, and the policies and procedures (as reported by administrators). To examine the impact of the environment on juvenile offenders, changes experienced by juveniles while confined were studied. Changes in juveniles' attitudes, stress levels, and social bonds (ties to family, school, and work) were expected to reflect their responses to the institutional environment and to be associated with future criminal behavior.

Juvenile perceptions of the institutional environment[5]

Demographics. The majority of the juveniles participating in the study in both facility types were black or white males who were approximately 16 years old. On average, these youths were 13 years old when they were arrested for the first time and had previously been committed to institutions 2.5 to 3 times. On average, juveniles in the boot camps had shorter sentence lengths than juveniles in comparison facilities (10 months compared with 16 months). They also had spent less time in the facility (3 months compared with 7 months). Juveniles in boot camps were significantly less likely than youths in traditional facilities to

Perceptual Environmental Conditions Scales

Control: Do staff have control over the residents? Do residents do what staff tell them? Do residents escape? Do residents have drugs or weapons?

Resident danger: Do residents worry about being hit or punched by other residents? Are they afraid of other residents? Are residents mean to one another? Do they fight? Do residents get sexually attacked?

Staff danger (juvenile perspective): Are residents afraid of staff? Do staff grab, push, or shove residents? Are staff mean to residents?

Staff danger (staff perspective): Are residents mean to staff? Are staff in danger of being hit or punched by residents? Do residents grab, push, or shove staff?

Environmental danger: Do staff protect residents? Is residents' property safe? Are gangs in the institution? Do staff catch and punish troublemakers? Are there enough staff to keep residents safe? Do staff prevent violence and forced sex among residents?

Activity: Do residents have activities to keep them busy? Do they spend time on school work? Are they busy at night? Do they plan what they will do when they leave? Do they exercise? Do they have activities when they are not in school?

Care: Do staff encourage residents to try new activities? Do staff help residents with school work after class? Do staff tease residents? Do they help residents with personal problems? Is the health care good? Are residents friendly? Will someone help if a resident has a problem? Do staff care about residents?

Risk to residents: Are insects, rodents, or dirt a problem? Is there a bad odor or poor air circulation? Do residents know what to do in case of fire? Do many accidents happen? Are the jobs safe?

Quality of life: Do residents exercise? Is it noisy? Is there a lot of space in the living area? Do residents have privacy in the shower and toilet? Is the food good? Do residents get enough to eat? Is the visiting area crowded?

Structure: Do residents follow a set schedule? Do they study at certain times? Do they know what will happen if they break a rule? Are they messy? Do staff change their minds about rules?

Justice: Are residents punished even when they do not do anything wrong? Do staff use force? Can residents file a grievance against staff? Are residents aware of the grievance process? Can staff and residents work out problems? Will something bad happen if a resident files a grievance? Do residents deserve the punishments they receive? Are punishments fair?

Freedom: Do residents have to work when they do not want to? Can they choose the type of work? Can they read or listen to music whenever they want? Are they encouraged to make decisions?

Therapeutic programming: Will the programs help residents find a job, understand themselves, keep focused on their goals, learn new skills, and/or return to school? Does the substance abuse treatment help residents? Are religious services offered? Do residents receive individual attention? Are they healthier since coming to the facility?

Preparation for release: Are residents encouraged to plan for release? Have they made plans to find a job, return to school, get drug treatment, and find a place to work? Do they set goals for the future?

Individual planning (staff only): Do residents have individual meetings with staff? Do they get help with their problems? Do they receive individual counseling?

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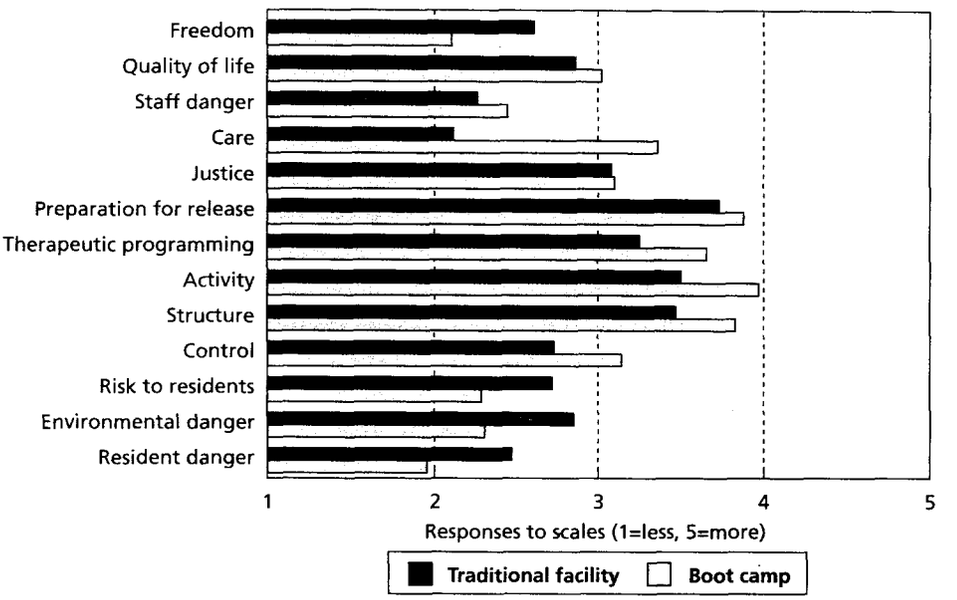
have experienced family violence and to have used illegal substances. Juveniles in boot camps, however, were significantly more likely than juveniles in traditional facilities to have problems with alcohol abuse.

Perceptions of the institutional environment. Juveniles in boot camps responded favorably to their institutional environments more frequently than juveniles in comparison facilities (see exhibit 1). Across all sites, juveniles in boot camps more frequently responded positively to their institutional environment, with the exception of safety from staff. Specifically, boot camp juveniles were more likely to report that they were in danger from staff. Juveniles in the boot camps reported more frequently that their environments prepared them for release, provided therapeutic programming, had structure and control, and kept them active. On average, juveniles in boot camps reported less environmental danger, less danger from other residents, and fewer environmental risks than juveniles in comparison facilities. Juveniles in boot camps reported less freedom.

Exhibit 1. ***Boot camp and traditional facility youths' perceptions of their environment***



Note: Each scale shows a significant difference between boot camp juveniles and traditional facility juveniles. Compared with juveniles in traditional facilities, juveniles in almost all the boot camps (90 to 100 percent) viewed their facilities as having better environments for preparing them for release and better therapeutic programming; being more active, more structured, and more controlled; and posing less danger from other residents, less danger from the environment, and fewer risks. Compared with juveniles in traditional facilities, juveniles in most of the boot camps (68 to 81 percent) reported their facilities as posing more danger from staff, being more caring, and having better quality of life and more justice.

Staff perceptions of the institutional environment[6]

Demographics. The majority of the staff in both facility types were male and white. Boot camp staff were an average age of 36; comparison facility staff were slightly older, on average, at 39 years old. Most boot camp (85 percent) and comparison (85 percent) staff had attended or graduated from college. More boot camp staff had military experience (49 percent compared with 29 percent of the comparison facility staff).

Perceptions of the institutional environment. As in the juvenile survey, staff in boot camps more frequently reported favorable perceptions of their institutional environment than traditional facility staff (see exhibit 2). Boot camp staff more frequently reported that juveniles were given more therapeutic programming and experienced a caring and just environment compared with reports of traditional facility staff. Boot camp staff also were more likely than staff in traditional facilities to say the juveniles were more active, and the camps had more structure and control and less freedom. Conversely, boot camp staff reported less frequently than traditional facility staff that there was danger to juveniles from the environment and other risks, from other juveniles, and from staff. Less consistent differences were found for the remaining three scales (quality of life, preparation for release, and individual planning).

Work experiences. In comparison to staff in traditional facilities, boot camp staff also more frequently reported favorable working conditions (see exhibit 3). They reported less personal stress, better communication among staff, more support from the administration, and, in general, more satisfaction with their working conditions.

Comparison of staff and juvenile perceptions

One interest of this research project was to find out whether juveniles and staff had the same perceptions of the particular facility in which they were

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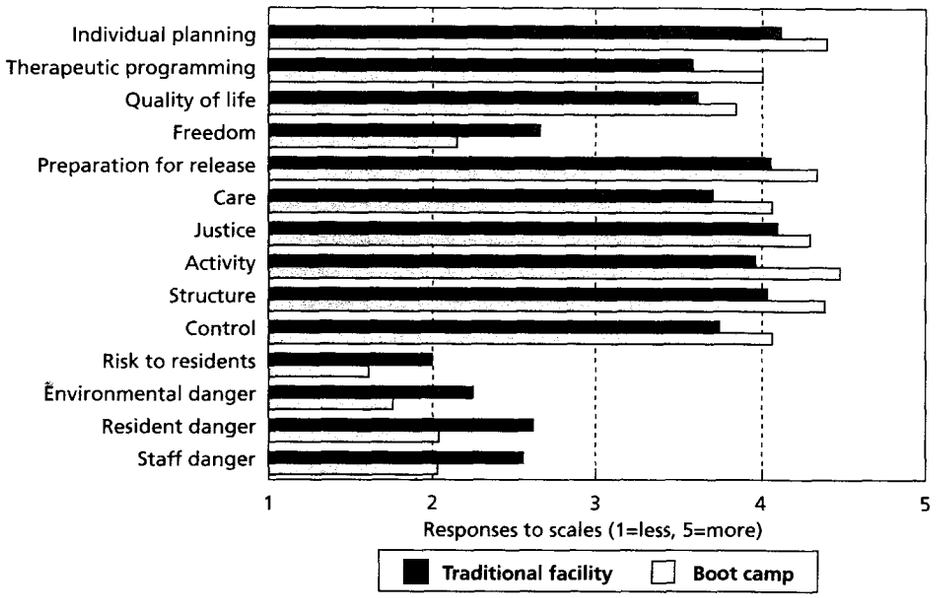
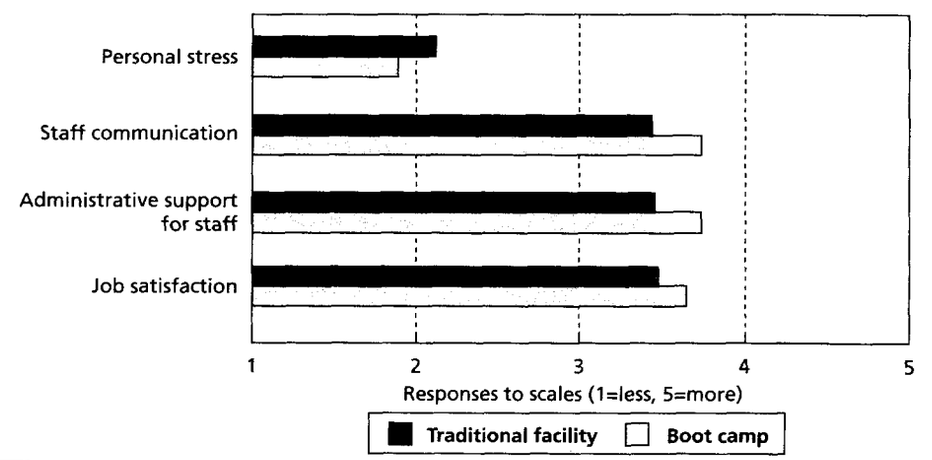
Exhibit 2. ***Boot camp and traditional facility staff perceptions of their environment***



Note: Each scale shows a significant difference between boot camp staff and traditional facility staff. Compared with staff in traditional facilities, staff in almost all the boot camps (85 to 100 percent) viewed their facilities as being more caring, more active, more structured, and more controlled; having more justice, less freedom, and better therapeutic programming; and posing less danger from residents, less danger to staff, fewer environmental dangers, and fewer risks. Compared with staff in traditional facilities, staff in most of the boot camps (75 to 85 percent) reported their facilities as having better preparation for release and better quality of life and providing more individualized attention to residents.

Exhibit 3. ***Boot camp and traditional facility staff perceptions of working conditions***



Note: Each scale shows a significant difference between boot camp staff and traditional facility staff. Compared with staff in traditional facilities, staff in the boot camps reported less stress, better communication among staff, more support from the administration, and more overall job satisfaction.

confined or worked. Overall, there was strong agreement between juvenile and staff perceptions of the institutions' environments. The five juvenile and staff scales with the highest correlations were environmental danger, resident danger, care, quality of life, and control. For 10 of the scales, the correlations between staff and juveniles' environmental ratings were more than 0.85; the correlations for the remaining two scales were 0.38 (individual planning) and 0.60 (justice).

Individual adjustment and change

The survey was given to 550 youths in the facilities twice to examine changes in adjustment over time. This permitted an examination of the changes youths underwent while they were confined. Anxiety, depression, social bonds, dysfunctional impulsivity, and social adjustment were measured (see exhibit 4). The adjustment and change variables were selected for practical and theoretical reasons.

Critics of boot camps have been particularly concerned about the level of stress created by the strict, military-based, confrontational model. They fear such an atmosphere will create excessive stress and will mitigate any positive effects from academic and therapeutic treatment programs that the camps may offer. Initial levels of anxiety were slightly higher for the boot camp juveniles, but initial levels of depression were higher for the comparison youths. The levels of anxiety and depression decreased over time for juveniles in both facilities; however, these reductions were greater for the boot camp youths.

Social bonds have been found to be associated with reductions in criminal

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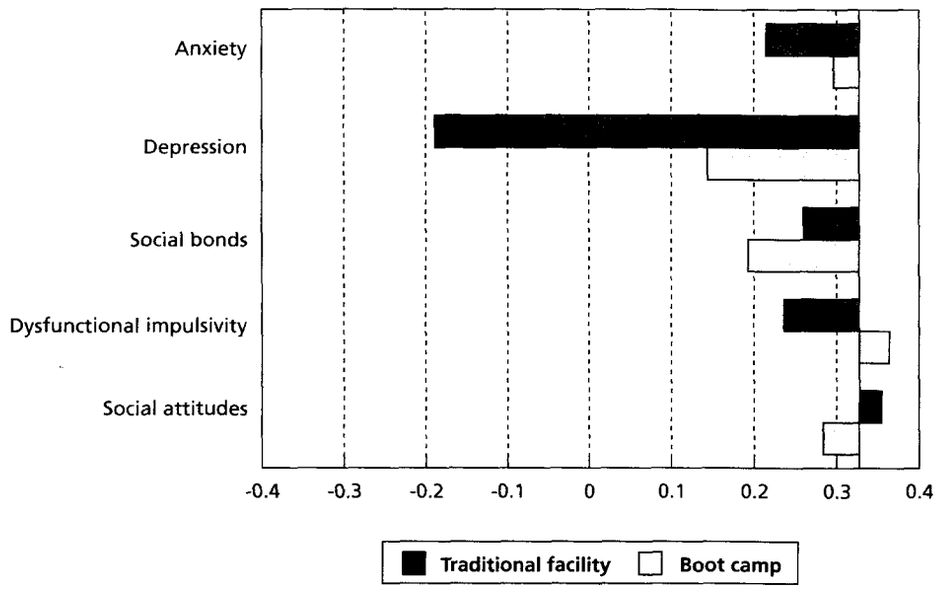
Exhibit 4. ***Changes over time for juveniles in boot camps and traditional facilities***



Note: Juveniles in both types of facilities became less depressed and anxious during their institutionalization. Decreases in depression and anxiety were greater for juveniles in boot camps. Social attitudes of juveniles in both types of facilities changed little. Juveniles in both types of facilities experienced a decrease in their attachment to family, school, and work (bonds). Juveniles in boot camps became less dysfunctionally impulsive.

activity.[7] If juvenile facilities improved such bonds, future criminal activities might be reduced. Disappointingly, juveniles in both types of facilities reported a weakening in their social bonds to family, school, and work while they were institutionalized. These changes, however, were small, and the differences were not statistically significant.

Theoretically, an inability to control one's impulses[8] and antisocial attitudes[9] is associated with delinquent and criminal activities. For this reason, changes in dysfunctional impulsivity (i.e., the inability to control one's impulses) and social attitudes (or, conversely, antisocial attitudes) during the time the youths were in the facility were examined. Juveniles in boot camps reported decreased dysfunctional impulsivity and increased prosocial attitudes (conversely, decreased antisocial attitudes). In contrast, juveniles in the comparison facilities reported more dysfunctional impulsivity and decreases in prosocial attitudes (conversely, increased antisocial attitudes).

Summary of perceptions and change

Overall, these results provided strong evidence that those who lived and worked in boot camps perceived their environment more positively than those who lived and worked in more traditional facilities. On average, both staff and juveniles in boot camps perceived less danger and more components that were conducive to positive change, such as more help in planning for release, more programming in the facility, a more just system, more activity, a more caring environment, and more individual attention. However, juveniles in boot camps more frequently reported perceptions of danger from staff.

Juveniles in both types of facilities became less depressed and anxious over time, but the decreases in depression and anxiety were greater for those in boot camps. Boot camps also appeared to be associated with more positive changes during the time juveniles were confined. Boot camp youths became less antisocial and reported less dysfunctional impulsivity compared with youths in traditional facilities. These changes were small, however, and youths in both facility types reported decreases in ties to family, school, and work. Thus, although youths in boot camps on average had a more positive view of their environments, there was little evidence that these perceptions translated into psychosocial changes that would reduce the likelihood of future delinquent or criminal activities.

Institutional policies and procedures[10]

The structured interview with facility administrators was designed to elicit information about the type of juveniles who enter the facility, the daily schedule, selection and admission procedures, facility characteristics, educational and staff issues, health and medical assistance policies, safety and security issues, and institutional impacts. While perceptions provide important information about the facilities, equally important is information about policies and procedures that might have an impact on those who live and work in the facilities.

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Control and structure. One explanation for juvenile and staff perceptions of a safe environment in boot camps could be a result of the increased structure and control over the juveniles' activities. Administrators were asked a series of questions about how structured juveniles' daily activities were. More boot camps required juveniles to get up, shower, and study according to a set daily schedule (see exhibit 5). Not surprising, boot camps also had more military-style components. Most of these components were indicative of regimentation and structure. For example, in the majority of the boot camp facilities, staff and juveniles wore uniforms, and the youths practiced drill and ceremony, entered the facility in groups, and marched to activities. Thus, the information from the administrators was similar to the perceptions of staff and juveniles in suggesting that boot camps provide much more structure for juveniles than the traditional institutions. These differences may explain why juveniles in boot camps had more favorable perceptions of their institutional environments.

Characteristics of juveniles in the facilities. Another possible explanation for the differences in perceptions is that the juveniles in boot camps differed from those in traditional facilities. Although individual differences were controlled for statistically in the perceptual analyses, there is an inherent selection bias at the administrative level if those who entered boot camps differed from those who went to traditional facilities. This issue was examined by asking how selective facilities were about their populations. In general, boot camps were found to be much more selective (see exhibit 6). Fewer boot camps admitted juveniles who had psychological problems or were suicide risks. More boot camps required psychological, medical, and physical evaluations before juveniles were admitted into the facility. Additionally, more facility personnel in boot camps were able to select juveniles for their program, and in 25 percent of the boot camps, juveniles had to volunteer for the program. None of the traditional facilities required juveniles to volunteer.

The question of whether juveniles with certain past histories or offenses were admitted to the facilities was also examined (see exhibit 7). For example, administrators were asked whether juveniles who committed arson are permitted to enter the facility and, if so, whether the number of such individuals is limited. In general, comparison facilities admitted delinquents who committed more serious offenses.

The examination of the structure and admission components of the facilities suggested that the environments of the two types of facilities differed substantially. One possibility is that these different environments lead to different experiences and, hence, different perceptions of the environment. This investigation of the characteristics of the juveniles in the facilities and the selection process, however, suggests that the differences in perceptions may result from characteristics of the juveniles admitted. From this perspective, juveniles who enter boot camps are different from those who go to the traditional facilities (e.g., less aggressive, fewer psychological problems); therefore, because of this selection process, boot camp juveniles judged their environment more positively.

Therapeutic components. It was somewhat surprising that juveniles and staff perceived the boot camp environment as having more components conducive to rehabilitation. In general, those who lived and worked in boot camps viewed their environment as being more just and

Exhibit 5. ***Structure and military components in juvenile boot camps and traditional facilities***

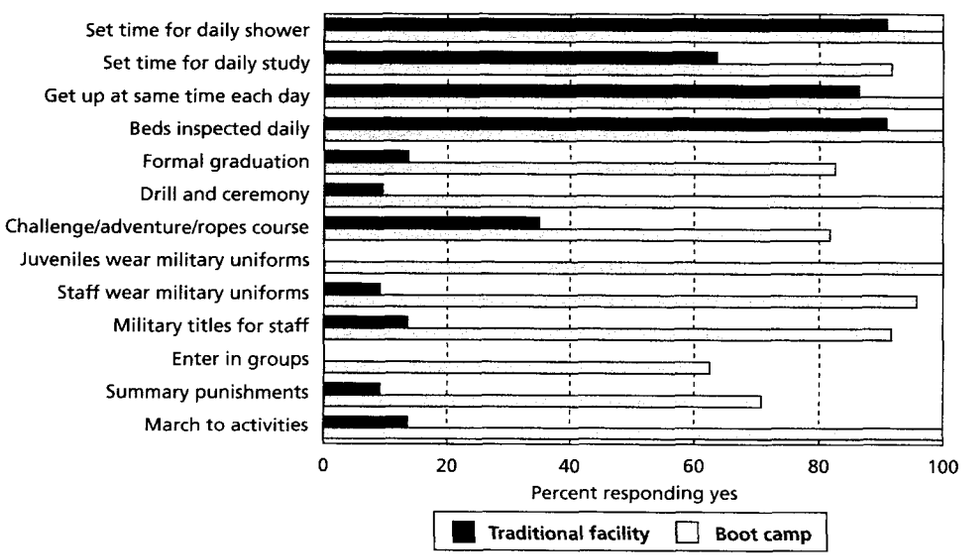

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Exhibit 6. ***Selection criteria used by boot camps and traditional facilities***

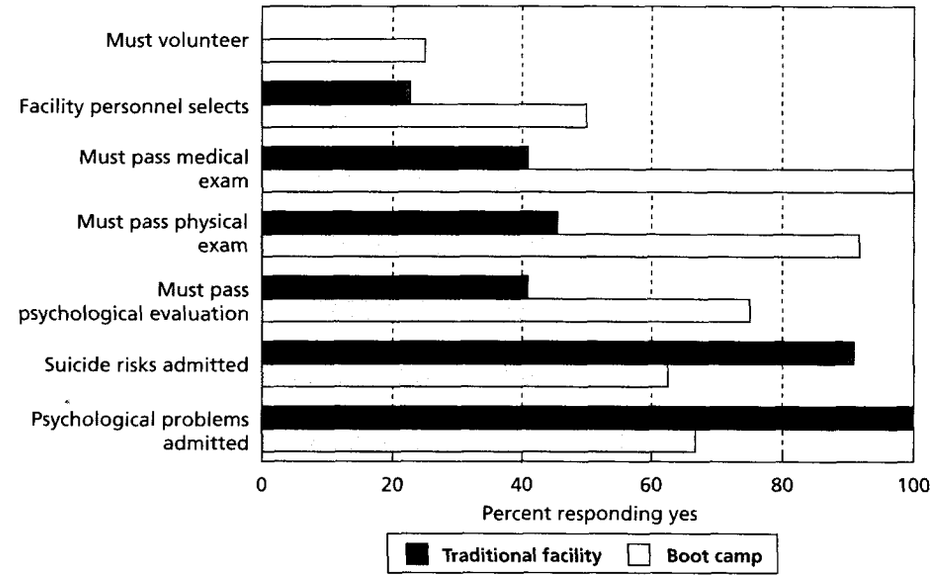
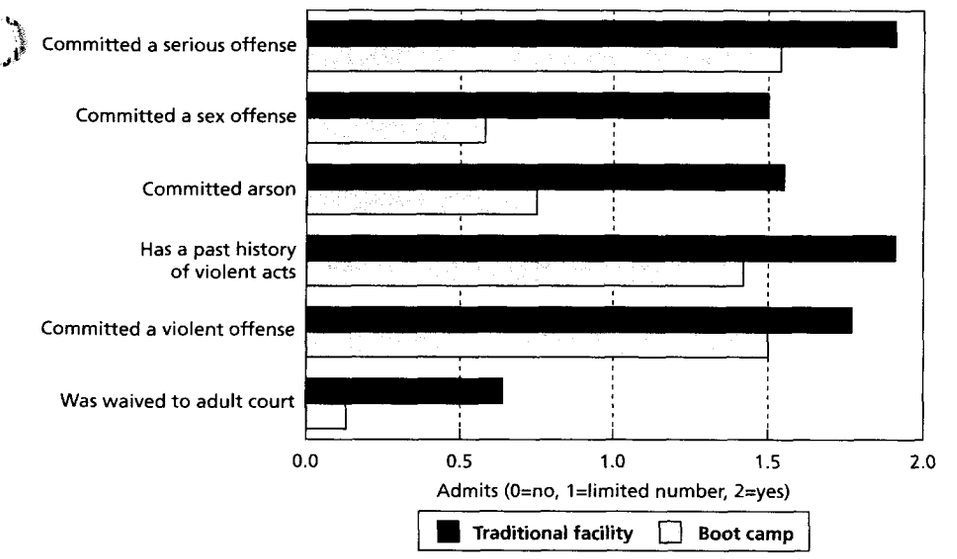


Exhibit 7. ***Admittance criteria of boot camps and traditional facilities***



caring, better preparing juveniles for release, and having more therapeutic programming. Staff in most of the boot camps also believed that their facilities provided more individual planning and therapeutic programming. This research attempted to verify the perceptions by obtaining information about programming, treatment, and the efforts facilities made to help youths maintain outside contacts (see "Differences in Therapeutic Programming and Individual Attention"). However, few differences were found in the average number of hours devoted to education per week.

Differences in Therapeutic Programming and Individual Attention

- On average, boot camps scheduled 25.3 hours of educational classes per week compared with 25.7 hours scheduled in the comparison facilities.
- In boot camps, an average of 25.3 percent of juveniles took a General Educational Development (GED) test in the past year; 42.9 percent of the juveniles in the traditional facilities took a GED test.
- Of those who took a GED test, an average of 78.3 percent passed in the boot camp and 75.2 percent passed in the traditional facilities.
- Juveniles attended classes grouped according to their appropriate grade levels (not with groups, housing units, or platoons) in 54.2 percent of the boot camps and 59.1 percent of the comparisons.
- Boot camps had 10.1 juveniles for every 1 teaching staff; comparison facilities had 6.6 juveniles for each teaching staff member.
- Boot camps had 3.5 juveniles to every 1 custody or treatment staff; comparison facilities had 1.6 juveniles to every custody or treatment staff.
- On average, boot camps scheduled physical fitness activities (including drill and ceremony practice) for 18.8 hours per week compared with 12.3 hours in the comparison facilities.

Fewer boot camp youths took a General Educational Development (GED) test, but overall passing rates for those who did were about the same in both facility types. In 54.2 percent of the

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boot camps, juveniles attended classes with others in their grade levels, compared with 59.1 percent of comparison facilities. Comparison facilities had more teaching staff and more custody and treatment staff per juvenile, making it possible that juveniles in the traditional facilities would receive more individual attention. Boot camp facilities scheduled more physical fitness activities than traditional facilities, but this was not considered as treatment, education, or therapy.

Another project interest was visitation policies, because such activities would permit juveniles to stay in contact with their families. Community contact is important because many juveniles are confined for only a short period of time and will be released to live most likely with their families. Therefore, attempts at successful community reintegration should start while juveniles are confined.[11] Overall, the boot camps permitted less visitation (see "Contact With the Outside"). More than half the camps did not allow visits during the juveniles' first month of confinement, and almost one-fifth did not permit visits at any time. Comparison facilities had fewer restrictions on visitation. Boot camps also were more likely than traditional facilities to require visitors to schedule their visits in advance.

Conclusion

The perceptions of staff and youths provide important insight into the adequacy of these programs as correctional options for juvenile delinquents. This research found that juveniles and staff in the boot camps perceived their environment as more caring than did those living and working in the comparison facilities. These results show that youths in the boot camps were more likely to agree that staff members encourage residents to try new activities and help residents with schoolwork or other problems. Youths and staff also believed that the treatment of residents was more just in the boot camps.

Advantages. Not only did the boot camp youths perceive their facilities as more caring and just, they also believed the programs were more therapeutic and provided them with more preparation for their release. In comparison to those in traditional facilities, youths and staff in boot camps were more likely to agree that juveniles' experiences in the facility would help them get a job, understand themselves, keep them focused on their goals, learn new skills, return to school, and address substance abuse problems. Boot camp staff on average believed that youths got more individual attention, were healthier since entering the facility, and were planning for their release through activities such as finding a place to work, planning to return to school, and setting goals for the future. Another positive aspect of the boot camps was staff perceptions of their working environment. In comparison to staff in traditional facilities, the boot camp staff reported feeling less personal stress, better communication among staff, a more supportive atmosphere for staff, and more satisfaction with their work.

Concerns. The one finding that supports the criticism of boot camps as institutions that offer little to improve interpersonal relationships was the data indicating that youths in the boot camps more frequently reported feelings of being in danger from staff. In contrast, traditional facility youths more frequently reported feelings of danger from other residents.

Contact With the Outside

- Boot camps schedule 4.0 hours per week for visitation; comparison facilities schedule 7.1 hours.
- Fifty-four percent of the boot camps had a "no outside visits" rule during the first month juveniles were in the facility; 14 percent of the comparison facilities had such a policy.
- Seventeen percent of the boot camps had a "no outside visits" rule during the entire time juveniles were in the facility; none of the comparison facilities had such a policy.
- Sixty-seven percent of the boot camp programs required visitors to schedule their visits in advance; only 36 percent of the traditional facilities required this of visitors.
- Juveniles in the boot camps were permitted to make 1.2 phone calls per week on average; juveniles in the comparison facilities could make 1.6 phone calls.

An additional concern raised by critics of boot camps is that the military basic training and confrontational interactions may create undue stress on a vulnerable youth population. The findings from this research suggest that there initially is an increased level of anxiety for youths in boot camps compared with those in traditional institutions. This increased level of anxiety, however, did not appear to be greatly dysfunctional. The juveniles were asked whether they agreed with statements indicating that they feel anxious, worried, upset, nervous, or not relaxed or calm; these questions reflect temporary emotions and not permanent anxiety or other

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dysfunctional traits. Therefore, the increased anxiety for the youths in the boot camps may reflect the difficult early period of adjustment to boot camp.[12] Although the data are not completely comparable to what some boot camp staff refer to as the "break down" and "build the youths up" phases, they suggest some similarities in that the early period in the boot camp may temporarily create more anxiety. Youths, however, do not become more depressed or exhibit permanent psychological dysfunction.

Findings from this study also indicated that in boot camps and traditional facilities, attachments or bonds to family, school, and work decreased for juveniles. This might be expected because youths are removed from their communities, schools, and work opportunities and have limited contact with their families. Boot camp youths, however, reported less dysfunctional impulsivity over time. Youths in the traditional facilities became slightly more impulsive, but the change was small. Similarly, traditional facility youths became less prosocial in attitudes over time, while boot camp youths became more prosocial. Prosocial changes for both boot camp and traditional facility youths, however, were small and statistically insignificant. Given the small changes in attitudes among both boot camp and traditional facility youths, it is not surprising that research to date has found little difference between the recidivism rates for these two groups.

The findings of administrator surveys of facility policies, procedures, and daily schedules were largely consistent with those from the perceptual surveys. Across all survey methods, boot camps were rated higher in institutional environments' structure, control, and "military-ness." Thus, some of the differences in perceptions of safety could be due to the structured nature of the environment. An environment that is structured and controlled by staff may be perceived by juveniles as safer.

Reasons for the differences. However, differences between boot camps and traditional facilities in the juvenile selection process may also help explain why boot camps were perceived as having positive institutional environments. Boot camps, on average, were much more selective about who entered the facility. Therefore, one possible reason for the differences in perceptions may be that boot camp youths have characteristics that make them easier to work with, which can have an impact on all aspects of the institutional environment.

Another possibility is that differences in the facilities' policies, procedures, and daily schedules led to differences in staff and juvenile perceptions. For example, if juveniles in boot camps received more individual attention or spent more time in treatment or educational programs, this may explain the perceptions of boot camps' more therapeutic nature. Yet little measurable differences were found in the facilities' therapeutic atmospheres. The few differences that were found favored the traditional facilities. For example, the traditional facilities had higher teaching-staff-per-juvenile and custody-or-treatment-staff-to-juvenile ratios than the boot camps. The strict rules and regimented environment of the boot camps may mean that fewer staff are needed to control juveniles, but it also may mean that youths have less opportunity to receive individual attention.

Designing better programs. Together, the results from this study suggest that boot camps are successful in the first step—creating a positive environment. However, boot camps appear to lack the necessary focus on incorporating components of effective therapy.[13] As a result, it is not surprising that boot camps have not been effective in reducing recidivism. An additional concern was the finding that boot camp youths more frequently perceived that they were in danger from staff. This is disappointing because so many of the other aspects of boot camps were viewed positively.

Additionally, this study found that few of the boot camps or traditional facilities had information about what happens to youths after they are released. Because the majority of these youths will return to their home communities, it is hard to understand how a facility can design a successful program that does not include gathering information about what happens to youths after they are released. If juvenile correctional programs are expected to have a positive impact on the future lives of these youths, it is important that they have information on what happens to the juveniles after they return to their communities. Otherwise, how else can a program effectively evaluate its performance?

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Notes

1. MacKenzie, D.L. "Criminal Justice and Crime Prevention," in *Preventing Crime: What Works, What Doesn't, What's Promising,* ed. L.W. Sherman, D.C. Gottfredson, D. MacKenzie, J. Eck, P. Reuter, and S. Bushway, Washington, DC: U.S. Department of Justice, National Institute of Justice, 1997, NCJ 165366.

2. Wright, K., and L. Goodstein, "Correctional Environments," in *The American Prison,* ed. L. Goodstein and D.L. MacKenzie, New York: Plenum Press, 1989: 266.

3. Andrews, D.A., I. Zinger, R.D. Hoge, J. Bonta, P. Gendreau, and F.T. Cullen, "Does Correctional Treatment Work? A Clinically Relevant and Psychologically Informed Meta-Analysis," *Criminology* 28 (3) (1990): 369–404; Lipsey, M., "Juvenile Delinquency Treatment: A Meta-Analytic Inquiry Into the Variability of Effects," in *Meta-Analysis for Explanation: A Casebook,* ed. T. Cook et al., New York: Russell Sage Foundation, 1992; and MacKenzie, "Criminal Justice and Crime Prevention."

4. MacKenzie, D.L., G.J. Styve, and A.R. Gover, "Performance-Based Standards for Juvenile Corrections," *Corrections Management Quarterly* 2 (1998): 28–35.

5. For a more detailed discussion, see Styve, G.J., D.L. MacKenzie, A.R. Gover, and O. Mitchell, "Perceived Conditions of Confinement: A National Evaluation of Juvenile Boot Camps and Traditional Facilities," *Law and Human Behavior* 24 (3) (2000): 297–308.

6. For a more detailed discussion, see Mitchell, O., D.L. MacKenzie, A.R. Gover, and G.J. Styve, "The Environment and Working Conditions in Juvenile Boot Camps and Traditional Facilities," *Justice Research and Policy* 1 (2) (1999): 1–22.

7. Sampson, R.J., and J.H. Laub, *Crime in the Making,* Cambridge, MA: Harvard University Press, 1993.

8. Gottfredson, M.R., and T. Hirschi, *A General Theory of Crime,* Stanford, CA: Stanford University Press, 1990.

9. Andrews, D.A., and J. Bonta, *The Psychology of Criminal Conduct,* Cincinnati: Anderson Publishing Co., 1998.

10. Gover, A.R., D.L. MacKenzie, and G.J. Styve, "Boot Camps and Traditional Correctional Facilities for Juveniles: A Comparison of the Participants, Daily Activities, and Environments," *Journal of Criminal Justice* 28 (1) (2000): 53–68.

11. Altschuler, D.M., T.L. Armstrong, and D.L. MacKenzie, *Reintegration, Supervised Release, and Intensive Aftercare,* Bulletin, Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, 1999, NCJ 175715.

12. See Zamble, E., and F.J. Porporino, *Coping, Behavior, and Adaptation in Prison Inmates,* New York: Springer-Verlag, 1988, for a similar comparison to adult prison inmates.

13. See, for example, Lipsey, "Juvenile Delinquency Treatment"; and Andrews et. al, "Does Correctional Treatment Work?"

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BOOT CAMPS AND TRADITIONAL CORRECTIONAL FACILITIES FOR JUVENILES: A COMPARISON OF THE PARTICIPANTS, DAILY ACTIVITIES, AND ENVIRONMENTS*

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FINAL REPORT

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BOOT CAMPS AND TRADITIONAL CORRECTIONAL FACILITIES FOR JUVENILES: A COMPARISON OF THE PARTICIPANTS, DAILY ACTIVITIES, AND ENVIRONMENTS

ABSTRACT

The environments of twenty-seven boot camps and twenty-two traditional facilities were examined in a national study of juvenile correctional facilities. Surveys with administrators and data from institutional files indicated that juveniles in the boot camps had less serious offending histories than did those in traditional facilities. Boot camp environments were more structured and most incorporated military basic training components. There were differences in the use of summary punishments and certain other matters, but few differences were found in therapeutic activities. In general, boot camp juveniles were more active but comparison facilities had more educators and other staff for each juvenile. Juveniles in traditional facilities also had more community contacts. Few institutions had access to any outcome information to tell them how and what the juveniles did after release. The potential impact of these differences on the future behavior of juveniles is discussed.

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INTRODUCTION

Boot camps have been a controversial correctional option since they were first developed for adults in 1983 (MacKenzie and Souryal, 1995b; MacKenzie and Parent, 1992; Meachum 1990; Morash and Rucker, 1990). Despite the controversy, boot camps have become a popular and rapidly growing option for delinquents. Even so, concerns have been raised regarding the boot camp environment as to its overall conduciveness to rehabilitation, the ability to provide individualized programming, the lack of aftercare, and the potential for net-widening (Morash and Rucker, 1990; MacKenzie and Parent, 1992; MacKenzie and Piquero, 1994; Castellano and Plant, 1996; Peters, Thomas, and Zamberlan, 1997). Most boot camp research describes individual programs or compares recidivism rates of adult boot camp completers to comparison groups (MacKenzie and Shaw, 1993; MacKenzie and Souryal, 1995a; MacKenzie et al., 1995; MacKenzie and Hebert, 1996; MacKenzie, 1997). Little research is available to tell us how juveniles in the boot camps differ from those in traditional facilities, or how the environment and daily activities in the camps compare to those of more traditional facilities. This paper reviews the controversy surrounding boot camps, examines differences between twenty-seven boot camps and twenty-two comparison facilities, and identifies how the populations, selection process, environments, and daily activities differ within these two types of institutions.

CONTROVERSIAL ISSUES SURROUNDING BOOT CAMP PROGRAMS

Boot camps are controversial for a variety of reasons. First, there is concern that they focus on lower risk cases, thereby failing to address the needs of juvenile delinquents most apt to recidivate (Souryal and MacKenzie, 1994). Boot camps appear to be deceptively seductive

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alternatives for youths with behavior problems compared to serious juvenile offenders (MacKenzie and Souryal, 1995b; Austin and Krisberg, 1982; Morris and Tonry, 1990). Since low risk cases are less apt to recidivate with or without treatment, the impact may be negligible (MacKenzie, 1997). Furthermore, in cases where program staff determine who may enter the camps, they may select juveniles who are at the lowest risk for recidivism.

The focus on lower risk cases means that camps may also widen the net of control over juveniles (MacKenzie and Piquero, 1994; MacKenzie, 1995a; MacKenzie, 1995b). Judges are often faced with the choice of sending juveniles to either a traditional state detention center or training school or of letting them remain in the community on probation (Byrne, Lurigio, and Petersilia, 1992; Tonry and Lynch, 1996). Given these choices, judges may tend to give juveniles the benefit of the doubt and let them remain in the community. If a boot camp alternative, however, is available, then many of these youths may be sent there, resulting in an increase in the overall number of youth who are institutionalized. Pressure from the public and policy makers who view the programs as appropriate options for undisciplined youth may also affect judicial decisions to send increasing numbers of juveniles to boot camps (MacKenzie and Parent, 1992; MacKenzie and Piquero, 1994; Tonry and Lynch, 1996; Byrne, Lurigio, and Petersilia, 1992).

Those interested in juvenile programming have emphasized the need for individualized programs (Acoca, 1995; Peters et al., 1997). The needs of juveniles' vary greatly and effective programs must assess each individual's needs and develop appropriate programming to address these needs. The majority of boot camps, however, group juveniles into units or platoons (Parent, 1989; Caldas, 1990; MacKenzie, 1990; MacKenzie, 1995a; MacKenzie and Rosay,

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1996; Gover, Styve, and MacKenzie, 1999; Gover, Styve, and MacKenzie, 1998; MacKenzie, Styve, and Gover, 1998). Youths enter the facility in a unit, attend classes and treatment programs together, are punished as a group for one individual's misbehavior, and finally graduate as a single unit. Boot camps also tend to have rigid rules and inflexible daily schedules (Lutze, 1998) which may not address the individual needs of the inmates. Critics argue, therefore, that the military philosophy and high level of structure within boot camps programs prohibit the flexibility needed to address individual problems of inmates.

"Total institutions," such as juvenile residential facilities, have also been described as rigid in regard to rules and daily schedules (Goffman, 1961). While correctional boot camps may appear to be more military-like and structured, this may only be a matter of degree. Traditional facilities may be just as structured but without some of the military aspects. If a high level of organizational structure necessarily limits individualization in programming, this may be a concern with both types of juvenile facilities.

Critics are also skeptical about the treatment provided to inmates in military style programs. These critics have not been particularly surprised by the results from recidivism studies which have found no differences in recidivism rates among boot camp and non-boot camp offenders (Morash and Rucker, 1990; Mathlas and Mathews, 1991; Henggeler and Schoenwald, 1994). Critics argue that because the boot camp environment has many elements that are antithetical to successful treatment, there is no particular reason to expect boot camp releasees to recidivate at lower rates. For example, mainstream psychologists believe that treatment and therapy require positive and supportive interpersonal relationships, not the confrontational characteristics of the boot camp environment (Andrews et al., 1990; Andrews,

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Bonta, and Hodge, 1990; Gendreau and Ross, 1987). Based on the previous research showing that therapeutic juvenile programs can be effective, an important issue of concern is how activities are scheduled in boot camp programs in comparison to traditional facilities (Andrews and Bonta, 1994; Andrews, Bonta, and Hodge, 1990; Andrews et al., 1990; Lipsey, 1992; Gendreau and Ross, 1987; Palmer, 1983). At the most basic level, a sufficient amount of time must be scheduled for therapeutic activities if change is to occur.

Boot camps may in fact create an environment to encourage short-term change, but if juveniles do not participate in post-camp activities that can help them succeed in the community, these programs may not have an affect on recidivism. Attention is now being paid to what happens to juveniles once they leave facilities and return to the community (Peters et al., 1997; Acoca, 1995; Altschuler and Armstrong, 1994). This issue is moving towards the forefront in juvenile corrections in part because the literature suggests that progress made by juveniles while they are confined to facilities quickly diminishes following their release (Altschuler and Armstrong, 1991; Catalano, Hawkins, and Jensen, 1988). Therefore, reintegration to the community must start while juveniles are still confined to the facility.

Since juveniles frequently return to live with family members, return to their local schools, and are reunited with their previous social networks, it is important for them to maintain contact with the community while they are incarcerated. The Intensive Aftercare Program Model (IAP) stresses that individualized case planning focus on the special needs of juveniles' and their relationships with their social networks (e.g., family, close friends, etc.) (Altschuler and Armstrong, 1994). To accomplish this, an aftercare counselor should be advising the juvenile from the beginning of the residential period.

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In addition, the involvement of offenders' family members in programming activities, while they are confined, may have more impact on their behavior once they are released than other official interventions (Zhang, 1988). This assertion is directly related to the extent to which facilities allow institutionalized juveniles to maintain contact with the community. Such contacts are assumed to facilitate successful reintegration into the community, and according to Altschuler, reintegration into the community is the key to boot camp success (Peters et al., 1997).

The new emphasis in corrections is on performance-based standards and institutional accountability (MacKenzie, Styve, and Gover, 1998; Logan, 1993; Dilulio, 1993; Boone and Fulton, 1995). In order to develop programs that will successfully prepare juveniles for their return to the community, facility staff and administrators need information about what happens to juveniles who leave their programs. In addition to recidivism rates, it is important to measure juveniles' positive activities. Zhang (1998) notes that most program evaluations do not include measures of inmates' prosocial activity once they are released from institutions, such as school enrollment, employment, involvement in drug treatment, or vocational training. If facilities are to be held accountable for what happens to juveniles after they are released, information about post-release activities must be made available.

NATIONAL EVALUATION OF JUVENILE CORRECTIONAL FACILITIES

The current research is part of a national study of juvenile correctional facilities which compared the environments/conditions of boot camp confinement to those of traditional facilities. Twenty-seven boot camps were compared to twenty-two traditional facilities using

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surveys of juveniles and staff, administrator interviews, institutional records, and video tapes. This paper focuses on the data collected from administrator interviews and institutional records and attempts to answer the following six questions:

- Are boot camps selecting juveniles who have less delinquent backgrounds in terms of offense histories than traditional facilities?
- Do the environments in boot camps differ in their levels of structure or security and custody from traditional facilities?
- To what extent do facilities incorporate a military philosophy into their environments and do boot camps differ from traditional facilities with regard to this philosophy?
- Do boot camps and traditional facilities differ in the emphasis placed on therapeutic programming?
- Does the level of contact juveniles have with the community while institutionalized differ by type of facility?
- Do facilities have access to information regarding post-incarceration behavior?

METHODOLOGY

Facilities

Juvenile correctional agencies throughout the U.S. were contacted to identify all boot camps operating for juvenile delinquents. In all, fifty programs in twenty-seven states were identified and contacted. Two programs were eliminated from the pool of potential participants because they were non-residential facilities. An additional two were eliminated because they were in the process of developing their program and they would not be operating in time to

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participate in the research. The remaining 46 eligible programs were invited to participate in the research and of these, twenty-seven programs in twenty states (or 59 percent of the eligible programs) participated. There were several reasons programs did not participate. For example, some states require outside researchers to obtain written consent from parents of juveniles in order for youths to participate in research. This was not logistically possible due to the time constraints of data collection during the site visits. Some facility administrators believed the research would be too time consuming for their already overburdened staff and refused to commit staff time to assist with data collection. A few sites did not participate due to a decision on the part of the State's Correctional Research Division. Finally, some sites did not reveal the basis for their decision to not participate.

A matched comparison facility was identified for each boot camp participating in the study. This facility was selected in consultation with the agency responsible for the boot camp facility and/or administrators at the boot camps. The goal was to identify the facility where the juveniles in the boot camps would have most likely been sent had they not gone to the boot camp. All comparison sites were in the same state as the boot camp. At times, the comparison site was a large facility with specialized programming for different types of offenders (e.g., sex offender units). In such cases, a subset of the facility was identified where juveniles similar to the boot camp residents would reside. This subset or unit was compared to the boot camp. All questions in the surveys referred to the smaller unit and not the total facility.

The number of traditional institutions (N=22) serving as comparison facilities for the boot camps is smaller than the number of boot camps (N=27) because four of the participating states had two boot camps. In one state the two boot camps were the only facilities where delinquents

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were confined so there was no viable comparison site. The remaining three states had one comparison site where the juveniles would reside if the boot camps had not been operating. This site was used as the comparison for both of the boot camps in the state. Thus, the data include twenty-five boot camps with comparison sites (three sites were used as comparisons for two boot camps) and two boot camps did not have a comparison site.

Responsibility for the operation of the participating facilities varied. Seventeen were privately operated (eleven boot camps), five were operated by county agencies (four boot camps), and twenty-seven were operated by state or multi-government agencies (twelve boot camps). Most of the programs (N=40) were located in a small city, town or rural area (twenty-three boot camps) while only nine were located in a suburb of or in an urban area (four boot camps).

Procedure

The forty-nine participating correctional facilities were visited between April 1997 and August 1998. During the site visits juveniles and staff were surveyed, a survey was administered to the facility administrator, and a video survey and checklist was completed during a walk through of the institution. This research focuses on information obtained from the survey conducted with the facility administrator(s), as summarized in this paper.

The survey consisted of 244 structured questions and took approximately two hours to complete. Questions in the survey related to the facility's population, selection and admission procedures, programming components, daily schedule, facility characteristics, such as health and medical assistance policies, staff issues, release supervision and aftercare, grievance procedures, safety and security issues, and institutional impacts. Some questions required information to be

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obtained from institutional records. When appropriate, these data were collected as summary statistics for a specific time period (one year).

To insure consistency in the survey administration process, questions were asked in a structured interview format by one of the project's three co-investigators so that questions could be clarified and responses recorded in the same fashion. All co-investigators participated in the development of the survey and were equally familiar with the survey format. The data from all forty-nine surveys were coded by one co-investigator to guarantee reliability.

The majority of the interviews were conducted with the facility's main administrator, such as the warden or director. This was an indication that it was very important to facilities that questions from this survey were answered accurately. At a few facilities more than one administrator sat in on the interviews, such as an assistant director or assistant warden. This usually occurred at facilities where the director or warden had not been employed by the facility for at least one year.

Indices

Four indices were developed to examine differences between boot camps and comparison facilities: (1) Population Seriousness; (2) Institutional Structure; (3) Institutional Security and Custody; and (4) Military Atmosphere (see appendix for a description of items in each index).

The Population Seriousness Index was developed in order to describe the population admitted to each facility in terms of offense seriousness. Administrators were asked whether juveniles with specific characteristics were admitted to the facility (convicted of violent crimes, past history of violent acts, arson, sex offenses, waived to adult criminal court, etc.). Responses

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were coded as "0" if they were legally or administratively excluded from the facility, "1" if they were admitted to the facility but in limited numbers, or "2" if admitted. Responses were summed and divided by 7 (the total number of items) which yielded a seriousness score for the population. Each facility received a score between 0 and 2. Scores close to zero indicate that the population of juveniles admitted to the facility do not have serious delinquent backgrounds when considering type of current offense and past history of offending. A score close to 2 indicates that the population admitted to the facility has serious delinquent histories. Scores ranged from .29 to 2.0 (coefficient alpha = .71).

The ten-item Institutional Structure Index gauges the degree of structure in the daily routine of the facility. A high structure program requires juveniles to adhere to various rules with a regimented schedule of activities. For example, they might be required to wear uniforms, enter the facility in groups, pass inspection, and have a set daily schedule of activities. Responses were coded as "1" for yes and "0" for no for each of the ten questions. These responses were summed and divided by 10 (the total number of items) to form an index ranging from 0 to1. A score close to 1 indicates a high degree of structure in the facility. Index scores ranged from .40 to 1.0 (coefficient alpha =.75).

The eight item Institutional Security and Custody Index measures the degree to which physical barriers and supervision are used to control juveniles. A program with a high level of security and custody has locked buildings, requires staff to search juveniles and visitors when they enter the facility, and keeps juveniles within eyesight of officials when they leave the facility. Administrators were asked to respond to these items on a five-point Likert scale from never (coded as "1") to always (coded as "5"). Responses were summed and divided by 8 (the

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total number of items) to form index scores ranging from 1 to 5. A score of 1 indicates a facility with a low level of security and custody and a score of 5 indicates a facility with a high level of security and custody. Scores ranged from 1.38 to 5.0 (coefficient alpha = .71).

The Military Index measures the degree to which military aspects are incorporated into the program. For example, whether juveniles have to march to class, call staff by military titles, wear military uniforms, and practice drill and ceremony. Responses choices were no (coded as "0") or yes (coded as "1") to nine items. Index scores were formed by summing the responses and dividing by 9 (total number of items) to form an index ranging from 0 and 1. A score of 0 indicates low militariness and 1 indicates high militariness. Military index scores ranged from 0 to 1 (coefficient alpha = .71).

RESULTS

The twenty-seven boot camp programs were developed between 1988 and 1997. Most of the twenty-two comparison facilities were much older than the boot camps, being developed between 1885 and 1995. Boot camp program capacities ranged from twenty-four to 250 juveniles. The overall capacity range for comparison facilities was much wider, from twenty-eight to 500. Juveniles in boot camp programs were between ten and twenty-one years old. The age ranges were slightly lower for comparison facilities which had an overall age limit of eight to twenty-one years old. Most of the boot camp facilities served males only, but five of them served both males and females. All but two of the comparison facilities served male delinquents only. The average length of stay for juveniles in boot camps ranged from two to fourteen months, with an overall average length of stay of 4.5 months, while the range in average length of stay in

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comparison facilities was from three to twenty-six months, with the average length of stay being 8.3 months. At the time of the site visits, boot camp programs were operating at an average capacity level of 93 percent and comparison facilities were operating at an average capacity level of 100 percent.

Selection and Characteristics of Juvenile Participants

The first issue of interest was the selection process for juvenile participants in the different facilities. The question was whether most boot camps limited their population to juveniles who had the least delinquent offense histories, that is, did they limit the type of juveniles who could enter the facilities? If so, boot camps would have been widening the net of control over juveniles who would have otherwise received sentences of probation.

In general, the answer is that boot camps were admitting offenders with less serious offense histories. Traditional correctional facilities scored significantly higher on the Population Seriousness Index, t (47) = -4.7, p<.000, compared to boot camps, indicating that they admitted more seriously delinquent juveniles (See Table 1). Also, comparison of the Seriousness Index using the Mann-Whitney nonparametric test indicated that traditional facilities ranked significantly higher in the seriousness of their populations (See Figure 1). The individual items in the index and additional items from the survey indicated that all of the facilities, boot camps and comparisons, admitted nonviolent offenders to their facilities (See Appendix). Additionally, almost all of them admitted only juveniles who had been adjudicated as delinquent, while only five facilities permitted juveniles who were diverted from further criminal processing (three boot camps). Approximately half of the boot camp programs (16 facilities) accepted status offenders

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while only six comparison facilities included status offenders. The only indication that boot camps tried to target more serious delinquents was in three programs where first time offenders were excluded from participating. None of the comparison sites had such restrictions.

Not only was the populations' delinquent history more serious in traditional facilities, but also, as shown on Table 1, traditional facilities (in comparison to boot camps) were less apt to target a 'certain type' of juvenile. Also, juveniles who entered traditional facilities were never required to volunteer to participate, fewer were interviewed by facility staff before being admitted, and fewer were required to pass physical, medical, and psychological evaluations prior to being admitted. Furthermore, personnel at fewer of the comparison facilities were able to determine who would be assigned to the facility (44.4 percent of the boot camps versus 22.7 percent of the comparison sites). Thus, as well as having a less delinquent population, boot camps were able to be more selective about who entered the program.

The concern that more juveniles in the boot camps would be sent to the facility by the court instead of being sentenced to the jurisdiction of the juvenile correctional agency did not appear to be warranted since approximately the same percentage of the programs received juveniles who were court assigned (48.1 percent of boot camps compared to 50 percent of comparison facilities).

Little information was obtained that permitted conclusions about whether boot camp participants were juveniles who would, if the boot camps did not exist, be in the community or in a comparison facility. The data, however, suggest boot camps were able to be more selective in who they admitted to the facility and that the juveniles in boot camps were less serious delinquents in comparison to those in the traditional facilities.

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INSERT FIGURE 1 ABOUT HERE

Facility Environment

Of considerable interest was whether the environments in boot camps differed from the environments in traditional facilities, since environmental conditions might be expected to have a direct impact on inmate behavior. While the boot camps are expected to have military basic training camp components, traditional facilities may also be highly structured.

Table 2 shows that the environments of the boot camps were significantly more structured than were those of comparison facilities, t (32) = 9.5, p<.000, according to the Institutional Structure Index. In addition, the Mann-Whitney nonparametric test indicates that boot camps ranked significantly higher in terms of structure (See Figure 2). It is important to note, however, that the individual index items suggested that several program characteristics were consistent across both types of facilities (See Appendix). For example, nearly all facilities required juveniles to get up at the same time every day, make their beds, have a shower at a specific time, and follow a strict schedule every day. Major differences were found in how the juveniles entered the facilities (whether in groups or on an on-going basis), how they were required to address the staff when speaking to them, and whether they were required to march to program activities.

There was no significant difference between boot camps and traditional facilities on the Security and Custody Index, t (46) = -.37, p >.05, indicating that the physical barriers and supervision of the juveniles was approximately the same in both types of facilities and that boot camps and traditional facilities did not really differ in the extent to which they maintain custodial control over juveniles while they were confined to the institution. This finding is somewhat

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surprising because the juveniles in boot camps appeared to be less serious delinquents.

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Military Philosophy

A third question addressed the degree to which the military philosophy was incorporated into boot camps, compared to other facilities. According to the correctional literature, a military philosophy within a juvenile correctional environment is controversial. This research examined the incorporation of military components into facility environments for two main reasons. Although one expectation was to see if the military philosophy was incorporated to a higher degree within boot camps, it was important to see just how different facilities appeared on this aspect alone. On the other hand, it might have been possible that military components created a therapeutic environment but on the other, this philosophy may have created a confrontational atmosphere that worked against treatment efforts. This question was also explored in order to determine how much variation existed in the incorporation of this philosophy within boot camps, since it is well documented that these programs differ in the extent to which the military model is emphasized.

As expected, boot camps incorporated significantly more military components than comparison facilities, as measured by the Military Index, $t(45) = 18.8$, $p<.000$. The Man-Whitney nonparametric test also confirmed that boot camps ranked significantly higher according to the Military Index (See Figure 3). In short, boot camps were very different than traditional programs for juveniles.

Looking only at the boot camp facilities to examine the extent to which they involved this philosophy, it appeared that most of these programs incorporated the major, traditional military

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aspects. For example, all programs required juveniles to wear military uniforms, march to class, meals, and other activities, to participate in drill and ceremony, and physical fitness training. The military philosophy was also incorporated in employee procedures at nearly all of the programs, such as requiring the staff to wear military uniforms and to use military titles. It is important to point out, however, that there was some variation in this regard. For example, approximately 75 percent of the programs used summary punishments and challenge courses. Also, juveniles in eleven boot camps entered the facility on an ongoing basis, instead of in platoons, squads, or groups. Thus, for the most part, most of the programs placed a heavy emphasis on military components; however, there were differences in some aspects.

INSERT FIGURE 3 ABOUT HERE

Correctional Programming Emphasis on Therapeutic Activities

Of additional interest was the differences between boot camps and traditional facilities in the priority they place on various programming components. There is a concern with juvenile residential facilities regarding what juveniles do during the day and whether they are kept occupied, and equally important is how they are kept occupied. Specifically, it was important to examine whether differences existed in the emphasis placed on therapeutic programming. Since previous research has established that therapeutic programming for juveniles can be effective, it was important to find out whether juveniles were participating in activities that would facilitate long term change.

Administrators were asked about the activities available for juveniles in the facilities and

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how many hours these activities were scheduled each week. Many facilities did not schedule programming components on a consistent basis each week and instead offered activities on an "as needed" basis or the activity was not available at all. Table 3 shows that the only activities consistently scheduled each week in both types of facilities were education, treatment services, physical fitness activities, and visitation.

While advocates argue that the atmosphere of boot camps is more therapeutic and critics argue that it is less conducive to treatment, significant differences were not found in the average amount of time scheduled by boot camps and traditional facilities each week for education, vocational training, and treatment services. On average, however, comparison facilities scheduled 6.1 more hours each week for vocational training and 5.4 more hours for treatment services than boot camps. Treatment services includes the time juveniles spent in substance abuse treatment, psychological treatment, or individual one-on-one meetings between a juvenile and staff member.

All facilities scheduled time each week for juveniles' participation in physical fitness activities, which includes the time juveniles spent in adventure, challenge, or ropes courses, drill and ceremony, and sports. As expected, juveniles in boot camp programs spent significantly more time than those in comparison facilities participating in physical fitness activities. Juveniles in boot camps were scheduled to spend 22.7 hours each week in physical fitness activities whereas youngsters in comparison facilities spent 12.6 hours each week in such activities. While juveniles in boot camps had less free time, it appeared that most of the reduction was due to the increased time they spent in physical fitness activities. As mentioned earlier, one concern with the military philosophy within the correctional environment was that a

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higher priority would be placed on physical fitness activities rather than the type of therapeutic activities that have been found to have an impact on later behavior.

It is interesting to note that for four of the ten programming components examined there were significant differences in the number of hours scheduled by the two facility types. While boot camp programs scheduled significantly more time for physical fitness activities than traditional facilities, comparison facilities scheduled significantly more time for juveniles to engage in visitation, free-time during the week, and free-time on the weekend.

Table 4 shows that nearly all facilities conducted academic instruction inside the facility and held educational classes during the summer months. In addition, juveniles in over half of both types of facilities attended classes according to their appropriate grade levels instead of according to their squad, platoon, or housing unit. The remaining facilities which provided academic instruction according to groups have reduced flexibility in their ability to address individual problems. It is interesting to note that of all the juveniles who entered all of the facilities last year, a higher proportion of juveniles at comparison facilities took a GED test (43 percent compared to 23 percent in boot camps). The two types of facilities, however, had approximately the same GED passing rate. About three-fourths of those who took a GED last year at both types of facilities passed the test.

One issue related to correctional programming has to do with the extent to which youth are provided with individualized attention while confined to an institution. Overall, boot camp programs had higher juvenile to staff ratios (See Table 4). The juvenile to teaching staff ratio was much higher for boot camps than for comparison facilities. In boot camp programs there were 10.2 juveniles for every one teaching staff member but in comparison facilities there were

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6.6 juveniles for every one teaching staff member. This indicates that juveniles in comparison facilities have the opportunity for more individualized attention in school. In addition, for boot camps, there were 3.5 juveniles for every one custody and treatment staff member whereas in comparison facilities there were 1.6 juveniles for every one custody and treatment staff member. This study was unable to distinguish between staff members that are specifically assigned to custodial responsibilities versus treatment responsibilities. The majority of custody staff in juvenile institutions also had counseling and treatment responsibilities. These overall findings, however, indicate that there may be more opportunities for juveniles to receive individualized attention in traditional correctional facilities than in boot camp programs.

Juveniles Contact With the Community

In addition to differences in programming, facilities were compared on the degree to which juveniles have community contact (See Table 5). Since most juveniles confined to institutions will return to the community after completing their sentence, it is important for juveniles to maintain contact with their social networks. According to administrators, juveniles in boot camps returned to the community after an average of 4.5 months of confinement and juveniles in traditional facilities returned to the community after an average of 8.3 months. One of the interests of this research was whether juveniles' contact with the community was different depending on the type of facility they are confined to.

Overall, policies and procedures in traditional facilities permitted juveniles to have more contact with the community while confined to the institutions than juveniles in boot camps. Boot camps had stricter policies for juveniles regarding visitation, phone calls, and letter writing (See

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Table 5). For example, juveniles in half of the boot camps were not allowed to receive visitors during the first to second months of confinement. Only three comparison facilities had this restriction on visitation. In addition, five boot camp programs did not allow juveniles to receive visitors during their entire confinement period. This was not a policy implemented at any of the comparison facilities.

Juveniles in comparison facilities had a significantly greater amount of time scheduled each week for visitation with family and friends. Comparison facilities scheduled an average of 7.1 hours each week for visitation while boot camp programs scheduled only 4.3 hours. In addition to having a longer period of time for visitation, visitation was allowed more often in comparison facilities. On average, juveniles in boot camps were allowed to receive visitors about once each week (.92 times/week) while in comparison facilities juveniles were allowed to receive visitors one and a half times each week (1.5 times/week).

The same can be said for phone calls - juveniles in boot camps were allowed to make an average of 1.1 calls each week while juveniles in comparison facilities were allowed to make an average of 1.6 calls each week. The length of the call permitted, however, by both types of facilities was approximately the same (about 10.5 minutes). In addition, boot camp programs were more likely than traditional facilities to limit the number of letters juveniles can write each week. Thus, boot camps' policies regarding visitation, phone calls, and letter writing were more restrictive than policies within traditional facilities.

Institutional Impacts

A final area of interest for this study involved the amount of access facilities have to

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information regarding institutional impacts. If facility staff and administrators plan to develop a program that will have an impact on juveniles once they leave, it is necessary for the staff to know what happens to youth after they leave. Do facilities collect or receive any information at all about how the youth are doing once they are released from the facility? This is information that could be collected by the facility itself or by another agency who then provides it to the institution. If programs do not have access to this type of information (e.g., whether juveniles are attending school, working, participating in drug treatment, etc.), it is impossible for these programs to know whether their programming resources are appropriately focused and are having an impact on juveniles' behavior. In addition, this information could be used for the development of performance-based standards for the operation of the facility.

Table 6 shows that nearly all of the institutions who participated in this study were not provided with this type of impact information. In fact, answers to these questions were consistently missing from 20 percent of the facilities while 43 percent to 69 percent of the facilities reported that this information was simply unavailable. Even sixteen facilities were unable to determine if juveniles who were released from their facilities last year had since been readmitted to their own facility.

DISCUSSION

Overall, these findings indicate that boot camps differed from traditional facilities in population, the level of structure in the environment, and in the incorporation of the military model into the correctional atmosphere. Facilities did not differ significantly in their levels of security and custody. Traditional facilities, however, had visitation, phone call, and letter writing

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policies that enabled juveniles to have a greater amount of contact with the community than juveniles in boot camps. In addition, traditional facilities scheduled more time each week for juveniles to participate in treatment services and vocational training. Traditional facilities also had more educators and custody/treatment staff for each juvenile. Thus, these juveniles potentially received more individualized attention than those in boot camps.

There are, however, limitations to these findings. For example, the data did not allow us to explicitly examine why the variation in boot camps and traditional facilities differed in terms of various factors, such as population seriousness and structure. As a result, our conclusions are inferred from the answers to questions regarding the admission process, the facility environment, the military philosophy, the emphasis on therapeutic activities, and the level of contact with the outside community. Our findings indicate that there was substantial variation both between and within boot camps and traditional facilities. From these data, however, we cannot test how these differences across facilities affect actual post-release behavior. This presents an important limitation that should be addressed in future research.

Despite the limitations of these data, this research does provide some indication of why previous research comparing the recidivism rates of juveniles released from boot camps have not differed from those released from traditional facilities. Perhaps most important, is the fact that while juveniles in the boot camps are kept busier and have less free-time, this increased activity was not in academic classes or therapeutic activities. As shown by previous researchers, the type of treatment provided to offenders must be carefully designed to address their "criminogenic needs" (Andrews and Bonta, 1994; Lipsey, 1992; Andrews et al., 1990). There is no reason to believe physical activity alone will be successful in reducing recidivism. Thus, from these

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results, boot camps would not be expected to be any more successful than traditional facilities in reducing recidivism.

In fact, many of these findings suggest that comparison facilities may be more successful than boot camps. In particular, they had more staff for each juvenile which presented the possibility for juveniles to have more individualized attention. Traditional facilities were also less structured, again suggesting the possibility of more individual attention. More juveniles in traditional facilities took GED examinations. Furthermore, these juveniles had more access to outside contacts while they were in the facility. This may help them with the difficulties inherent in making the transition back to the community (Altschuler and Armstrong, 1991).

It is difficult to design a program that successfully changes juvenile delinquents without having some basic information about how the juveniles are adjusting once they return to the community. From the findings here, however, it is clear that institutional personnel do not have access to or are not provided with this type of information. As a result, we could not examine the potential impact of institutional differences on juveniles' post-release outcomes. This information is critical for determining what types of institutional programs or environmental settings are the most effective. Nearly all of this information could be collected by the agency responsible for juveniles' aftercare supervision and forwarded to the facility. Therefore, one recommendation from these results is that it is the responsibility of the correctional system to provide the resources and expertise so that institutions have access to this information. Certainly if performance-based standards are going to be developed, more outcome information will need to be documented.

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Table 1: Differences in Juvenile Populations Within Boot Camp Programs and Traditional Correctional Facilities

	Boot Camp Programs (N=27)	Comparison Facilities (N=22)
*Serious Population Index M (SD), α=.71	1.01 (.43)	1.55 (.38)
Facility targets a certain type of juvenile, % Yes (N)	41.7% (10)	18.2% (4)
Juveniles must volunteer to be considered for the facility, % Yes (N)	25.9% (7)	0.0% (22)
The personnel at this facility determine who is assigned to this facility, % Yes (N)	44.4% (12)	22.7% (5)
The court determines who is assigned to this facility, % Yes (N)	48.1% (13)	50.0% (11)
A juvenile corrections agency determines who is assigned to this facility, % Yes (N)	63.0% (17)	77.3% (17)
Juveniles are interviewed by a facility staff member prior to admission to the facility, % Yes (N)	55.6% (15)	31.8% (7)
Juveniles must pass a physical evaluation prior to admission to the facility, % Yes (N)	81.5% (22)	45.5% (10)
Juveniles must pass a medical evaluation prior to admission to the facility, % Yes (N)	88.9% (24)	40.9% (9)
Juveniles must pass a psychological evaluation prior to admission to the facility, % Yes (N)	66.7% (18)	40.9% (9)
Facility admits juveniles evaluated as being suicide risks, % Yes (N)	66.7% (18)	90.9% (20)
Facility admits juveniles evaluated as having psychological problems, % Yes (N)	70.4% (19)	100% (22)
Facility admits juveniles with histories of abuse (either physical or sexual), % Yes (N)	100% (27)	100% (22)

*Note: $p<.00$

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Table 2: Comparison of Boot Camps and Comparison Sites on Structure, Security & Custody, and Military Components

Indices	Boot Camp Programs (N=27)	Comparison Facilities (N=22)
*Institutional Structure Index M (SD), α = .75 (Range 0-1)	.94 (.08)	.63 (.14)
Security & Custody Index M (SD), α = .71 (Range 1-5)	3.33 (1.01)	3.43 (1.01)
*Military Index M (SD), α = .71 (Range 0-1)	.87 (.13)	.12 (.13)

*Note: $p<.00$

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Table 3: Mean Number of Hours Scheduled Each Week for Programming Components in Boot Camps and Traditional Facilities

Program Component	Boot Camps (N=27)		Comparisons (N=22)	
	% Schedules (N)	Mean Hours (SD)	% Schedules (N)	Mean Hours (SD)
Educational Classes	100% (26)	24.35 (5.07)	100% (19)	25.74 (8.48)
Vocational Training Classes	40.7% (10)	7.25 (7.35)	54.6% (6)	13.33 (9.25)
Treatment Services	100% (23)	5.06 (3.93)	100% (16)	10.49 (12.25)
Physical Fitness Activities*	100% (26)	22.67 (7.08)	100% (18)	12.61 (6.07)
Work	44.4% (11)	10.58 (10.25)	59.1% (9)	11.78 (10.03)
Chores	88.9% (22)	12.25 (8.99)	100% (19)	11.50 (8.98)
Visitation*	100% (24)	4.29 (3.55)	100% (19)	7.14 (4.77)
Free-Time During Week*	63.0% (15)	5.55 (3.08)	86.4% (15)	9.57 (6.27)
Free-Time on Weekend*	81.5% (20)	3.63 (1.69)	90.9% (16)	10.88 (6.89)
Community Service	48.1% (12)	5.66 (6.04)	54.6% (8)	4.06 (8.47)

*$p<.05$ Note: the N sizes for the cells in this table represent the programs who reported that they regularly schedule a specific number of hours for juveniles to participate in these activities each week. Some programs do not schedule each activity on a regular basis and instead use them as needed. Other programs may not use an activity at all. For boot camp programs, less than 10% of data are missing for all activities, except for the treatment category, where 15% of the programs did not respond to these questions. For comparison facilities, less than 20% of data are missing, except for the vocational training and treatment services category, where 27% of the programs failed to respond to these questions.

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Table 4: Juvenile Correctional Facilities Educational and Staffing Issues

Educational Programming	Boot Camp Programs (N=27)	Comparison Facilities (N=22)
Juveniles attend classes grouped according to their appropriate grade levels, % Yes (N)	59.3% (16)	59.1% (13)
Academic instruction is held inside the facility, % Yes (N)	100% (27)	95.5% (21)
Academic classes are held during the summer months, % Yes (N)	96.3% (26)	100% (22)
Proportion of juveniles who took a GED test last year, out of those who entered the facility last year, % (N)	23.3% (20)	42.9% (17)
Proportion of juveniles who passed a GED test last year, out of those who took a GED test last year, % (N)	74.0% (19)	75.2% (17)
Inmate to Teaching Staff Ratio	10.17 to 1	6.59 to 1
Inmate to Custody and Treatment Staff Ratio	3.46 to 1	1.62 to 1

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Table 5: Juvenile Correctional Facilities Visiting, Letter Writing, and Phone Call Regulations

Program Regulations	Boot Camp Programs (N=27)	Comparison Facilities (N=22)
Program has a "no visit" policy during the first or second month juveniles are in the facility, % Yes (N)	51.9% (14)	13.6% (3)
Program has "no visit" policy during the entire time juveniles are in the facility, % Yes (N)	18.5% (5)	0.0% (0)
Visitors must schedule their visits in advance, % Yes (N)	59.3% (16)	36.4% (8)
Juveniles who have children are encouraged to have their children visit during visiting hours, % Yes (N)	77.8% (21)	81.8% (18)
Contact with family or friends through visits or phone calls can be limited as punishment, % Yes (N)	25.9% (7)	52.4% (11)
Facility permits juveniles to make a set number of phone calls each week, % Yes (N)	62.5% (15)	55.6% (10)
Juveniles are required to write letters to their relatives, % Yes (N)	37.0% (10)	22.7% (5)
Program limits the number of letters juveniles can write in one week, % Yes (N)	40.7% (11)	9.1% (2)
Average number of times per week juveniles are allowed to receive visits from family or friends, M (SD)	.921 (.52) (N=25)	1.49 (.65) (N=21)
Average number of hours per week open for visitation, M (SD)	4.29 (3.55) (N=27)	7.14 (4.77) (N=21)
Average number of phone calls juveniles are permitted per week (of those who have a set number), M (SD)	1.08 (.58) (N=15)	1.60 (1.05) (N=10)
Average number of minutes permitted per call, M (SD)	10.48 (6.97) (N=25)	10.58 (7.83) (N=19)

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Table 6: Facilities' Access to Measures of Institutional Impacts

Information collected on juveniles who were released from the facility last year regarding[1]...	Information Unavailable % (N)	Information Available % (N)	Information Missing % (N)
Juveniles who have returned to school	61.2% (30)	20.4% (10)	18.4% (9)
Juveniles who have since completed high school	63.3% (31)	12.2% (6)	24.5% (12)
Juveniles who have since obtained their GED	57.1% (28)	22.4% (11)	20.4% (10)
Juveniles who have since gained vocational training	65.3% (32)	14.3% (7)	20.4% (10)
Juveniles who have since gained employment	65.3% (32)	16.3% (8)	18.4% (9)
Juveniles who have continued in drug treatment	69.4% (34)	10.2% (5)	20.4% (10)
Juveniles who are receiving psychological counseling	71.4% (35)	6.1% (3)	22.4% (11)
Juveniles who have returned to live with their family.	59.2% (29)	18.4% (9)	22.4% (11)
Juveniles who have since been re-arrested in that year	65.3% (32)	10.2% (5)	24.5% (12)
Juveniles who have since returned to this facility	42.9% (21)	32.7% (16)	24.5% (12)
Juveniles who have since been sent to another facility	61.2% (30)	16.3% (8)	22.4% (11)
Juveniles who have died or been killed	57.1% (28)	24.5% (12)	18.4% (9)

[1]Administrator/s reported that they did not have access to this information (information unavailable), that they did have access to this type of information (information available), or did not respond to these questions (information missing).

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APPENDIX

Table A1: Serious Population Index Items	Boot Camp Programs	Comparison Facilities
Juveniles waived to adult criminal court, M (SD)	.19 (.56)	.64 (.85)
Adjudicated juveniles convicted of violent crimes, M (SD)	1.44 (.80)	1.77 (.53)
Juveniles with a past history of engaging in violent acts, M (SD)	1.33 (.88)	1.91 (.29)
Juveniles convicted of arson, M (SD)	.81 (.88)	1.55 (.80)
Juveniles convicted of sex offenses, M (SD)	.67 (.88)	1.50 (.86)
Adjudicated juveniles previously convicted of serious offenses, M (SD)	1.48 (.75)	1.91 (.29)
*Status Offenders. M (SD)	1.11 (.93)	1.55 (.80)

Note: Items coded as: 0=No; 1=Limited; 2=Yes; *Denotes Reversal

Table A2: Institutional Structure Index Items	Boot Camp Programs (N=27)	Comparison Facilities (N=22)
Juveniles have to say "Sir" or "Ma'am" when addressing the staff, % Yes (N)	96.3% (26)	22.7% (5)
Juveniles are required to wear uniforms, % Yes (N)	100% (27)	59.1% (13)
Juveniles have to march to class, to meals, and to other activities, % Yes (N)	100% (27)	13.6% (3)
Juveniles enter the unit/facility in groups or platoons, % Yes (N)	59.3% (16)	0.0% (0)
*Juveniles have to make their beds everyday, % Yes (N)	100% (27)	100% (22)
Juveniles' beds are inspected to make sure it is made properly, % Yes (N)	100% (27)	90.9% (20)
Juveniles in this unit/facility get up at the same time, % Yes (N)	96.3% (26)	86.4% (19)
*Every weekday, juveniles have a set schedule to follow, % Yes (N)	100% (27)	100% (22)
Juveniles have a set study time each weekday for homework, % Yes (N)	88.9% (24)	63.6% (14)
Juveniles have a set time each day when they must shower, % Yes (N)	96.3% (26)	90.9% (20)

Note: Items coded as 0=No; 1=Yes; *These items were not included in the computation for the index reliability coefficient because there was no variation among facilities' responses to these items

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Table A3: Institutional Security and Custody Index Items	Boot Camp Programs	Comparison Facilities
Facility is operated to ensure that all entrances and exits are under the control of the staff of the facility, M (SD)	4.07 (1.54)	4.23 (1.45)
Facility relies on construction fixtures (locked rooms, buildings, and fences) to physically restrict free access into the community, M (SD)	3.37 (1.94)	3.55 (1.77)
Visitors are searched for weapons or contraband when entering the facility (Include pat down searches not just metal detectors), M (SD)	2.42 (1.72)	2.50 (1.82)
Visitors have to pass through a metal detector before entering the facility, M (SD)	2.41 (1.85)	2.82 (1.94)
Juveniles are searched for weapons or contraband when entering the facility (count pat down searches not just metal detector), M (SD)	4.59 (1.05)	4.82 (.85)
Juveniles have to pass through a metal detector before entering the facility, M (SD)	1.70 (1.46)	2.14 (1.70)
*Juveniles leave the facility routinely to work, attend activities, or utilize community resources, M (SD)	3.37 (1.55)	3.29 (1.52)
When outside of the facility, juveniles are within eyesight of direct care officials, M (SD)	4.67 (.55)	4.62 (.50)

Note: Items coded as 1=Never; 2=Rarely; 3=Sometimes; 4=Often; 5=Always; *Denotes Reversal

Table A4: Military Index Items	Boot Camp Programs (N=27)	Comparison Facilities (N=22)
Juveniles have to march to class, to meals, and to other activities, % Yes (N)	100% (27)	13.6% (3)
Facility has summary punishments that require physical exercise, % Yes (N)	74.1% (20)	9.1% (2)
Juveniles enter the unit/facility in groups or platoons, % Yes (N)	59.3% (16)	0.0% (0)
Facility staff in this unit have military titles, % Yes (N)	88.9% (24)	13.6% (3)
Facility staff in this unit wear military uniforms, % Yes (N)	96.3% (26)	9.1% (2)
Facility has challenge/adventure/ropes courses, %Yes (N)	76.9% (20)	35.0% (7)
Facility has drill and ceremony, % Yes (N)	100% (27)	9.5% (2)
Facility has a formal graduation ceremony , % Yes (N)	84.6% (22)	13.6% (3)
Juveniles are required to wear military uniforms, % Yes (N)	100% (27)	0.0% (0)

Note: Items coded as 0=No; 1=Yes

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REFERENCES

Acoca, L. (1995). Court as an effective consumer of substance abuse services. *Juvenile and Family Court Journal* 46:33-35.

Altschuler, D. M., and Armstrong, T. L. (1991). Intensive aftercare for the high-risk juvenile parolee: Issues and approaches in reintegration and community supervision in probation and parole. In *Intensive Interventions With High-Risk Youths: Promising Approaches in Juvenile Probation and Parole*, ed. T. L. Armstrong. Monsey, NY: Criminal Justice Press.

Altschuler, D. M. and Armstrong, T. L. (1994). *Intensive aftercare for high-risk juveniles: A community care model.* Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Andrews, D. A. and Bonta, A. (1994). *The Psychology of Criminal Conduct.* Cincinnati, OH: Anderson.

Andrews, D. A., Zinger, I., Hodge, R. D., Bonta, J., Gendreau, P., and Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology* 28:375-404.

Andrews, D. A., Bonta, J. and Hodge, R. D. (1990). Classification for effective rehabilitation: rediscovering psychology. *Criminal Justice and Behavior* 17:19-51.

Austin, J. and Krisberg, B. (1982). The unmet promise of alternatives to incarceration. *Crime and Delinquency* 28:374-409.

Boone, H. N. and Fulton, B. (1995). *Results-Driven Management: Implementing Performance-Based Measures in Community Corrections.* Washington, DC: The American Probation and Parole Association.

Byrne, J. M., Lurigio, A. J., and Petersilia, J. (1992). Introduction: The emergence of intermediate sanctions. In *Smart Sentencing: The Emergence of Intermediate Sanctions*, eds. J. M. Byrne, A. J. Lurigio and J. Petersilia. Newbury Park, CA: Sage.

Caldas, S. J. (1990). Intensive incarceration programs offer hope of rehabilitation to a fortunate few: Orleans paris prison does an 'about face.' *International Journal of Offender Therapy and Comparative Criminology* 34:67-76.

Castellano, T. and Plant, S. (1996). Boot camp aftercare programming: Current limits and suggested remedies. In *Juvenile and Adult Boot Camps.* Laurel, MD: American Correctional Association.

Catalano, R. F., Hawkins, E. A., and Jensen, J. M. (1988). Transition and aftercare services for adjudicated youth. In *A Guide to Developing Substance Abuse Treatment Programs for*

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Adjudicated Youth. eds. L. Mixdorf, M. Goff, and P. Paugh. Laurel, MD: American Correctional Association.

Dilulio, J. J. (1993). Rethinking the criminal justice system: Toward a new paradigm. In *Performance Measures for the Criminal Justice System*. Bureau of Justice Statistics and Princeton University: U.S. Department of Justice.

Federal Bureau of Prisons. (1993). *Prison Social Climate Survey: Staff Version and Resident Version*. Washington, DC: U.S. Government Printing Office.

Gendreau, P. and Andrews, D.A. (1996). Correctional program evaluation inventory. Unpublished manuscript.

Gendreau, P. and Ross, R. R. (1987). Revivacation of rehabilitation: Evidence from the 1980s. *Justice Quarterly* 4:349-408.

Goffman, E. (1961). *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Garden City, NY: Doubleday.

Gover, A. R., Styve, G. J., and MacKenzie, D. L. (1998). Evaluating correctional boot camp programs: Issues and concerns. In *The Dilemmas of Corrections: Contemporary Readings*, eds. K. C. Haas and G. P. Alpert. Prospect Heights, IL: Waveland Press.

Gover, A. R., Styve, G. J., and MacKenzie, D. L. (1999). Boot camps. In *Prison and Jail Administration*, eds. P. M. Carlson and J. S. Garrett. Gaithersburg, MD: Aspen Publishers, Inc.

Henggeler, S. W. and Schoenwald, S. K. (1994). Boot camps for juvenile offenders: Just say no. *Journal of Child and Family Studies* 3:243-248.

Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In *Meta-Analysis for Explanation: A Case Book*, eds. T. D. Cook, H. Cooper, D. S. Corday, H. Hartman, L. V. Hedges, R. J. Light, T. A. Louis, and F. Mosteller. New York: Russell Sage.

Logan, C. H. (1993). Criminal justice performance measures for prisons. In *Performance Measures for the Criminal Justice System*. Bureau of Justice Statistics and Princeton University: U.S. Department of Justice.

Lutze, F. E. (1998). Are shock incarceration programs more rehabilitative than traditional prisons? A survey of inmates. *Justice Quarterly* 15:547-566.

MacKenzie, D. L. (1990). Boot camp prisons: Components, evaluations, and empirical issues. *Federal Probation* 54:44-52.

MacKenzie, D. L. (1995a). Boot camp prisons. In *Introduction to Social Problems*, eds.

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Calhoun and Ritzer. New York: NY: McGraw-Hill, Inc.

MacKenzie, D. L. (1995b). Boot camps - a national assessment. In *Intermediate Sanctions in Overcrowded Times*, eds. Tonry and Hamilton. Boston, MA.: Northeastern University Press.

MacKenzie, D. L. (1997). Criminal justice and crime prevention. In *Preventing Crime: What Works, What Doesn't, What's Promising*, eds. L. W. Sherman, D. C. Gottfredson, D. L. MacKenzie, J. Eck, P. Reuter, and S. Bushway. Washington DC: National Institute of Justice.

MacKenzie, D. L. and Piquero, A. (1994). The impact of shock incarceration programs on prison crowding. *Crime & Delinquency* 40:222-249.

MacKenzie, D. L. and Rosay, A. B. (1996). Correctional boot camps for juveniles. In *Juvenile and Adult Boot Camps*. Laurel, MD: American Correctional Association.

MacKenzie, D. L. and Souryal, C. (1995a). Inmates' attitude change during incarceration: A comparison of boot camp with traditional prison. *Justice Quarterly* 12:325-353.

MacKenzie, D. L. and Souryal, C. (1995b). A machiavellian perspective on the development of boot camp prisons: A debate. *University of Chicago Roundtable*. Chicago, IL: University of Chicago Press.

MacKenzie, D. L. and Parent, D. (1992). Boot camp prisons for young offenders. In *Smart Sentencing: The Emergence of Intermediate Sanctions*, eds J. N. Byrne, A. J. Lurigio, and J. Petersilia. London: Sage Publications.

Mackenzie, D. L. and Hebert, E. E. (1996). *Correctional Boot Camps: A Tough Intermediate Sanction*. Washington DC: National Institute of Justice.

MacKenzie, D. L., Styve, G. J., Gover, A. R. (1998). Performance-based standards for juvenile corrections. *Corrections Management Quarterly* 2:28-35.

MacKenzie, D. L. and Shaw, J. W. (1993). The impact of shock incarceration on technical violations and new criminal activities. *Justice Quarterly* 10:463-487.

MacKenzie, D. L., Brame, R., McDowall, D., and Souryal, C. (1995). Boot camp prisons and recidivism in eight states. *Criminology* 33:326-356.

Mathlas, R. E. S. and Mathews, J. W. (1991). The boot camp program for offenders: Does the shoe fit? *International Journal of Offender Therapy and Comparative Criminology* 35:322-6.

Meachum, L. M. (1990). Boot camp prisons: Pros and cons. Paper presented at Annual Meeting of American Society of Criminology, Baltimore, MD.

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Morash, M. and Rucker, L. (1990). A critical look at the ideal of boot camp as a correctional reform. *Crime and Delinquency* 36:204-222.

Morris, N. and Tonry, M. (1990). *Between Prison and Probation: Intermediate Punishments in a Rational Sentencing System*. New York: Oxford University Press.

Palmer, T. (1983). The effectiveness issue today: An overview. *Federal Probation* 46:3-10.

Parent, D. (1989). *Shock Incarceration: An Overview of Existing Programs*. Washington, DC: U.S. Department of Justice.

Peters, M. Thomas, D. Zamberlan, C., and Caliber Associates. (1997). *Boot Camps for Juvenile Offenders*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Souryal, C. and MacKenzie, D. L. (1994). Shock incarceration and recidivism: An examination of boot camp programs in four states. In *Intermediate Sanctions: Sentencing in the 90's*, eds. J. O. Smykla and W. L. Selke. Cincinnati, OH: Anderson.

Tonry, M. and Lynch, M. (1996). Intermediate sanctions. In *Crime and Justice: A Review of Research*, Vol.20, eds. M. Tonry and N. Morris. Chicago: University of Chicago Press.

Zang, S. X. (1998). In search of hopeful glimpses: A critique of research strategies in current boot camp evaluations. *Crime and Delinquency* 44:314-334.

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DO INDIVIDUAL CHARACTERISTICS AFFECT JUVENILE CORRECTIONAL STAFF'S PERCEPTIONS OF INMATES AND THE CORRECTIONAL WORK ENVIRONMENT?

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ABSTRACT

This study examines whether the individual characteristics of race, sex, and education affect the manner in which juvenile correctional staff perceive inmates and their work environment. Prior to 1980, correctional staff were overwhelming comprised of White males. Correctional reformers believed employing more female, minority and highly educated staff members would lead to more humane correctional environments. However, the existing research conducted in adult correctional facilities not only calls this belief into question, but also indicates that the hiring of non-traditional staff may have led to racial and sexual hostility. Yet, these research efforts almost uniformly examined adult correctional institutions. In contrast, this study examines these issues in sample of 1,362 *juvenile* correctional staff from forty-nine juvenile correctional facilities. These results reveal that individual characteristics of juvenile correctional staff do significantly affect perceptions of both inmates and the work environment. Specifically, minority staff perceived inmates more favorably than other staff; female staff report more stress than their same race male counterparts; and more highly educated staff indicated significantly less job satisfaction than other staff. Contrary to much of the prior research in adult facilities, the current study found few, if any, manifestations of either racial or sexual hostility.

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INTRODUCTION

The demographic composition of staff in America's correctional institutions has undergone a marked change over the last 30 years. In 1968, five percent of correctional staff were female, five percent were non-white, and twenty percent had a college degree or more (Galvin and Karacki, 1969).[1] Over the next twenty-seven years, these numbers changed dramatically. By 1995, twenty-nine percent of all correctional staff were female, thirty-three percent were non-white (BJS, 1997), and an increasing number had a college degree or more[2].

These changes in correctional staff were the culmination of a confluence of political, judicial, and reform efforts. First, in the late 1950's, an increasing need for correctional staff and the civil rights movement forced correctional administrators to hire non-whites as line staff (Crouch, 1999). Many more minority staff were hired in the 1970's, as the prisoners' rights and prison reform movements increased the pressure on correctional administrators to hire minorities (Jacobs and Kraft, 1978; National Advisory Commission on Criminal Justice Standards and Goals, 1973). Then, the 1972 amendment to Title VII of the 1964 Civil Rights Act enabled women to acquire employment in men's prisons (Crouch, 1999; Wright and Saylor, 1991). Finally, in the 1970's and 1980's, in an attempt to reform the battered image and hold their autonomy in

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[1] Figures include line, administrative, and para-professional (i.e., teachers, social workers, psychologists, etc.) staff.

[2] As evidenced by reports of BOP staff educational level (BJS, 1998) and staff educational level reported in other research (Camp and Camp, 1996), in comparison to the educational level of staff reported in Galvin and Karacki (1969).

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the face of federal intervention, correctional administrators began to emphasize the professionalization of their staff. They did this mostly by increasing the educational level of line staff (Jurik, 1985a; Jurik and Musheno, 1986; Jurik, Halemba, Musheno, and Boyle, 1987).

Many correctional reformers believed hiring more female, minority and highly educated staff members would lead to more humane correctional environments (Jacobs and Kraft, 1978; Jurik, 1985a; Jurik 1985b; Jurik and Musheno, 1986). Reformers believed hiring more minorities would lead to better inmate relations for two reasons. First, reformers reasoned minorities, many of whom have similar socio-economic and cultural backgrounds as inmates, would be able to communicate with inmates more effectively (some researchers have labeled this as the "identification" theory). Second, correctional reformers noted that many of the complaints alleged against correctional staff were racial in nature (Burns, 1973). The largely white rural correctional staff often had negative perceptions of the inmates in their custody and came into conflict with the increasingly non-white urban prison population (Bowker, 1999). Correctional reformers expected the addition of non-white staff would attenuate many of these racial problems.

Empirical tests of the "identification" theory have been less than definitive. Several studies examining perceptions of inmates or efficacy in dealing with inmates found that minorities perceive inmates significantly more positively than staff (Crouch and Alpert, 1982; Van Voorhis et al., 1991; Whitehead and Lindquist, 1989). Conversely, a sizable number of studies found no differences in perceptions of inmates by race of correctional staff (Cullen, Lutze, and Link, 1989; Jacobs and Kraft, 1978; Toch and Klofas, 1982).

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Correctional reformers and researchers also believed that staff who were more highly educated or were female would be more human service oriented, and would emphasize communication and counseling (Jurik and Musheno, 1986). Studies of this hypothesis have been less than fully supportive. Wright and Saylor (1991) failed to find gender differences in staff perceptions of efficacy in dealing with inmates. Britton (1997) also found no significant gender differences once controls were introduced. The hypothesis that more education leads to a greater rehabilitation orientation also has failed to find much support in the literature. Research has shown that staff educational level exhibits no statistically significant relationship to perceptions of inmates (Jurik, 1985a). However, Rogers (1991) did find that educational level was significantly related to an interest in counseling: "College graduates in particular indicated a marked preference for counseling over custody (pg. 133)."

The integration of these new correctional staff members was not without considerable turmoil. Correctional reformers and administrators failed to realize that their efforts to improve their image and maintain independence, by changing the demographics of correctional staff, would produce an "internal crisis" in corrections (Jurik and Musheno, 1986). Shortly after reform efforts to diversify correctional staff were implemented, qualitative research reported that racial and sexual hostility and discrimination were common among integrated correctional staff (Crouch, 1985; Jacobs and Grear, 1977; Jurik, 1985b; Owen, 1985; Zimmer, 1986). Yet, later quantitative analyses found few, if any, indications of either racial or sexual hostility (Britton, 1997; Jurik and Halemba, 1984; Wright and Saylor, 1991; Wright and Saylor, 1992).

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Typically, quantitative researchers have examined staff perceptions of job satisfaction and stress by race and gender to determine if racial or sexual hostilities were pervasive in a correctional environment. Researchers usually hypothesize that if racial and sexual hostilities do exist, then these phenomena should manifest themselves through lower job satisfaction and higher levels of stress among minority and female staff. Most research has not revealed a relationship between gender or race and lower job satisfaction (Blau et al., 1986; Cullen et al., 1985; Wright and Saylor, 1991). Several studies, however, found that female correctional staff experienced more stress than male staff (Blau et al., 1986; Cullen et al., 1985). Moreover, the relationship between race and stress is more ambiguous. Some studies have shown that minority staff have less stress than their counterparts (Blau et al., 1986; Cullen et al., 1985; Wright and Saylor, 1991). while other research finds just the opposite (Van Voorhis et al., 1991).

Further the increased emphasis on educational level appears to have produced turmoil among correctional staff. Many studies have found that staff with more education have less job satisfaction (Cullen et al., 1985; Jurik and Musheno, 1986; Jurik et al., 1987). A number of hypotheses have been posited to explain this relationship. Some researchers hypothesize that staff with more education experience alienation from other staff who do not possess a college education, and they perceive staff without college education less favorably; creating tension amongst staff (Rogers, 1992). Others contend that more educated staff may experience less job satisfaction because of the limited autonomy and promotional opportunities associated with working in a para-military organization (Jurik et al., 1987).

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Another body of research argues that individual characteristics are not the most salient influences on perceptions of either inmates or work experience. From this perspective, the nature of correctional work over time "homogenizes" staff, regardless of individual differences. This occurs through either socialization or attrition of non-conformists until a correctional subculture with its own values and norms is formed (Jacobs and Grear, 1977; Jacobs and Kraft, 1978; Jurik and Winn, 1987; Van Voorhis, Cullen, Link, and Wolfe, 1991). According to this view, individual differences will not exert much, if any, influence on perceptions. Instead, correctional staff, especially those with tenure, will perceive the environment and inmates in a similar fashion.

In sum, a growing body of correctional literature has addressed whether the individual characteristics of race, gender, and educational attainment influence perceptions of inmates and work experiences. However, none of the above referenced studies have examined how the individual characteristics of *juvenile correctional staff* effect perceptions of inmates and work experiences. The current study is the first to analyze these relationships in a large sample of juvenile correctional staff.

HYPOTHESES

This study addresses four central questions. First, do the individual characteristics of race, sex, and educational level predict juvenile correctional staff's perceptions of the juveniles in their custody? Second, do racial minorities, female correctional staff, and more educated staff members manifest indicators of negative work experiences, such as lower job satisfaction or higher levels of stress, which may be an indication of discrimination/alienation or racial/sexual hostility? Third, are individual characteristics significant predictors of stress? And, lastly, are individual-level

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characteristics significant predictors of perceptions after organizational-level variables and tenure in the present institution are taken into account?

The extant research has not addressed these questions in a sample of juvenile correctional staff. However, the research conducted in adult facilities suggests the following hypotheses: 1) Race is significantly related to perceptions of inmates. Specifically, African-American staff perceive inmates more positively than other staff. Conversely, both gender and education are not related to perceptions of inmates; 2) Race and educational level are associated with lower job satisfaction, while gender is not. It is hypothesized that minority staff and staff with more education will display lower job satisfaction; 3) The only individual characteristic associated with stress is gender, with female staff experiencing higher levels of stress than male staff; and, 4) The individual characteristics of race, sex, and education remain significant predictors of perceptions of inmates and work experiences even after controlling for other relevant factors.

METHODOLOGY

The data utilized in this article was collected as part of the National Evaluation of Juvenile Correctional Facilities (hereafter referred to as "The National Evaluation"). The National Evaluation was undertaken with the goal of evaluating the quality of correctional confinement in both juvenile boot camps and traditional correctional programs (e.g., detention centers, training schools, etc.), in order to identify how well both types of facilities were achieving basic standards of quality juvenile management and programming. The National Evaluation employed four interrelated instruments to examine the quality of confinement of each facility from four different point of views. Two instruments assessed the quality of facility confinement by measuring the

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perceptions of both juvenile residents and facility staff. A third instrument measured the quality of the correctional environment by interviewing facility administrators in order to assess the administrative functioning of each facility. The National Evaluation also included a videotaped inspection of the facilities. The data analyzed in this article came primarily from the staff survey portion of the National Evaluation.

Selection of Sites

Forty-nine juvenile correctional facilities from twenty different states were analyzed in The National Evaluation. These facilities were both publicly and privately funded. Twenty-seven of these facilities were boot camps and twenty-two facilities were non-boot camp, traditional facilities (e.g., detention centers, training schools, etc.). The boot camps were matched to the traditional facilities using the criterion that the traditional facility must be the facility where boot camp residents would have mostly likely been placed if that particular boot camp were not in operation. There are more boot camps (27) than comparison facilities (22) because several of the traditional facilities were matched to more than one boot camp. In this analysis, however, the facilities were not matched or linked in any manner.

Survey Administration

The staff survey was administered by a survey facilitator who worked in each facility, as it was not possible for the investigators to administer the survey to all staff members across all the facilities' varying shifts. The researchers recommended that the survey facilitator distribute the survey packets to all staff members having contact with residents at a staff meeting or role call. All staff having contact with residents were requested to complete a survey, thus no sampling device was used in this study. The

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investigators also recommended that staff be given time during their shift to complete the survey. Completed staff surveys were returned to a central location or the survey facilitator. Once all participating staff members had returned their survey packets to the survey facilitator, the surveys were then mailed back to the investigators. The consent form advised staff that participation in the survey was voluntary and all responses would be kept strictly confidential.

The final sample consisted of 1,362 respondents. The overall response rate for all forty-nine correctional facilities was 66%. The response rate of boot camps was 72% (N=775), while the comparison facilities had a 58% response rate (N=587). All of the data were collected between April, 1997 and August, 1998.

Staff Survey

The 216-item staff survey utilized in The National Evaluation captured information on a variety of demographic and occupational characteristics, including age, race, education, prior experience working with juveniles, correctional training, correctional role, length of employment in current facility, frequency of contact with residents, etc. The survey also contained scales measuring staff perceptions of inmates and work experiences. The following is a brief description of those scales which are pertinent to the current analysis:

- The Juvenile Culpability scale consists of six items measuring staff perceptions of how culpable the residents are for their own misbehavior and how amenable their behavior is to change (Alpha coefficient =.61). For example, "Most of these kids are good kids, they have just had a tough life." and "All these kids need is a good home and some love."

- The Job Satisfaction scale uses fifteen items to measure staff's satisfaction with their jobs, co-workers, supervisors, facility administration, and training (Alpha coefficient = .89).

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- The fourteen-item Stress scale measures the amount of stress, depression, anxiety, and anger staff members have experienced in the past six months (Alpha coefficient = .91)

The scales utilized in The National Evaluation were not validated measures; therefore, they were factor analyzed and assessed for internal reliability. All of the scales displayed internal reliability scores (Cronbach's Alpha) of at least .60 and all the items had a factor score of at least .30.[3]

Variables and Analytic Strategy

The Juvenile Culpability, Job Satisfaction, and Stress scales are the dependent variables in this analysis. The independent variables of interest are race, gender, and educational attainment. In this analysis, an interaction term between gender and race was created in order to examine the existence of significant interactions. Staff perceptions of inmates (as measured by the Juvenile Culpability scale), job satisfaction, and stress were regressed on the variables of staff race, gender, and educational attainment using ordinary least squares regression in order to ascertain whether these independent variables have any affect on staff perceptions and attitudes. Then, the control variables of correctional role (line staff, administrative staff, etc.), frequency of contact with inmates, age, tenure, prior experience working with juveniles, military experience, number of inmates in facility, inmate to staff ratio, average length of inmate stay, population seriousness, type of facility (boot camp or comparison facility), percentage of staff non-white, and percentage of inmates non-white were introduced into the analysis to determine if significant demographic differences persist after other relevant factors are taken into account.

[3] The results of the scale analyses and the scale items are available from the authors.

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RESULTS

Sample Characteristics

Analysis of the demographic data (see Table 1) revealed that 63% of the respondent were male (70% of line staff were male). Sixty-three percent of respondents identified themselves as s. 25% identified themselves as African-American. 7% identified themselves as Hispanic. and 5% were classified as belonging to other racial groups (i.e., Asian. Native American. Bi-Racial. and other). This sample of correctional officers was generally highly educated. The majority of respondents reported having at least a college degree. with 33% reporting their highest level of education as a college degree and 23% reporting post-graduate studies.

—TABLE 1 ABOUT HERE—

As seen in Table 2. the majority of respondents (57.1%) were employed as line staff. 10.4% indicated having administrative positions. 18.7% identified their role as teachers. 3.9% of staff reported being caseworkers. and another 9.8% of staff indicated having other correctional roles. This sample of correctional staff reported a considerable amount of experience. with an average of 1.52 years of prior experience working with juveniles and an average 4.42 years of experience working in their current facility. Respondents' ages ranged from 20 to 70. with an average age of 37.6 years of age.

—TABLE 2 ABOUT HERE—

Regression Analysis

Hypothesis 1 predicted that race of staff is significantly related to staff perceptions of inmates. while gender and education are not. More specifically. it was hypothesized that African-American staff would perceive inmates more positively than

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white male staff. In order to assess the validity of this hypothesis, the Juvenile Culpability scale, which assesses staff's perceptions of inmates, was regressed on the demographic data.

—TABLES 3 AND 4 ABOUT HERE—

The results are presented in Table 4 (standardized regression coefficients are displayed). The first column of Table 4 presents the results of the analysis of staff perceptions of inmates without controls. Based upon Model 1, the first hypothesis appears to be supported. African-American staff, both male and female, perceived inmates as being significantly less culpable in their criminality than White male staff. African-American staff were more likely than White male staff to believe that the criminality of juvenile offenders was due to poor parenting or a result of having had a "tough life." Furthermore, Hispanic males and "other" race females also perceived inmates more positively than White male staff. Neither gender nor educational attainment were significantly related to perceptions of inmates.

Even after the control variables were introduced (see Model 2), all of the racial differences in perceptions of inmates persisted. It is interesting to note that several of the control variables were also significantly related to perceptions of inmates. Administrative staff (in comparison to line staff), older staff, staff working in facilities with larger inmate to staff ratios, and boot camp staff (in comparison to traditional facility staff) all perceived inmates as being less culpable in their own criminality. Staff with more previous experience working with juveniles (not in the current facility) and staff working in larger facilities perceived inmates less favorably.

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The second hypothesis predicted that race and education are significantly related to job satisfaction. The previous research conducted in adult facilities suggests that racial minorities and staff with more education will be significantly less satisfied with working in correctional facilities than White or less educated staff. This hypothesis is only partially substantiated by the data. Model 3 (Table 4, third column) revealed education was significantly related to job satisfaction; however, race did not bear a consistent relationship to job satisfaction. Model 3 confirmed that education was related to job satisfaction, specifically, as education increased job satisfaction decreased. Race, on the other hand, did not appear to bear any systematic relationship to job satisfaction. Hispanic females and males from the "other" race group reported significantly higher levels of job satisfaction than White male staff, while neither Hispanic males or female staff from the "other" race group reported similar perceptions.

The control variables did not mediate or intervene in any of these relationships; instead, the control variables exacerbated differences among staff (see Model 4). Whereas the affects of educational-level on job satisfaction remained substantively unchanged in Model 4, the affects of race change substantially, but not in the manner predicted. After adjusting for the controls, in comparison to White male staff, all non-White male staff and Hispanic female staff were significantly more satisfied with their positions. Additionally, model 4 shows that several of the control variables were significantly related to job satisfaction. Specifically, administrative, older, and boot camp staff all reported higher job satisfaction. On the other hand, staff with more tenure, staff reporting weekly contact with inmates (in comparison to staff with daily contact with inmates), staff working in facilities with longer average inmate stays, staff working

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in larger facilities, and staff working in facilities with higher percentages of non-white staff all reported lower job satisfaction. Thus, the researchers concluded that education did bear the hypothesized relationship to job satisfaction; however, race did not.

According to the third hypothesis, it was expected that gender would be significantly related to stress, while race and education would not. This hypothesis was not generally supported. Model 5 indicates that White female staff were significantly more stressed than White male staff; however, African-American and females from the "other" race group reported levels of stress which were non-significantly higher than White male staff. Conversely, African-American and males from the "other" race category both indicated significantly lower levels of stress than White male staff. Thus, the hypothesis that gender is a predictor of stress regardless of race is not supported, although certain groups of females (i.e., African-American, "other" race, and White females) may be more stressed than their male counterparts of the same race.

When the control variables were entered into the model, the relationship between "other" race males and stress fell slightly short of statistical significance (at the .10 level); however, the other relationships persisted. Furthermore, Model 6 shows that staff with more tenure, staff working in facilities with larger inmate to staff ratios, and staff working in larger facilities perceived more stress, while younger staff and boot camp staff both reported less stress.

The final hypothesis predicted that significant differences in staff perceptions would remain even after controlling for other relevant factors. Models 2, 4, and 6 indicated that, while several of the control variables were predictors of the dependent variables, these controls generally did not mediate or intervene in the relationships

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between staff perceptions and various personal characteristics. Therefore, hypothesis 4 was fully substantiated by the data.

DISCUSSION AND CONCLUSIONS

The hiring of non-traditional correctional staff was accompanied by several assumptions and expectations about these new staff members. Correctional experts believed that hiring minority staff members would lead to better inmate-staff relations, as minority staff were believed to possess more positive perceptions of inmates and would be better able to communicate with the increasingly non-white inmate population. This in turn would lead to increased efficacy in dealing with inmates. Similarly, female and highly educated staff were thought to hold attitudes more oriented toward rehabilitation and treatment as opposed to the traditional custody orientation.

The extant research conducted in adult facilities concerning these assumptions and expectations has not only called into question these expectations, but has also revealed that the hiring of non-traditional staff produced negative work environments in many correctional institutions. Early research found that women and minorities were routinely discriminated against and harassed, whereas later studies found less indications of hostility toward non-traditional staff. However, this empirical evidence called into question many of the assumptions about the attitudes and orientations of non-traditional correctional staff.

In concordance to the earlier research conducted in adult facilities, the present findings also provide no support for the expectations that female staff and highly educated staff are more rehabilitation oriented. The above analysis revealed no

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relationship between gender or educational-level of staff and perceptions of juvenile culpability. However, the above results clearly supported the expectation that minority staff, especially African-American staff, perceive inmates more favorably than White staff. While many studies conducted in adult facilities have not revealed a similar relationship (Britton, 1997; Cullen et al., 1989; Toch and Klofas, 1982), this study joins a growing body of literature which does support the "identification hypothesis" (Crouch and Alpert, 1982; Van Voorhis et al., 1991; Whitehead and Lindquist, 1989).

These findings are of utmost importance for juvenile correctional administrators, as, unlike adult corrections, rehabilitation is still the underlying philosophy for most juvenile justice and correctional agencies in America. Undoubtedly, how staff perceive inmates affects their interactions with inmates. If staff believe that the behavior of the inmates in their custody is not open to change and rehabilitation, then these staff are less likely to fully implement and adhere to the rehabilitation philosophy of juvenile corrections.

Interestingly, minority staff generally reported higher levels of job satisfaction and, in many instances, considerably less stress than their White male counterparts. The current study did not reveal any indications that African-American staff, as a whole, experienced greater than average negative work relations, as some researchers have suggested (Britton, 1997; Jacobs and Kraft, 1978; Owen, 1988; Pollock, 1986, Zimmer, 1986). In fact, once the control variables were taken into account, minorities in general reported higher levels of job satisfaction than White male staff, which is direct in opposition to the literature conducted in adult facilities (Britton, 1997; Jacobs and Grear,

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1977; Jurik and Winn, 1987). Furthermore, the current study finds that African-American males reported significantly less stress than White males.

In contrast to much of the previous research concerning female correctional staff, women reported levels of job satisfaction and stress roughly the same as male staff. Only one significant difference was found between females and White males. Specifically, Hispanic female staff reported significantly *more* job satisfaction than White male staff. In regards to stress, the researchers found only one gender difference: White females reported significantly more stress than White males. This finding of only one gender difference in stress does not support the researchers' hypothesis of female staff, regardless of race, reporting higher levels of stress. However, in comparison to males of the same race, females appear to be more stressed. For example, African-American males indicated significantly less stress than White males, while African-American females report non-significantly more stress than White males. A similar pattern exists between "other" race males and females.

On the other hand, highly educated staff reported significantly more dissatisfaction with correctional work than staff with less education. Some researchers have suggested that this relationship is a result of the limited autonomy associated with working in a para-military organization such as correctional institutions (Jurik et al, 1987). From this perspective, these exceedingly able correctional staff are not being asked to perform up to their ability, which often leads to frustration and attrition. Other researchers believe that the lack of promotional opportunities among staff leads to dissatisfaction especially among highly educated staff (Rogers, 1992). Future research

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needs to focus on ascertaining why educated staff are so dissatisfied with correctional work and develop methods to alleviate this dissatisfaction.

In general, we conclude that while non-traditional staff do manifest certain differences in perceptions of the correctional environment which cannot be explained by other relevant factors, generally the perceptions of non-traditional correctional staff are not very different than that of White male staff. All of the models presented explained very little of the variation in the dependent variable of interest. Furthermore, with the exception of racial differences in the perceptions of inmates, most of the differences found the current study were small (rarely more than a .10 of a standard deviation). Therefore, the researchers conclude that the current data presents few, if any, indications of either racial or sexual hostility among juvenile correctional staff. These findings could be due to the longer history of minority and female staff working within juvenile corrections. Or perhaps, minority correctional staff, after a period of initial rejection, have been accepted by their fellow staff, and consequently no longer report or indicate widespread negative work experiences. While the current analysis did not reveal significant manifestations of racial or sexual hostility, other research examining voluntary turnover among juvenile correctional staff have found that minority, female, and highly educated staff all exhibited significantly higher rates of voluntary turnover, which is another manifestation of negative work experiences (see Mitchell, MacKenzie, Styve and Gover, under review). Hence, it is apparent the debate over this issue is far from resolved. Only additional research concerning correctional staff can explicate these issues.

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TABLE 1. Main Effects Descriptive Statistics and Coding

MAIN EFFECTS	N	VALID %
Gender by Race	1326	100%
African-American Females	124	9.4%
Hispanic Females	27	2%
White Females	317	23.9%
Other Females	23	1.7%
Total Females	491	37%
African-American Males	212	16%
Hispanic Males	63	4.8%
White Males*	516	38.9%
Other Males	44	3.3%
Total Males	835	63%
Total African-American	336	25.3%
Total Hispanic	90	6.8%
Total White	833	62.8%
Total Other Race	67	5.1%
Education	1342	100%
High School or Technical Training*	203	15.1%
Some College	382	28.5%
College Degree	447	33.3%
Graduate Study	310	23.1%

*Reference Category

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TABLE 2. Control Variables Descriptive Statistics and Coding

CONTROL VARIABLES	N	VALID %
Job Title	1304	100%
Line Staff*	745	57.1%
Administrative Staff	136	10.4%
Caseworker	51	3.9%
Teacher	244	18.7%
Other	128	9.8%
Frequency of Contact	1351	100%
Infrequently	23	1.7%
Monthly	23	1.7%
Once a Week	31	2.3%
Daily*	1274	94.3%
Type of Facility	1362	100%
Boot Camp	775	56.9%
Comparison Facility*	587	43.1%
Personal Factors	**N**	**Mean (SD)**
Age	1283	37.6 (10.3)
Tenure	1309	4.4 (5.9)
Length of Prior Experience with Juveniles	1280	1.52 (3.7)
Facility Level Factors		
Number of Inmates in Facility[4]	1151	109.1 (109.2)
Inmate to Staff Ratio	1151	3.38 (6.2)
Average Length of Inmate Sentence (in months, AVGLOS)	1331	6.9 (2.1)
Population Seriousness Index[5]	1362	1.2 (.5)
% of non-white staff working in facility	1362	.37 (.2)
% of residents non-white	1362	.67 (.2)

*Reference Category

[4] Missing data for both inmate to staff ratio and number of staff in facility were replaced with the median for that type of facility (the mean for both variables were skewed), in order to prevent staff working in certain facilities from being excluded. Imputing not this data did change any of the substantive results.

[5] The Population Seriousness Index consists of a series of questions regarding whether the facility accepts certain types of offenders (e.g., violent offenders, sex offenders, arsonists, etc.) values are 0 (does not accept), 1 (accepts, a limited number), and 2 (accepts); higher values represent a more serious population.

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TABLE 3 Dependent Variables Descriptive Statistics

Dependent Variables	Mean (SD)	N
Juvenile Culpability	2.7 (0.6)	1273
Job Satisfaction	3.7 (0.6)	1276
Stress	2.0 (0.7)	1276

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TABLE 4 Results of OLS Regression Analysis

	Juvenile Culpability		Job Satisfaction		Stress	
Gender by Race						
African-American Females	-.117**	-.107**	.012	.049	.016	.028
Hispanic Females	.012	-.001	.050*	.084**	-.015	-.033
White Females	-.020	-.024	-.002	.004	.095**	.091**
Other Females	-.066**	-.107**	-.024	-.009	.036	.025
African-American Males	-.114**	-.119**	.009	.091**	-.094**	-.102**
Hispanic Males	-.056*	-.062*	.016	.056*	-.042	-.045
Other Males	.009	.022	.096**	.095**	-.051*	-.047
Education						
Some College	.041	.060	.011	.008	-.012	-.013
College Graduates	.034	.008	-.104**	-.091**	.025	-.039
Graduate Study	.025	.062	-.138**	-.126**	.007	-.013
Correctional Role						
Administrative Staff		-.094**		.104**		.003
Caseworker		-.041		.009		-.024
Teacher		-.043		.009		.000
Other Staff		-.027		.007		.012
Personal Level Factors						
Tenure		-.005		-.121**		.128**
Prior Experience Working w/Juveniles (in yrs.)		.102**		-.048		.019
Age		-.105**		.086**		-.118**
Military Experience		-.032		-.037		-.029
Frequency of Contact						
Infrequently		-.012		-.014		-.034
Monthly		.038		-.030		-.008
Weekly		-.028		-.078**		-.035
Facility Level Factors						
Inmate to Staff Ratio		-.087**		-.032		.140**
Population Seriousness		.032		-.008		-.059
AVGLOS		.036		-.134**		.080**
Size		.075**		-.058*		.014
Type of Facility		-.121**		.132**		-.193**
% of staff non-white		-.054		-.142**		.068
% of inmates non-white		.024		.018		-.052
Model Summary						
N	1235	1072	1238	1073	1240	1075
R^2	.03	.12	.04	.13	.03	.10

*p < .10; **p < .05

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LIST OF REFERENCES

Blau, Judith R., Light, Stephen C., and Chamlin, Mitchell (1986). "Individual and contextual effects on stress and job satisfaction: A study of prison staff." Work and Occupations, 13, 131-156.

Britton, Dana M. (1997). "Perceptions of the work environment among correctional officers: Do race and sex matter?" Criminology, 35, 85-105.

Bureau of Justice Statistics. (1997). Census of State and Federal Correctional Facilities, 1995. (NCJ-164266). Washington D.C.: James J. Stephan.

Bureau of Justice Statistics (1998). Sourcebook of Criminal Justice Statistics: 1994, 1995, and 1996 Editions (CD ROM). Washington D.C.

Camp, G. M., Camp, C. G., and Fair, M. V. (1996). Managing Staff: Corrections' Most Valuable Resource. Washington, D.C. National Institute of Corrections.

Crouch, Ben M. (1985). "Pandora's Box: Women guards in men's prisons." Journal of Criminal Justice, 13, 535-548.

Crouch, Ben M. (1999). Guard Work in Transition. In Kenneth C. Haas and Geoffrey P. Alpert (Eds.), The Dilemmas of Corrections, Fourth Edition. Prospect Heights, IL: Waveland Press, Inc.

Galvin, John J. and Karacki, Loren. (1969). Manpower and Training in Correctional Institutions. Washington D.C.: Joint Commission on Correctional Manpower and Training.

Jacobs, James B., and Kraft, Lawrence J. (1978). "Integrating the keepers: A comparison of black and white prison guards in Illinois." Social Problems, 25, 304-318.

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Jurik, Nancy J. (1985a). "Individual and organizational determinants of correctional officer attitudes toward inmates." Criminology, 23, 523-539.

Jurik, Nancy J. (1985b). "An officer and a lady: Organizational Barriers to women working as correctional officers in men's prisons." Social Problems, 32, 375-388.

Jurik, Nancy J., Halemba, Gregory J., Musheno, Michael C., and Boyle, Bernad V. (1987). "Educational Attainment, Job Satisfaction, and the Professionalization of Correctional Officers." Work and Occupations, 14, 106-125.

Jurik, Nancy J., and Musheno, Michael C. (1986). "The internal crisis of corrections: Professionalization and the work environment." Justice Quarterly, 3, 457-480.

Jurik, Nancy J., and Winn, Russell (1987). "Describing correctional security dropouts and rejects: An individual or organizational profile?" Criminal Justice and Behavior, 14, 5-25.

National Advisory Commission on Criminal Justice Standards and Goals, Task Force on Corrections (1973). Corrections. Washington, D.C.: U.S. Government Printing Office.

Owen, Barbara A. (1985). "Race and Gender Relations Among Prison Workers." Crime and Delinquency, 31, 147-159.

Rogers, Robert (1991). "The effects of educational level on correctional officer job satisfaction." Journal of Criminal Justice, 19, 123-137.

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Van Voorhis, Patricia, Cullen, Francis T., Link, Bruce G., and Wolfe, Nancy T. (1991). "The impact of race and gender on correctional officers' orientation to the integrated environment." Journal of Research in Crime and Delinquency, 28, 472-500.

Wright, Kevin N., and Saylor, William G. (1991). "Male and Female Employees' Perceptions of Prison Work: Is There a Difference?" Justice Quarterly, 8, 505- 524.

Wright, Kevin N., and Saylor, William G. (1992). A comparison of perception of the work environment between minority and non-minority employees of the federal prison system. Journal of Criminal Justice, 20, 63-71.

Zimmer, Lynn E. (1986). Women Guarding Men. Chicago: University of Chicago Press.

Zupan, Linda (1986). "Gender-related differences in correctional officers' perceptions and attitudes." Journal of Criminal Justice, 14, 349-361.

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THE IMPACT OF INDIVIDUAL, ORGANIZATIONAL, AND ENVIRONMENTAL ATTRIBUTES ON VOLUNTARY JUVENILE CORRECTIONAL STAFF TURNOVER

INTRODUCTION

In recent years, numerous studies have examined occupational problems among correctional staff in institutional settings. The focus of these studies has varied from burnout (Whitehead and Lindquist, 1986), to job dissatisfaction (Blau, Light, and Chamlin, 1986), to lack of participation in decision-making (Slate and Vogel, 1997), to job stress (Cheek and Miller, 1983), and lack of social support (Dignam, Barrera, and West, 1986). Notably lacking from this growing body of literature is research examining how these occupational issues contribute to voluntary turnover among correctional staff, especially amongst juvenile correctional staff. Of the dozens of studies conducted concerning correctional staff occupational issues, only eight studies (Benton, Rosen, and Peters, 1982; Camp, 1994; Camp, Saylor, and Gilman, 1994; Jacobs and Grear, 1977; Jurik and Winn, 1987; Slate and Vogel, 1997; Stohr, Self, and Lovich, 1992; Wright, 1993) have focused on explaining how these occupational issues contribute to voluntary correctional staff turnover. Furthermore, of the studies addressing voluntary correctional staff turnover, only one has emphasized turnover in juvenile institutions (Wright, 1993).

Despite the lack of research concerning juvenile correctional staff turnover, there is evidence to suggest that the turnover rate in correctional facilities is unusually high. Perhaps the earliest national study of correctional staff attrition was conducted by Lunden (1965) in 1961. This study revealed a correctional staff turnover rate of 25%, with many states reporting correctional turnover rates in excess of 35%. Two national studies of correctional turnover were conducted in 1978 (Benton, et al., 1982; National Institute of

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Law Enforcement and Criminal Justice, 1978). The former reported a turnover rate of 24%, while the latter reported the voluntary turnover rate to be 19.1%. A 1987 national survey of correctional facilities reported that the correctional staff turnover rate had been reduced to approximately 17% (Contact Inc., 1987). The latest figures obtained revealed a correctional turnover rate of 12.4%, with at least one state reporting turnover rates approaching 40% (Wees, 1996).

National rates of juvenile correctional staff turnover have not been extensively reported; however, according to the National Manpower Survey (1978), the average annual voluntary turnover rate was higher for juvenile correctional facilities than in adult correctional facilities, 37.2% versus 19.1%. Furthermore, Wright (1993) found that, during a two-year period, 39.2% (an annual rate of 19.6%) of the juvenile detention center staff in his sample voluntarily left their positions.

Two disturbing trends are evident from the above discussion of annual correctional turnover rates. First, retention of correctional staff is a chronic problem facing correctional administrators. At least since 1961, correctional administrators have been combating the issue of turnover - apparently with only limited success. Second, correctional turnover is also an acute problem, with some states still reporting turnover rates in excess of 35% (Wees, 1996).

While turnover is a costly problem in many professions (Cascio, 1991; Laser, 1980), in corrections, staff turnover is especially costly, as correctional facilities are almost completely reliant upon staff, not machines or computers, to meet their objectives (Archambeault and Archambeault, 1982; Archambeault and Fenwick, 1988; Benton et al., 1982). Like most occupations, staff attrition impacts correctional facilities on two levels:

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direct costs and indirect costs (Benton et al., 1982; Dennis, 1998; Hom and Griffeth, 1995; Laser, 1980). The direct financial costs include the increased expenditure of funds to recruit and train new staff, payment of overtime to remaining staff in order to cover vacated shifts, and increased payroll administrative expenses stemming from the fluctuation in employees. McShane, Williams, Shichor and McClain (1991) estimate that the direct costs of recruiting, testing, hiring, and training new personnel ranges from $10,000 to $20,000.

The indirect costs of staff attrition include decreased productivity, reduced quality of service, and low staff morale. Quite possibly the indirect costs of correctional attrition are even more expensive than in most professions, as correctional staff attrition breaks down the lines of communications between staff and inmates (Stohr et al., 1992). These lines of communication provide correctional authorities with the information they need to avert potential conflicts/problems in their institutions. New staff need time to acclimate to the correctional environment and establish lines of communication with both the inmates and correctional administrators. During this acclimation period not only are productivity, quality of service, and staff morale in jeopardy, but also the safety of inmates and correctional staff may be in increased peril. Thus, the constant fluctuation of correctional staff in our country's correctional institutions, in this era of increasing budgetary constraints, is more than just a mere distraction; it is a serious threat to the safety and quality of service of the correctional facilities in this country.

Stress in Corrections

The correctional literature clearly indicates that employment in the field of corrections is stressful (Benton et al., 1982; Cheek, 1984; Cheek and Miller, 1983;

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Huckabee, 1992; Lasky, Gordon, and Srebalus, 1986; Lombardo, 1981; Stohr, Lovrich, and Wilson, 1994). Correctional staff stress has been traced to a number of factors, most commonly role ambiguity, perceived danger from inmates, conflict with facility administrators and supervisors, lack of workplace and family support, and lack of participatory management (Huckabee, 1992; Liou, 1995; Poole and Regoli, 1980; Triplett, Mullings, and Scarborough, 1996).[1]

Many correctional and organizational researchers have determined that stress is a primary cause of both poor physical health and negative work behaviors (Adwell and Miller, 1985; Albrecht, 1979; Cheek and Miller, 1983; Cullen, Link, Wolfe, and Frank, 1985; Honnold and Stinchcomb, 1985; Mobley, 1985; Morris, 1986). As early as the 1930s, researchers concluded that the stress of being a correctional officer had negative effects on physical health. Alverez and Stanley (1930) found the blood pressure of correctional officers, in comparison to that of 3,677 white male inmates weighing within 10 percent of the normal average (based upon O. H. Roger's New York Life standard table), were considerably higher than the inmates (118.3 mm vs. 133.5 mm).

Over fifty years later, research continues to support the conclusion that being a correctional officer has deleterious health effects. Cheek (1984) reported that average life expectancy of correctional officers was sixteen years less than the national average (59 years versus 75 years). Furthermore, Cheek found that correctional officers reported more incidences of hypertension, ulcers, heart disease, diabetes, gout, gall bladder

[1] For the purposes of the current study, the concept of stress is based upon the definition given by Cullen, Link, Wolfe, and Frank (1985, pg. 507): "psychological discomfort, physiological pathology and/or social disability." This definition of stress recognizes that stress manifests itself in a number of negative outcomes, both psychological and physical.

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disorders, and hypoglycemia than either a sample of police patrol officers or a sample of blue- and white-collar workers.

Stress has also been linked to a number of negative work and personal behaviors. Cheek and Miller (1979) reported that 60% of sick leave requests by correctional officers in New York were due to stress related illnesses, specifically heart disease, alcoholism, and emotional disorders. This rate was 300% higher than the rate of other state employees. Other negative work and personal behaviors found to be related to stress include lower job satisfaction, lower productivity, lower morale, dissatisfaction with supervisor and co-workers, absenteeism, excessive sick leave, excessive consumption of alcohol, drug use, family problems, and burnout (Adwell and Miller, 1985; Albrecht, 1979; Cheek and Miller, 1983; Dennis, 1998; Dignam, et al., 1986; Gerstein, Topp, and Correll, 1987; Hepburn, 1989; Hulin, 1968; Mobley, 1985; Morris, 1986; Stohr et al., 1994; Whitehead and Lindquist, 1986). Conspicuously lacking from these analyses are empirical examinations of the effects of stress on voluntary attrition.

Findings from the Turnover Literature and Theoretical Framework

The present study classifies and discusses the variables found to be related to turnover using the taxonomy from earlier reviews of the literature (Cotton and Tuttle, 1986; Hom and Griffeth, 1995; Pettman, 1975). This taxonomy classifies variables into three categories: characteristics of the employees, characteristics or perceptions of the work environment, and external factors. Individual or personal characteristics are the demographical characteristics which an individual brings with them to the work situation (e.g., race, gender, age, education, marital status, etc.). Often these variables are static and can not be easily manipulated. Characteristics or perceptions of the work

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environment are atmospheric variables including managerial style, pay, general job satisfaction, organizational commitment, role ambiguity, promotional opportunities, staff communication, etc. External market factors related to turnover are forces such as the unemployment rate, accession rate, union presence, etc.

Early turnover researchers, particularly early correctional researchers, focused primarily on examining which individual characteristics were most associated with continued employment, nearly to the exclusion of work environment and external variables (Cotton and Tuttle; 1986; Jurik and Winn, 1987). Relationships were discovered between correctional staff turnover and age (Camp, 1994), race (Jacobs and Grear, 1977; Jurik and Winn, 1987), gender (Camp, 1994; Jacobs and Grear, 1977; Slate and Vogel, 1997), tenure (Camp, 1994; Wright, 1993), and job title (Slate and Vogel, 1997). According to this research, younger employees, employees belonging to a racial minority, female employees, employees with less tenure, and employees performing certain tasks within a correctional facility were all are more likely to quit their positions

More recently, turnover researchers in both the field of corrections and other organizations have focused less on individual attributes, noting that these individual-level variables are only moderately related to turnover and do not explain why individuals with similar characteristics exhibit differential rates of turnover (Cotton and Tuttle, 1986; Jurik and Winn, 1987). To these later researchers, employees' personal characteristics and values shape their perceptions of the work environment, these perceptions in turn control employees' likelihood of continued employment. If employees negatively perceive the work environment or their personal values/expectations are not met by the current work situation, the likelihood of continued employment decreases, especially if suitable

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alternate opportunities are available (i.e., external labor market variables are favorable). Correctional researchers utilizing this theoretical framework have found, after taking into account individual differences, employees perceiving higher levels of job satisfaction (Wright, 1993), organizational commitment (Camp, 1994), participatory management (Benton et al., 1982; Jurik and Winn, 1987; Slate and Vogel, 1997), and institutional safety (Camp, 1994; Slate and Vogel, 1997) are all less likely to quit.

Researchers in the larger organizational literature and in corrections have hypothesized that stress exacerbates the turnover process directly by increasing turnover intentions or indirectly by deteriorating job satisfaction (Jackson, Schwab, and Schuler, 1986; Lyons, 1971; Slate and Vogel, 1997). The few correctional turnover studies testing this hypothesis have reached conflicting conclusions. Camp (1994) examined the effect of stress on a sample of correctional staff working in federal correctional facilities. This study found that stress was not a significant predictor of turnover. In contrast, Slate and Vogel (1997) found that stress was significantly related to turnover in a large sample of Southern correctional officers.

Research Questions and Hypotheses

This study adds to the turnover literature by examining the effects of stress and job satisfaction on voluntary attrition, and by examining turnover in a large number of juvenile correctional facilities (49), which have heretofore been neglected by the literature. The authors hypothesize that the tense nature/environment associated with working within corrections leads to deleteriously high levels of stress and job dissatisfaction. Many correctional employees in an effort to attenuate the stress and job

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dissatisfaction emanating from their occupations resort to the one surefire means of coping with their stress and job dissatisfaction – they simply quit their jobs.[2]

Furthermore, the authors investigate the relative importance of individual- and organizational-level variables to voluntary turnover. Traditionally, correctional administrators have attempted to reduce staff attrition by matching the personal attributes of new hires to those of staff exhibiting longer tenure (Jurik and Musheno, 1986). Given the generally weak association between individual characteristics and turnover, this practice seems questionable. The authors expect that while both organizational- and individual-level variables are significantly related to turnover, individual-level variables are considerably weaker predictors of attrition than are organizational characteristics and perceptions of the organization.

METHODOLOGY

The data used in this research was originally collected as part of the National Evaluation of Juvenile Correctional Facilities (hereafter referred to as "the National Evaluation"). The National Evaluation was undertaken with the goal of assessing the quality of confinement in both juvenile boot camps and non-boot camp facilities in order to identify how well both types of facilities are achieving basic standards of quality juvenile management and programming. The National Evaluation examined 49 juvenile correctional facilities, both publicly and privately funded, in 20 states. Twenty-seven of these facilities were boot camps and the remaining twenty-two facilities were traditional

[2] It needs to be emphasized that turnover can be either voluntary or involuntary. Voluntary turnover is defined as the attrition of qualified, adequately performing employees. Involuntary turnover is a phenomenon which the organization often has limited control over (e.g. retirement) or may find necessary (e.g. termination of a policy-breaker).

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facilities (e.g., detention centers, training schools, forestry camps, etc.). The traditional facilities were matched to the boot camps on the criterion that the traditional facility was the institution where the boot camp residents' would have most likely been placed if the boot camp were not in existence. The disparity in the number of boot camps (27) in comparison to the comparison facilities (22) is due to the fact that in some instances more than one boot camp was matched to the same traditional facility. In this analysis, the facilities were not linked in any manner.

Data for the study were collected through video surveys, checklists, and surveys of juveniles, facility staff, and administrators. The current paper analyzes data produced mainly from the staff portion of the evaluation; however, a few items from the administrative survey were used to supplement the staff survey.

Survey Administration

The staff survey was administered by a survey facilitator, as it was not feasible for the investigators to administer the survey to all staff members across all the varying shifts. The research investigators recommended that the survey facilitator distribute the survey packets to all staff members having contact with the residents, at a staff meeting or role call. All staff having contact with residents were requested to complete a survey, thus no sampling device was used in this study. The researchers stressed to staff that participation in the survey was voluntary and all responses would be kept strictly confidential. All of the data were collected between April 1997 and August 1998.

Variables

The dependent variable under analysis is turnover intentions, as measured by the question: "I would like to continue working at this institution." This question is

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measured on a five-point Likert scale: Never, Rarely, Sometimes, Often, and Always.[3] Organizational researchers have found that voluntary employee turnover can be effectively predicted by turnover intentions (Cotton and Tuttle, 1986; Hom and Griffeth, 1995; Steel and Ovalle, 1984). In their review of the occupational literature, Steel and Ovalle (1984) indicated that the relationship between employees' intentions to continue or discontinue employment and actual turnover was significant in every study reviewed. Hom and Griffeth (1995) conducted a meta-analysis of studies examining the relationship between voluntary turnover and 35 different variables. They found that among these variables, intentions to quit had the strongest relationship to actual voluntary turnover. Cotton and Tuttle (1986) reached a similar conclusion concerning this relationship in their meta-analysis. Furthermore, Atchison and Lefferts (1972) found, in a sample of Air Force pilots, the single question, "How often have you thought of quitting or changing jobs", measured on a five-point scale, "distinguishes between those who stay and those who leave (pg. 56)."

Moreover, several researchers argue the use of turnover intentions may be a more useful measure than other common measures of turnover, such as the review of administrative records for actual turnover. As administrative records often contain unreliable data, or in the case of voluntary turnover usually record only one reason for turnover (Campion, 1991). Turnover intentions also have been argued to be a better measure of voluntary turnover as they are more directly under the control of individuals,

[3] This question has been reverse coded, in order to display the level of turnover intentions, which is the variable of interest. High values correspond to strong turnover intentions, low values correspond to weaker turnover intentions.

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than are actual turnovers (Shore and Martin, 1989).

The main drawback of using turnover intentions as a measure of voluntary turnover is that while turnover intentions tend to be an accurate predictor of immediate turnover, turnover intentions may be a less accurate predictor of long-term turnover (Hom and Griffeth, 1986: 48). That is, turnover intentions may be an accurate measure of turnover within the immediate future (i.e., a few months), but they are less accurate measures of turnover occurring outside this time period. The authors do not expect the predictive immediacy of turnover intentions to be problematic in testing the research questions posed.

Many of the individual- and organizational-level variables found to be significant predictors of voluntary turnover in either the correctional or the larger organizational literature have been incorporated in this study. Specifically, the individual-level variables analyzed in this study are: age, gender, race, highest level of education completed, tenure, job title, prior experience working with juveniles, and frequency of contact with residents. The organizational-level variables examined are: stress, job satisfaction, support of staff and staff communication, danger from inmates, level of population seriousness, and dangerousness of working conditions. This analysis includes several organizational variables specific to corrections (see BOP, 1993; OJJDP, 1994; Moos, 1968; Toch, 1977), which have not been previously analyzed in the turnover literature. These include measures of staff perceptions of inmate activity, institutional caring towards inmates, institutional control over inmates, and inmate programming, in addition to a measure of staff to inmate ratio.

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Each of the above-mentioned measures use multi-item scales, measured on a five-point Likert scale, except the level of population seriousness scales, which uses a three-point scale. High values on all scales indicate that the respondents perceived a high level of the construct of interest. The above-mentioned scales were not validated measures; therefore, they were factor analyzed and assessed for reliability. All of the scales displayed internal reliability scores (Cronbach's Alpha) of at least .74 and all of the items on each scale had a factor score of at least .37. Scale descriptions and reliability scores are reported in the Appendix.

RESULTS

Sample Characteristics

A sample of 1,362 respondents was obtained. The overall response rate for all 49 correctional facilities was 66%. The response rate of boot camps was 72% (N=775), while the comparison facilities had a 58% response rate (N=587).

Analysis of the demographic data provided by the 1,362 respondents (see Table 1) revealed that 66% of the respondents were male (70% of line staff were male). Sixty-three percent of respondents identified themselves as White, 25% identified themselves as African-American, 7% identified themselves as Hispanic, and 5% were classified as belonging to other racial groups. Respondents' ages ranged from 20 to 70, with an average age of 37.6 years of age. The majority of the respondents reported having at least a college degree, 33% reported their highest level of education as a college degree and 23% reported post-graduate studies. This sample of correctional staff indicated that they have considerable work experience; 58% of the sample reported prior experience working with juveniles and respondents averaged nearly 4.5 years of experience working in their

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current facility. However, the median years of experience in the current facility was approximately 2 years.

[INSERT TABLE 1 HERE]

Distribution of Main Variables of Interest

This sample of correctional staff reported being "somewhat" satisfied with their jobs, the mean on this measure was approximately a three on a five-point Likert scale. Moreover, relatively few respondents reported being either very satisfied or very dissatisfied. Approximately 13% of the staff reported being very satisfied (3.75 or higher), while only approximately 9% of the staff reported being very dissatisfied (2.25 or lower).

In agreement with the previous research concerning correctional staff stress (Brodsky, 1982; Cheek and Miller, 1983; Honnold and Stinchcomb, 1985; Lindquist and White, 1986; Pollak and Sigler, 1998), the staff in this sample self-reported experiencing minimal stress. The respondents stated that they experienced physical and psychological manifestations of stress only rarely. Previous research indicates that correctional staff tend to self-report little stress (Cheek, 1984; Cheek and Miller, 1983; Cullen et al., 1985). However, when correctional staff are questioned about physical indicators of stress (e.g., hypertension, heart conditions, etc.), or about the stress level of their fellow staff members, staff report a substantial amount of stress (Cheek and Miller, 1983). Researchers have labeled this phenomenon as the "John Wayne" syndrome, meaning that oftentimes tough correctional staff are too "macho" to admit being stressed (Cheek and Miller, 1983; Honnold, 1985) (see Table 2).

[INSERT TABLE 2 HERE]

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Distribution of the Dependent Variable

Nearly 45% of the respondents indicated they have no intentions of leaving their present institution. Another 28% indicated they have little intention of leaving their institutions. Approximately 16% of respondents reported they sometimes have intentions of leaving their institutions. Only 5% of respondents indicated they either often or always have intentions of leaving their institutions. (3.6% and 1.6% respectively).

In contrast to the reported high rates of correctional staff turnover, the distribution of the dependent variable indicates the majority of the staff do not have an intention to leave their positions. The discrepancy between the two measures of turnover is most likely due to the predictive immediacy of turnover intentions. Whereas intentions are short-term measures of voluntary turnover, the earlier cited measures of correctional turnover were long-term indicators of turnover (i.e., annual rates of turnover) and often include both voluntary and involuntary turnover. However, this difference is not expected to be important in assessing the researchers' hypotheses.

Ordered Logit Regression Results

Due to the small number of cases falling into the last category of the dependent variable (respondents with the strongest turnover intentions), turnover intentions for this portion of the data analysis were re-coded into four ordered categories, instead of five.[4] Since the data does not meet the assumptions needed to apply Ordinary Least Squares (OLS) regression (i.e., continuous dependent variable), and in order to take advantage of

[4] Without this re-coding preliminary logit models (not reported) indicated there was not enough variation in the dependent variable for parameter estimates to be calculated efficiently (i.e., some of the standard errors for the maximum likelihood parameters estimates are very high, >5, and the Test of the Proportional Odds Assumption is rejected.)

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the ordinal nature of the dependent variable, an ordered-logit analysis was conducted (see Demaris, 1992).

Tables 3 presents the results of three ordered-logit models; standardized coefficients (*B*), Wald statistics, odds ratios, and model statistics are displayed. Model 1 reports the effects of only individual-level variables on turnover intentions. Model 2 reports the effects of only the organizational-level variables on turnover intentions. And, finally, Model 3 presents the results of the full model, which utilized both individual- and organizational-level variables to explain turnover intentions.

The model fit information for Model 1 indicates that the individual-level variables were significant predictors of turnover intentions. The –2 Log Likelihood (-2LL) statistic reveals that the inclusion of the individual-level variables to the intercept reduces the model -2LL statistic significantly (62.21 with 13 degrees of freedom, $p< 0.01$); meaning that the inclusion of the individual-level variables produces a significantly better fit to the data than the intercept alone. Furthermore, the Test of the Proportional Odds Assumption, a chi-square test of 30.79 with 26 degrees of freedom ($p=0.24$), suggests the assumption of the predictors' effects on the dependent variable being independent of the cut-points is plausible.

The results from Model 1 suggest that four individual-level variables significantly affect turnover intentions. The strength of association as evaluated by the Wald Statistic (whose function is analogous to the t-statistic in OLS regression) indicates that educational-level had the strongest relationship to turnover intentions among the individual-level variables. Model 1 shows that, controlling for the other predictors, a one-level increase in education increased the odds of having stronger turnover intentions

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(as opposed to having weaker turnover intentions) by a factor of 1.42. Stated another way, a one level increase in educational-level is associated with an increase in the odds of having stronger intentions by approximately 42%, holding the other predictors constant.

Also according to Model 1, older correctional staff have significantly lower odds of having stronger turnover intentions, holding all else constant. Conversely, female correctional staff and correctional staff having greater tenure exhibited significantly higher odds of having stronger turnover intentions, all other things being equal. A one-year increase in age reduced the odds of having stronger turnover intentions by 3.0%, holding the other variables constant. The odds of having stronger turnover intentions among female correctional staff was 36% higher than male correctional staff. Furthermore, in opposition to the literature concerning voluntary turnover, correctional staff having more tenure displayed significantly higher odds of possessing stronger intentions to leave their positions. Model 1 reveals that each additional year of tenure increased the odds of having stronger turnover intentions by 3.0%, holding all other variables constant. This finding may be a manifestation of experienced juvenile correctional staff seeking positions in adult correctional institutions or law enforcement, after having gained some experience in juvenile correctional facilities. However, the data did not allow for a test of this hypothesis.

The predictive efficacy of the organizational variables were analyzed in Model 2. The model statistics results for Models 1 and 2 indicate that Model 2 has the better fit to the data. Both the Schwartz-Criterion (SC)[5] and the –2LL statistics indicate that Model 2

[5] SC=-2LL + (k+s)log(N), where k is the number of intercepts, s is the number of predictors, and N is the number of observations.

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fits the data better than Model 1, as these statistics are considerably lower for Model 2 than the first model.

The results from Model 2 indicate that many of the organizational-level variables were statistically significant predictors of turnover intentions.[6] Based upon the values of the Wald statistic in this model, as hypothesized, Job Satisfaction and Stress displayed the strongest relationship to the dependent variable. The results indicated that a one-point increase in Job Satisfaction reduced the odds of having stronger turnover intentions by a factor of 0.20, an 80% reduction, holding the other variables constant. A one-point increase in the Stress scale increased the odds of having stronger turnover intentions by a factor of 1.62, a 62% increase, other things remaining the same. Conversely, a one-point increase in the Staff Support and Communication scale decreased the odds of displaying stronger turnover intentions by a factor of 0.60, approximately 40%. Model 2 also indicates that only one of the quality of correctional environmental variables, Institutional Care, was a significant predictor of staff turnover intentions.

Finally, the results of Model 1 and 2 were re-evaluated in the full model, Model 3. The –2LL statistics for Model 3 indicated that this model had the best fit to the data of the three models, as the –2LL for Model 3 (2094.31), was lower than in the previous models. Yet, the difference between the –2LL for Models 2 and 3 is relatively small (59 points) in comparison to the difference between Models 1 and 2 (400 points). This indicates that the inclusion of the individual variables to the organizational variables in Model 3

[6] As the data used in this analysis came from a sample of juvenile correctional staff employed at either boot camp or traditional facilities, the author investigated if type of juvenile correctional facility has an affect on turnover intentions. The effect of type of facility was entered into Models 2 and 3 by dummy coding type of facility (0 for traditional facilities, and 1 for boot camps). The results of this analysis reveals that type of correctional facility was not a significant predictor of turnover intentions in either model.

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produced only a slightly better fit to the data. Moreover, the SC statistic which adjusts the –2LL statistic for the number of predictors found that Model 2 (organizational-level variables only) was the model with the best fit to the data, as the SC for Model 2 is smaller than either of the other models.

Many of the individual-level variables continued to exert a significant influence on turnover as revealed in the results from Model 3. Age had a negative relationship to turnover intentions and educational-level had a significant positive relationship to turnover intentions. However, a few of the individual-level variables that displayed significant relationships in Model 1 did not display similar relationships in Model 3. Most notably, tenure was no longer significant in the full model (B = - 0.02 and p = 0.65), in stark contrast to Model 1. Additionally, gender was not statistically significant in the full model.

Furthermore, race which was not a significant predictor of turnover intentions in Model 1, became a significant predictor in the full model. In the full model, respondents identifying themselves as African-American or Hispanics exhibited significantly higher odds of having stronger turnover intentions in comparison to white respondents. African-American correctional staff had an approximately 47% greater odds of displaying stronger turnover intentions than White respondents, holding all other things constant. Similarly, Hispanics had an approximately 69% greater odds of displaying stronger turnover intentions than White respondents, all other things remaining the same.

All of the organizational-level variables which were significant predictors of turnover intentions in Model 2 were also significant predictors of intentions in Model 3.

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As in Model 2, Job Satisfaction, Stress, Institutional Care and Staff Support and Communication were all significant predictors of turnover intentions and the odds ratios associated with these variables were similar in both models.

DISCUSSION AND CONCLUSIONS

The data analyses presented above suggest that eight variables, four individual characteristics and four organizational attributes, were significant predictors of correctional staff turnover intentions. Specifically, age, educational-level, race of respondent (African-American and Hispanic), job satisfaction, stress, staff support and communication, and care were all significant predictors of turnover intentions. Many of the individual- and organizational-level characteristics identified by this data analysis as being significant predictors of turnover intentions have been previously identified by the correctional literature or the larger organizational literature.

In concordance to the turnover literature, older employees were found to have lower propensities to leave their positions (Arnold and Feldman, 1982, Bassett, 1967, Farris, 1971; Hom and Hulin, 1981). Older employees are believed to be more entrenched in their communities and jobs, consequently they are less prone to leave their positions. Race was also found to be a significant predictor of intentions. While it is not clear why race contributes to turnover, African-Americans and Hispanics in the present study and earlier research have exhibited a greater likelihood to turnover. Some researchers have hypothesized that the high rate of turnover displayed by racial minorities is a result of the racial hostilities present in correctional facilities (Jacobs and Grear, 1977; Jurik and Winn, 1987). The present study is unable to formally test this hypothesis. However, racial minorities in this study (African-Americans and Hispanics) reported

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higher or equal levels of job satisfaction (White respondents had a mean Job Satisfaction of 3.03, while African-Americans and Hispanics had mean Job Satisfaction scores of 3.09 and 3.20, respectively), satisfaction with supervisors (means = 3.76 for Whites, 3.78 for African-Americans, and 3.78 for Hispanics) and with co-workers (means = 3.86 for Whites, 3.86 for African-Americans, and 3.96 for Hispanics) than White respondents, which seems to contradict this hypothesis.

The analysis also revealed that employees with higher levels of education are significantly more likely to have stronger turnover intentions. Correctional researchers have not previously revealed the same relationship; however, the larger organizational literature provides considerable support for this finding (Arthur, 1981; Black and MacKinney 1963; Blau and Kahn, 1981; Cotton and Tuttle, 1986). Organizational researchers hypothesize that more highly educated employees are presented with more alternate employment opportunities, which leads to increased attrition of these employees. Other researchers hypothesize that more highly educated employees are more likely to become dissatisfied with the paramilitary, authoritarian management styles which are typical of many correctional facilities (Jurik, Halemba, Musheno, and Boyle, 1987). Regardless of why education affects turnover rates, correctional administrators should be advised that the increasing professionalization of correctional employees (see Jurik and Musheno, 1986; Jurik, et al., 1987) appears to have both negative as well as positive repercussions.

It is interesting to note that the effects of several individual-level variables changed when perceptions of the organization and environment were taken into account. Before the organizational and environmental variables were entered into the model,

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gender and tenure were significant predictors of turnover intentions, while race was not a significant predictor. When the effects of organizational and environmental variables were controlled, these relationships changed. In this analysis, gender and tenure were not significant predictors of turnover intentions; however, race was significant. This finding appears to bolster the theoretical framework which suggests that individual-level variables are most important not in their direct relationship to turnover, but instead in how these variables mediate perceptions of the organization and the environment.

The current study joins the growing correctional literature examining staff turnover which indicates organizational-level attributes are the most salient factors to correctional staff turnover (Camp, 1994; Jacobs and Grear, 1977; Jurik and Winn, 1987; Slate and Vogel, 1997). However, the previous research concerning correctional staff attrition has been almost exclusively confined to adult institutions. This study is one of the first to find that many of the issues found to be related to turnover in both adult correctional facilities and organizations in general also appear to apply to juvenile correctional facilities as well.

The analysis also revealed juvenile correctional employees perceiving more job satisfaction, support/communication, and institutional caring within their facilities indicated less intentions to leave their positions. It comes as no surprise that job satisfaction is significantly related to stress, as job satisfaction has been found to be related to turnover in an enormous number of studies conducted in organizations other than corrections. However, the previous correctional research often has failed to find this relationship (Camp, 1994; Camp et al., 1994). A supportive environment for staff has been found to be significantly related to correctional staff "burnout" (Lindquist and

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Whitehead, 1986; Whitehead, and Lindquist, 1986), but Staff Support has not been examined previously in the correctional turnover research.

Perhaps the most surprising finding in the present analysis is that correctional staff perceiving their institutions as having high levels of institutional caring towards inmates were more likely to have stronger turnover intentions. This finding could mean institutions displaying more care are more rehabilitation oriented. Previous correctional staff research has indicated that institutions or staff with a rehabilitation orientation are at a greater risk of burnout and job dissatisfaction (Lindquist and Whitehead, 1986; Maslach, 1978), which could explain the relationship found in this study.

The finding of utmost importance is that stress is a primary cause of turnover. The stress which is pervasive in corrections has implications beyond the well-documented negative health effects. Staff in the present study reporting higher levels of stress were not only at a significantly greater risk of turnover, but also were at a exponentially greater risk of turnover. This finding underscores the importance of correctional administrators being cognizant of the stress level and the sources of stress within their facilities. A number of examinations of correctional stress have exhibited that relationships with correctional administrators and between staff are often the sources of stress for staff (Huckabee, 1992; Jacobs and Grear, 1977; Slate and Vogel, 1997). Administrators with this knowledge are in much better positions to combat stress and turnover.

The good news for correctional administrators is that the organizational-level variables effect turnover intentions more than the individual-level characteristics. All of the organizational attributes associated with staff attrition can theoretically be changed, and, consequently administrators have the ability to reduce turnover in their institutions.

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The longstanding practice of attempting to reduce correctional staff turnover by seeking new employees based mainly upon selecting applicants whose individual characteristics match those of employees most likely to stay (Jurik and Musheno, 1986) appears highly suspect in light of the growing body of correctional and organizational literature indicating that organizational attributes are the most salient factors related to turnover. In order for correctional administrators to be most successful in attenuating voluntary correctional staff turnover, correctional administrators need to ameliorate those organizational conditions that correctional staff have identified as being related to turnover intentions. While the focus of this study has not been to suggest methods to ameliorate these conditions, previous correctional literature has suggested some approaches to this end (see Albrecht, 1979; Benton et al., 1982; Cheek and Miller, 1980; Honnold and Stinchcomb, 1985; Laser, 1980).

The limitations of the data make this study more of an exploratory examination than a definitive analysis. Perhaps the two greatest weaknesses of the data are that the data is cross-sectional instead of longitudinal, and the data does not have a formal measure of organizational commitment. Although previous research has shown turnover intentions to be a robust predictor of actual turnover (see Atchison and Lefferts, 1972; Cotton and Tuttle, 1986; Hom and Griffeth, 1995; Steel and Ovalle, 1984;), these previous findings do not mean that turnover intentions in the present study were necessarily a robust predictor of actual separations. If turnover intentions in the present study were not an accurate predictor of actual separations then the findings of this study may also be inaccurate.

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Furthermore, the lack of a measure of organizational commitment also is a weakness of the present data. A growing body of correctional literature points to organizational commitment as being a strong predictor of correctional turnover. The present study's findings may have been more conclusive if the hypotheses were tested vis-à-vis organizational commitment.

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Table 1. Descriptive Statistics and Coding of Individual-Level Variables		
	Valid %	N
Categorical Variables		
Gender		
Female [SEX]	34.4	887
Male*	65.6	465
Race		
African-American [BLACK]	25.3	336
Hispanic [HISPANIC]	6.8	90
White*	62.9	834
Other	5.0	67
Highest Level of Education [EDUCATION]		
High School or Technical Training	15.1	203
Some College	28.5	382
College Degree	33.3	447
Graduate Study	23.1	310
Prior Experience working with juvenile [JUV EXP]		
Yes	58.0	783
No*	42.0	468
Job Title		
Line Staff*	57.6	759
Administrative Staff [ADMINSTF]	10.3	136
Caseworker [CASEWRKR]	3.9	51
Teacher [TEACHER]	18.5	244
Other [OTHER]	9.7	128
Frequency of Contact with Inmates [CONTACT]		
Infrequently	1.7	23
Monthly	1.7	23
Once a Week	2.3	31
Daily	94.3	1274
Continuous Variables	Mean (SD)	N
Age [AGE]	37.6 (10.3)	1283
Length of employment in current facility [TENURE]	4.4 (5.9)	1309

*Reference Category; Coded as 0.

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Table 2. Scale Descriptive Statistics

Organizational Perceptions Scales[7] [Variable Name]	Mean (SD)	Valid N
Turnover Intentions [TURNOVER]	1.82 (.96)	1278
Activity [ACTIVITY]	4.26 (.60)	1346
Care [CARE]	3.85 (.50)	1344
Control [CONTROL]	3.98 (.52)	1345
Job Satisfaction [JOBSATIS]	3.06 (.57)	1273
Programs [PROGRAMS]	3.79 (.60)	1336
Personal Stress [STRESS]	2.01 (.69)	1276
Staff Communication [SUPP_COM]	3.58 (.69)	1233
Staff Danger [STFDANGR]	2.33 (.66)	1350
Unsafe Working Conditions [WORKCOND]	1.94 (.63)	1352
Facility Level Scales [Variable Name]	**Mean (SD)**	**Valid N**
Inmate to Custody/Treatment Staff Ratio[8] [STFRATIO]	3.38 (6.22)	1151
Average Length of Inmate Stay [AVGLOS]	6.88 (5.10)	1331
Population Seriousness[9] [SERIOUS]	1.23 (.47)	1362

[7] All of the Organizational Perceptions Scales are measured on a five-point scale with 1 signifying and 5 signifying more less of the construct.

[8] In order to avoid excluding staff from facilities which did not provide this measure, missing values have been replaced by the mean.

[9] This scale consists of a series of questions regarding whether the facility accepts certain types of offenders (e.g., violent offenders, sex offenders, arsonists, etc.) values are: 0 (does not accept); 1 (accepts but only a limited number; and, 2 (does accept). Thus, higher values represent more serious populations.

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Table 3. Ordered Logit Regression Results – Model 1, 2, & 3									
	Model 1			**Model 2**			**Model 3**		
Variables	*B*	Wald	Odds Ratio	*B*	Wald	Odds Ratio	*B*	Wald	Odds Ratio
Intercept 1	-2.31**	16.35	-	2.38*	4.74	-	3.85**	9.18	-
Intercept 2	-0.62	1.25	-	4.40**	16.13	-	5.92**	21.65	-
Intercept 3	0.81	2.11	-	6.30**	32.41	-	7.89**	37.79	-
Age	-0.15**	17.20	0.97	-	-	-	-0.16**	15.15	0.97
Sex	0.08*	6.55	1.36	-	-	-	0.06+	2.87	1.25
Black	0.02	0.46	1.10	-	-	-	0.09**	6.11	1.47
Hispanic	0.01	0.01	1.03	-	-	-	0.07*	4.24	1.69
OtherRace	-0.06+	2.80	0.63	-	-	-	-0.02	0.28	0.85
Education	0.19**	28.31	1.42	-	-	-	0.17**	19.53	1.38
Adminstf	-0.04	1.70	0.78	-	-	-	0.03	0.74	1.20
Casewrkr	-0.02	0.35	0.84	-	-	-	-0.05	2.23	0.62
Teacher	-0.05	1.68	0.80	-	-	-	-0.05	1.63	0.79
Other staff	-0.05	1.91	0.75	-	-	-	-0.05	2.09	0.72
Juv exp	-0.01	0.16	0.95	-	-	-	-0.05	1.98	0.83
Tenure	0.08*	5.42	1.03	-	-	-	-0.02	0.21	0.99
Contact	-0.05	2.12	0.89	-	-	-	-0.06+	2.87	0.86
Activity	-	-	-	-0.09+	3.74	0.75	-0.08	2.48	0.79
Care	-	-	-	0.13*	5.76	1.61	0.14**	6.08	1.66
Control	-	-	-	-0.01	0.03	0.98	-0.03	0.44	0.90
Jobsatis	-	-	-	-0.51**	72.54	0.20	-0.56**	81.45	0.17
Programs	-	-	-	-0.08+	3.04	0.77	-0.07	2.24	0.80
Staffdngr	-	-	-	-0.05	1.37	0.87	-0.05	1.33	0.86
Stress	-	-	-	0.18**	20.66	1.62	0.18**	19.50	1.62
Supp_com	-	-	-	-0.19**	9.32	0.60	-0.19**	8.90	0.60
Workcond	-	-	-	0.06	1.45	1.20	0.04	0.87	1.12
Serious	-	-	-	0.03	0.42	1.12	0.04	0.81	1.17
Ratio	-	-	-	0.04	1.07	1.01	0.07+	3.28	1.02
Typedum	-	-	-	-0.01	0.01	0.99	-0.04	0.54	0.88

Model Statistics		**Model Statistics**	**Model Statistics**
N	1119	1119	1119
Test of Proportional Odds	p=0.24	p=0.53	p=0.21
-2LL Intercept	2613.77	2613.77	2613.77
-2LL Intercept & Covariates	2551.56	2151.19	2094.31
-2LL Covariates	62.21**	462.58**	519.46**
SC Intercept Only	2634.83	2634.83	2634.83
SC Intercept & Covariates	2663.88	2256.49	2290.87

**$p < .01$
* $p < .05$
+ $p < .10$

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List of References

Adwell, Steven T., and Leonard E. Miller (1985). Occupational burnout. Corrections Today 47: 70, 72

Albrecht, Karl (1979). Stress and the Manager: Making It Work For You. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Alvarez, Walter C., and L. L. Stanley (1930). Blood Pressure in six thousand prisoners and four hundred prison guards. Archives of Internal Medicine 1930: 17-39.

Archambeault, William G., and Betty J. Archambeault (1982). Correctional Supervisory Management: Principles of Organization, Policy and Law. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Archambeault, William G., and Charles R. Fenwick (1988). A comparative analysis of culture, safety, and organizational management factors in Japanese and U.S. prisons. Prison Journal 68: 3-23.

Arnold, Hugh J., Daniel J. Feldman (1982). A multivariate analysis of the determinants of job turnover. Journal of Applied Psychology 67: 350-360.

Arthur, M. (1981). Turnover and the occupational career. Industrial Relations Journal 12: 28-39.

Atchison, T. J., and E. A. Lefferts (1972). The prediction of turnover using Herzberg's job satisfaction technique. Personnel Psychology 25: 53-64.

Bassett, G.A. (1967). A Study of Factors Associated with Turnover of Exempt Personnel. Crotonvilee, N.Y.: Behavior Research Service, General Electric Corporation.

Benton, F. Warren, Ellen Doree Rosen, Judy-Lynne Peters (1982). National Survey of Correctional Institution Employee Attrition. National Institute of Corrections, U. S. Bureau of Prisons, U. S. Department of Justice: Washington, D.C.

Black, Bruce B., and Arthur C. MacKinney (1963). Validity information exchange. Personnel Psychology 16: 173-180.

Blau, Francine D., and Lawrence M. Kahn (1981). Race and sex differences in quits by young workers. Industrial and Labor Relations Review 34: 563-577.

Blau, Judith R., Stephen C. Light and Mitchell Chamlin (1986). Individual and contextual effects on stress and job satisfaction: a study of prison staff. Work and Occupations 13: 131-156

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Brodsky, Carroll M. (1982). Work stress in correctional institutions. Journal of Prison and Jail Health 2: 74-102.

Camp, Scott D. (1994). Assessing the effects of organizational commitment and job satisfaction on turnover: an event history approach. The Prison Journal 74: 279-306.

Camp, Scott D., William G. Saylor, and Evan Gilman (1994). Aggregate Work Environment Measures and Job Separations at the Federal Bureau of Prisons. Paper Presented at the 1994 Academy of Criminal Justice Sciences Meeting in Chicago.

Campion, Michael A. (1991). Meaning and Measurement of Turnover: Comparison of Alternative Measures and Recommendations for Research. Journal of Applied Behavior, 76: 199-212.

Cascio, Wayne F. (1991). Costing Human Resources: The Financial Impact of Behavior in Organizations. Boston: PWS-Kent Publishing.

Cheek, Frances E. (1984). Stress Management for Correctional Officers and Their Families. College Park, MD: American Correctional Association.

Cheek, Frances E., and Marie Di Miller (1979). Managerial Styles and Correction Officer Stress. Paper Presented at the Annual Meeting of the American Society of Criminology 1979 in Philadelphia.

Cheek, Frances, and Marie Di Stefano Miller (1980). Reducing Staff and Inmate Stress. Corrections Today 44: 72-76.

Cheek, Frances E., and Marie Di Stefano Miller (1983). The experience of stress for correction officers: a double-bind theory of correctional stress. Journal of Criminal Justice 11: 105-120.

Contact, Inc. (1987). Survey: Cos in Demand in Many States. Corrections Compendium 11: 9-13.

Cotton, John L., and Jeffrey M. Tuttle (1986). Employee Turnover: A Meta-Analysis and Review with Implications for Research. Academy of Mangement Review 11: 55-70.

Cullen, Francis T., Bruce G. Link, Nancy T. Wolfe, and James Frank (1985). The Social Dimensions of Correctional Officer Stress. Justice Quarterly 2: 505-533.

Demaris, Alfred (1992). Logit Modeling: Practical Applications. Sage Publications Inc.: Newbury Park, CA.

Dennis, Gary L. (1998). Here today, gone tomorrow: how management style affects job satisfaction and, in turn, employee turnover. Corrections Today 60: 96-101.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Dignam, John, Manuel Barrera, Jr., and Stephen West (1986). Occupational Stress, Social Support, and Burnout Among Correctional Officers. American Journal of Community Psychology 14: 177-193.
Farris, George F. (1971). A predictive study of turnover. Personnel Psychology 24: 311-328.

Gerstein, Lawrence H., Charles G. Topp, Gregory Correll (1985). The role of the environment and person when predicting burnout among correctional personnel. Criminal Justice and Behavior 14: 352-369.

Hepburn, John R. (1989). Prison Guards as Agents of Social Control. In Lynne Goodstein, and Doris Layton MacKenzie, eds., The American Prison: Issues in Research and Policy. Plenum Press: New York

Hom, Peter W., and Charles L., Hulin (1981). A Competitive Test of the Prediction of Reenlistment by several models. Journal of Applied Psychology 66: 23-39.

Hom, Peter W. and Rodger W. Griffeth (1995). Employee Turnover. South-Western College Publishing: Cincinnati.

Honnold, Julie A., and Jeanne B. Stinchcomb (1985). Officer Stress: Costs, Causes, and Cures. Corrections Today 47: 46-51.

Huckabee, Robert G. (1992). Stress in Corrections: An Overview of the Issues. Journal of Criminal Justice 20: 479-486.

Hulin, Charles L. (1967). Effects of Changes in Job Satisfaction Levels on Employee Turnover. Journal of Applied Psychology 50: 280-285.

Jackson, Susan E., Richard L. Schwabm, and Randall S. Schuler (1986). Toward an Understanding of the Burnout Phenomenon. Journal of Applied Psychology 71: 630-640.

Jacobs, James B., and Mary P. Grear (1977). Dropouts and rejects: an analysis of the prison guard's revolving door. Criminal Justice Review 2: 57-70.

Jurik, Nancy C., and Russell Winn (1987). Describing correctional-security dropouts and rejects: an individual of organizational profile? Criminal Justice and Behavior 14: 5-25.

Jurik, Nancy C., and Michael C. Musheno (1986). Internal crisis of corrections – professionalization and the work environment. Justice Quarterly 3: 457-80.

Jurik, Nancy C., Gregory J. Halemba, Michael C. Musheno, and Bernard V. Boyle (1987). Education, job satisfaction, and the professionalization of correctional officers. Work and Occupations14: 106-125.

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Laser, Stephen A. (1980). Dealing with the problem of employee turnover. Human Resource Management 19: 17-21.

Lasky, Gareth L., Gordon, B. Carl, Srebalus, David J. (1986). Occupational stressors among federal correctional officers working in different security levels. Criminal Justice and Behavior 13: 317-327.

Lindquist, Charles A., John T. Whitehead (1986). Burnout, job stress and job satisfaction among southern correctional officers: perceptions and causal factors. Journal of Offender Counseling, Services & Rehabilitation 10: 5-26.

Liou, Kuotsai Tom (1995). Role stress and job stress among detention care workers. Criminal Justice and Behavior 22: 425-436.

Lombardo, Lucien X. (1981). Occupational Stress in Correction Officers – Sources, Coping Strategies, and Implications. In Sherwood E. Zimmerman and Harold D. Miller, eds., Corrections at the Crossroads: Designing Policy Perspectives in Criminal Justice 1. Sage Publications: Beverly Hills.

Lunden, Walter A. (1965). The Prison Warden and Custodial Staff. Charles C. Thomas Publishing: Springfield, Illinois.

Lyons, Thomas F. (1971). Role Clarity, Need for Clarity, Satisfaction, Tension, and Withdrawal. Organizational Behavior and Human Performance 6: 99-110.

Maslach, Christina (1978). The Client Role in Staff Burn-out. Journal of Social Issures 34: 111-124.

McShane, Marilyn, Frank P. Williams III, David Shichor, and Kathy L. McClain (1991). Early exits: examining employee turnover. Corrections Today 53: 222-225.

Maslach, Christina (1982). Burnout: The Cost of Caring. Prentice-Hall: Englewood Cliffs, New Jersey.

Mobley, Max J. (1985). Occupational Hazard?: Stress has many implications for the Administrator. Corrections Today 47: 18, 20.

Moos, Rudolf H. (1968). The assessment of social climates of correctional institutions. Journal of Research in Crime and Delinquency 5: 174-188.

Morris, Richard M. (1986). Burnout: avoiding the consequences of on-the-job stress. Corrections Today 48: 122, 124, 126.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

National Institute of Law Enforcement and Criminal Justice (1978). National Manpower Survey of the Criminal Justice System: Corrections, Vol. 3. Washington, DC: Superintendent of Documents:

Pettman, Barrie O. (1975). Labor Turnover and Retention. Wiley: New York.

Pollak, Charlotte, and Robert Sigler (1998). Low levels of stress among Canadian correctional officers in the Northern Region of Ontario. Journal of Criminal Justice 26: 117-128.

Poole, Eric D., and Robert M. Regoli (1980). Role stress, custody orientation, and disciplinary actions: a study of prison guards. Criminology 18: 215-226.

Shore, Lynn M., and Harry J. Martin (1989). Job Satisfaction and Organizational Commitment in Relation to Work Performance and Turnover Intentions. Human Relations 42: 625-638.

Slate, Risdon N., and Ronald E. Vogel (1997). Participative Management and correctional personnel: A study of the perceived atmosphere for participation in correctional decision-making and its impact on employee stress and thoughts about quitting. Journal of Criminal Justice 25: 397-408.

Steel, Robert P., and Nestor K. Ovalle (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. Journal of Applied Psychology 69: 673-686

Stohr, Mary K., Ruth L. Self, and Nicholas P. Lovrich (1992). Staff turnover in new generation jails: an investigation of its causes and prevention. Journal of Criminal Justice 20: 455-478

Stohr, Mary K., Nicholas P. Lovrich, and Gregory L. Wilson (1994). Staff stress in contemporary jails: assessing problem severity and the payoff of progressive personnel practices. Journal of Criminal Justice 22: 313-327.

Toch, Hans (1977). Living in Prison: The Ecology of Survival. New York: Macmillan.

Triplett, Ruth, Jane L. Mullings, and Kathryn E. Scarborough (1996). Work-Related Stress and coping among correctional officers: implications from organizational literature. Journal of Criminal Justice 24: 291-308.

U.S. Department of Justice, Federal Bureau of Prisons (1993). Prison Social Climate Survey: Staff Version and Resident Version. Washington, DC: Government Printing Office

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

U.S. Department of Justice. Office of Juvenile Justice and Delinquency Prevention (1994). Conditions of Confinement: Juvenile Detention and Correctional Facilities. Washington DC: Government Printing Office

Wees, Greg (1996). Fewer correctional officer positions created in '96: respondents in larger jurisdictions project slowed growth. Corrections Compendium 21: 12-29.

Whitehead. John T. and Charles A. Lindquist (1986). Correctional officer job burnout: A path model. Journal of Research in Crime and Delinquency 23: 23-42.

Wright, Thomas A. (1993). Correctional Employee Turnover: A Longitudinal Study. Journal of Criminal Justice 21: 131-142.

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Appendix

Table A1. Scale Description and Internal Reliability

Scale	Scale Description and Cronbach's Alpha
Activity	This seven-item scale concerned how busy residents typically are in their daily activities (coefficient α = .81).
Care	This scale used ten items to assess the amount of care and amicability staff members believe there is between the institution and the juveniles in their custody (coefficient α = .75).
Control	This nine-item scale examined staff's perceptions of how much discipline the institution demands of its residents (coefficient α = .76).
Job Satisfaction	This scale used thirteen items to measure staff's satisfaction with their jobs, co-workers, supervisors, facility administration, and training (coefficient α = .89).
Programs	This scale used eleven-item to measure how beneficial staff members believe the residents' experiences in the institution have been (coefficient α = .90).
Staff Danger	This scale measured perceptions concerning how much danger staff believe residents pose towards the safety of staff members (coefficient α = .78).
Stress	This fourteen-item scale determined the amount of stress, depression, anxiety, and anger staff members have experienced in the past six months (coefficient α = .93).
Staff Support/ Communication	This scale measured staff's perceptions of the relationships and level of communication amongst staff members; fifteen items (coefficient α = .94).
Unsafe Working Conditions	This scale measured staff perceptions of how much general institutional danger exists with each facilities using five items (coefficient α = .74).

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Running Head: PERCEIVED CONDITIONS OF CONFINEMENT

Perceived Conditions of Confinement: A National Evaluation of Juvenile Boot Camps and Traditional Facilities*

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Abstract

In a national study of juvenile correctional facilities, the perceived environment of 22 juvenile boot camps were compared to the perceived environment of 22 traditional facilities. Self-report surveys completed by 4,121 juveniles recorded information on demographics, risk factors and perceptions of the facility's environment. Compared to juveniles in traditional correctional facilities, boot camp residents consistently perceived the environment as significantly more controlled, active, structured, and as having less danger from other residents. Boot camp juveniles also perceived the environment as providing more therapeutic and transitional programming. Overall, from the perspective of the juveniles, boot camps appear to provide a more positive environment conducive to effective rehabilitation considering almost all of the conditions measured. A major concern is that in both types of facilities, juveniles perceived themselves to occasionally be in danger from staff (rated as rarely to sometimes).

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Perceived Conditions of Confinement: A National Evaluation of Juvenile Boot Camps and Traditional Facilities

The appropriateness of correctional boot camps for juveniles is a controversial subject (MacKenzie & Hebert, 1996; MacKenzie & Parent 1992; Meachum 1990; Morash & Rucker 1990) In contrast to traditional correctional programs, boot camps incorporate elements of military basic training in the daily schedule. For example, most boot camps require juveniles to wear military style uniforms, march to and from activities, enter and exit the program in squads or platoons, participate in military style drill and ceremony and strenuous physical fitness activities. There is disagreement about whether this is an appropriate method for managing and treating delinquents.

Advocates argue the focus on strict control and military structure provides a safer environment which is more conducive to positive change (Steinhart, 1993; Zachariah, 1996). From this perspective, the intense physical activity and healthy atmosphere of the camps provide an advantageous backdrop for therapy, education and other treatment activities (Clark & Aziz, in MacKenzie & Hebert, 1996; Cowles & Castellano, 1995).

Critics of the camps suggest the confrontational nature of boot camps is antithetical to treatment. In fact, they argue some aspects of the boot camps are diametrically opposed to the constructive, interpersonally supportive treatment environment necessary for positive change to occur (Lipsey, 1992; Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990). It is argued that boot camps hold inconsistent philosophies and procedures (Marlowee, Marin, Schneider, Vaitkus & Bartone, 1988), set the stage for abusive punishments (Morash & Rucker, 1990), and perpetuate a "we versus they" attitude suggesting newer inmates are deserving of degrading

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treatment (Raupp, 1978). Critics expect the boot camp environment to be perceived as less caring, more unfair or unjust, and less therapeutic as compared to traditional facilities. They anticipate that youth may fear staff and that the camps will have less individualized programming as a result youth will be less prepared for their return to the community.

As the critics predict, those released from boot camps do not fare better after they return to the community. Comparison of juvenile (Bottcher, Isorena, & Belnas, 1996; Clawson, Coolbaugh, & Zamberlan, 1998; MacKenzie, 1997) or adult-boot camp inmates (MacKenzie, Brame, McDowall & Souryal, 1995) to inmates who received more traditional correctional options (prison, probation, training schools, detention centers) show no differences in recidivism rates or participation in constructive community activities such as work and school (MacKenzie & Brame, 1995). However, despite the empirical evidence, boot camps have remained a popular sentencing option for juveniles. Advocates of the boot camps say that the juvenile boot camps studied were early models of the programs that were not fully developed or were different from the camps of today.

The impact of the prison environment on inmate adjustment and behavior inside and outside the prison walls has been well established in the research literature (Ajdukovic, 1990; Goffman, 1961; Johnson & Toch, 1982; Moos, 1971; Wright, 1985, 1991; Wright & Goodstein, 1989; Zamble & Porporino, 1990). Facilities have been found to "possess unique and enduring characteristics that impinge upon and shape individual behavior" (Wright & Goodstein, 1989, p. 266). As such, an understanding of potential differences in the perception of environments of boot camps and traditional facilities are important.

To positively impact inmate adjustment and reduce criminal activity, correctional

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environments at a minimum must provide an environment that is perceived as safe to allow inmates to focus on the treatment programs. Though boot camps may provide some basic components such as safety, structure and activity, these program aspects may not be sufficient for rehabilitation to occur (Lutze, 1998). Effective rehabilitation that reduces future criminal activity and improves positive adjustment requires more (Andrews, Bonta & Hoge, 1990; Gendreau & Ross, 1987; Gendreau, Little & Goggin, 1997). Such an atmosphere would be perceived as caring and just and include therapeutic programming, focus on reintegration and provide individualized programming. These are the sufficient conditions that would be necessary if boot camps are to influence adjustment and a change in criminal activities.

This study builds on previous research examining the prison environment to determine how inmates perceive the environment of two dramatically different programs. We expect inmates in boot camps and traditional facilities to perceive consistent differences in their environments. Given the military-type atmosphere of the boot camps, we expect inmates in these camps to perceive the environment as more structured, controlled and active. Furthermore, as a result of the highly controlled and structured military atmosphere, they will see themselves as safer from the threat of danger from other inmates. However, we anticipate that the highly controlled atmosphere typical of military basic training with confrontational interactions, group punishments and management by squad or platoon will lead to some negative perceptions. As critics of boot camps assert, the camps are expected to be perceived by the juveniles as less caring, less just, to have less individualized planning, fewer programs focusing on reintegration and, overall, to focus less on therapeutic treatment. We also anticipate that the yelling, direct commands, and summary punishments by "drill instructors" in the boot camps will result in the boot camp youth perceiving

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themselves to be in more danger from the staff than will the youth in the traditional facilities.

Method

Participants

Incarcerated juveniles (n=4,181) from 24 boot camps (n=2,668) were surveyed and compared to 22 traditional facilities (n=1,848)[1]. Traditional facilities were selected as a comparison for each boot camp facility by identifying the state facility in which the juveniles would have been confined if the boot camp was not in operation. These matched facilities are referred to as state pairs or state paired facilities.

Survey Instrument

The survey included 266 questions consisting of 17 demographic questions, 13 environmental conditions scales, 17 risk factor scales (criminal history and attitudes) and 9 intermediate outcome scales. Thirteen questions were open-ended (primarily demographics) with the remaining questions based on 5-point likert scales[2].

Surveys were administered in classroom-like settings in groups of 15 to 20 participants in accordance with prevailing ethical principles. A videotaped presentation of instructions and survey questions were provided on televisions to ensure uniform administration and provide assistance to juveniles with reading difficulties.

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[1]For two pairs of boot camps, the same facility was identified as the most appropriate comparison facility. Given these two boot camps did not significantly differ, the data from the two boot camps were combined. Thus, 22 matched boot camp and comparison pairs were included for analysis.

[2]It is interesting to note that juveniles found the last 105 questions in the survey most appealing as they were asked concrete questions about their experiences in the institution. Most likely, this resulted in the high completion rate of over 85% of the total population.

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Scale Development

Conditions of Confinement Scales. Items were developed for thirteen conditions of confinement using the categories identified in previous research examining institutional environments (see Federal Bureau of Prisons, 1993; Gendreau & Andrews, 1994; Logan, 1993; Moos, 1974; OJJDP, 1994; Wright, 1985). The summated scales were (1) Control, the security measures exerted over the residents to keep them in the facility and monitor their activities; (2) Resident Danger, the resident's risk of being injured by other residents; (3) Danger from Staff, the resident's risk of being injured by staff members; (4) Environmental Danger, the resident's risk of being injured as a result of being institutionalized; (5) Activity, the level and variety of activities available to inmates; (6) Care, the quality of interactions between juveniles as well as between staff and juveniles; (7) Risks to Residents, the risks to the residents as a result of facility conditions; (8) Quality of Life, the general social environment including the resident's ability to maintain some degree of individuality; (9) Structure, the formality of daily routines and interactions with staff and other residents; (10) Justice, the appropriateness and constructiveness of punishments given to the residents; (11) Freedom, choice of activities and movement to residents; (12) Therapeutic Programming, the availability and utility of therapeutic opportunities; (13) Preparation for Release, activities with juveniles prior to release to assist the juvenile in the transition back to society[3].

Factor Analysis. All scales were formed utilizing confirmatory factor analysis methods for each scale. Initially, both the Barlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO) measure

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[3]A listing of individual items and related descriptive statistics of each scale may be obtained from the authors.

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of sampling adequacy were performed to determine whether factor analysis of the questions was warranted. Given acceptable KMO and Bartlett scores, Varimax factor analysis with pair-wise deletion of missing cases was performed[4].

Additionally, Cronbach's alpha reliability test (1951) tested the internal consistency of the items. If acceptable, scale scores were computed controlling for missing data[5]. All scales contained less than 10 percent missing data. The only scale that was not developed was for a measure of Individualized Planning. Items pertaining to this concept failed to factor analyze or demonstrate internal consistency.

Analytic Model

Individual differences between inmate characteristics in each type of facility were determined using t-tests for continuous variables and the Kolmogorov-Smirnov (K-S) test for categorical variables. Subsequently, Analysis of Covariance (ANCOVA) was performed to examine the inmates perceptions of the environments in boot camps and traditional facilities. Separate analyses were completed for each of the thirteen environmental conditions. Variables in the model were Type of Facility (boot camp vs. traditional facility), the State Pair (grouping of boot camp and comparable traditional facility within a state), individual differences (gender, race, age, sentence, age at first arrest, length of incarceration, prior commitments, family violence history, substance use, and alcohol abuse) and an interaction between boot camps and the state

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[4]Varimax rotation was used because it was assumed the most interpretable factor has numerous high and low loadings but few of intermediate value (Comrey & Lee, 1992). This occurs because the variance of the variables are maximally spread apart. In the majority of cases, items were dropped if they did not load on a factor as .30 or greater.

[5]If an individual failed to answer more than 20% of the questions contained in the scale, the case was excluded from the overall analysis.

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pairs.

If there was an overall main effect difference between boot camps and traditional facilities for an environmental measure, we examined whether this difference was consistent for all boot camp-traditional pairs. The interaction term indicated whether environmental differences were consistent among all the state pairs or if differences existed in only some of the state pairs. If the interaction term was significant, contrast statements in the ANCOVA model compared the mean difference between each boot camp and traditional facility to the overall mean difference between the two types of facilities. The contrast statement implemented the equation:

$$(\bar{x}_{\text{boot camp}} - \bar{x}_{\text{traditional facility}}) - (\text{boot camp}_i - \text{traditional facility}_i) \text{ for } i = 1...22 \text{ facilities}$$

If the contrast statement was significantly different from zero as determined by a t-test, we determined whether differences between environments were due to direction or magnitude. To do so it was necessary to refer to the estimated marginal means of the significant state paired facilities to compare them with the overall means of boot camps and traditional facilities.

If each mean difference between the facilities was similar to the difference between the overall mean of boot camps and traditional facility, conclusions regarding a consistent difference in environments are warranted. For example, if a state's boot camp had a higher mean level on the environmental control scale in comparison to the traditional facility, we concluded there was a consistent difference in environmental control between boot camps and traditional facilities. However, if some state boot camps had higher control than traditional facilities, while others did not (a directional difference from the overall mean), an inconsistency in perceptions of the environmental control existed.

In addition to determining the significance of differences between types of facilities, we

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determined the magnitude of these differences through effect sizes (ES). Cohen's *d* was computed for each of the environmental conditions (Cohen, 1977). The Cohen's *d* coefficient was defined as the boot camp group mean minus the comparison group mean, divided by the pooled group standard deviation. A positive ES indicated a higher level of the outcome in the boot camp whereas a negative ES indicated a higher level of the outcome in the comparison facility.

Results

Demographics and Risk Factors

In examining the inmates within boot camps and traditional facilities, as shown in Table 1, t-tests and K-S tests demonstrated significant differences between groups in the mean age, sentence length, age at first arrest, length of incarceration, number of previous commitments, family violence, substance use, and alcohol abuse. The magnitude of these differences is small in most cases; however, these individual differences were subsequently controlled for in the ANCOVA model as covariates.

Insert Table 1 about here

Environmental Conditions

In the ANCOVA model there were significant main effects for state and type of facility (boot camp and traditional facility). The state by boot camp interaction was significant for all thirteen environmental conditions. Overall, boot camp inmates perceived the environment as more therapeutic, structured, active, controlled, just, caring, less dangerous from any source, better preparing them for release, having a better quality of life and less freedom. The effect sizes or magnitude of the differences between the means of the perceived environmental conditions within

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the two types of facilities are displayed in the fourth column of Table 2.

Insert Table 2 about here

The last column of Table 2 displays the number of state pairs that coincide with the overall means adjusted for the covariates. Our investigation of the interactions revealed that in 17 or more of the 22 facilities (more than 75%) inmates in the boot camps perceived the boot camps as having more therapeutic programming, activity, structure, control, and a more thorough preparation process for release from the facility. Boot camp inmates also perceived the facility to pose less dangers from other inmates, the environment and have fewer general risks to residents. Thus, in the vast majority of the camps, the juveniles perceived the environments as high in the characteristics expected in a boot camp environment (structure, control, safety from other inmates) but they also view the environments as more positive in the more therapeutic components such as therapeutic programming and preparation for release. Additionally, although somewhat less consistently, boot camps are perceived by the inmates as being more just and more caring.

Due to a lack of consistency in the pair comparisons, it is unclear which type of environment (boot camp vs. traditional facility) is perceived as having greater danger from staff, a better quality of life and more freedom. It appears these variables may be more specific to the individual facility rather than the type of program.

Discussion

Perceptions of juveniles in facilities are only one type of measure that can be used to develop standards for conditions conducive to positive inmate adjustment and change. We believe

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it is an important perspective. There is little reason to believe the juveniles in the boot camps would say the boot camp is positive in all of these aspects if that was not their perception. Observers of boot camps frequently argue that the active, structured environment provides safety for the inmates. Although some psychologists and other researchers believe the militaristic style of boot camp programs hold more potential for harm than benefit, the results from this investigation provide evidence contrary to this argument. Even though there are many critics of boot camp style programs, these programs were rated by the juveniles incarcerated in them as providing a much more positive atmosphere.

Juveniles perceived both the external environment (structure, control, etc.) and the therapeutic environment (care, justice, programming, etc.) as more conducive to treatment. In addition to perceiving the environment as controlled and safe, juveniles in the boot camp believed their experience provides more opportunities for programming and that they were provided with more intensive preparation for transition into the community. Furthermore, in their view boot camps better prepared them for their future, helped them to focus on their goals, understand themselves and assisted them in learning things in classes (therapeutic programming and planning for release scales). Results were surprisingly consistent given the number of facilities holding the different types of offenders as well as the vast number of juveniles surveyed.

It should be noted, however, there are differences between the boot camps and traditional facilities in the youth who were detained in each. Youth in the comparison facilities had longer sentences, more prior commitments to facilities and had been first arrested at an earlier age than the boot camp youth. They had fewer substance use/abuse problems, more family violence and they were older. Other than the substance use/abuse and age, all of the differences would suggest

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that the inmates in the traditional facilities are at more serious risk for criminal activity. Furthermore, selection criteria for boot camps restrict admission to youth with less serious criminal histories. While we controlled for these differences in the analysis of covariance, it is still possible that differences between the inmates led to differences in the environment and, hence, their perceptions. Or the environments might be the same but the differences between the inmates led to differences in perceptions. There are also differences between these boot camp facilities and the traditional facilities other than the boot camp aspects. For example, the boot camps are all relatively new programs (developed after 1990). The traditional facilities are much older. The boot camps are frequently very visible, touted as exciting new methods for managing juvenile delinquents. Similar new, highly visible programs without boot camp type components may also result in more positive perceptions of the environment compared to traditional facilities. We cannot rule out any of these possibilities.

However, if there are indeed differences in the environments of these institutions as suggested by the perceptions of these juveniles, we are left with the question of why past research has not shown any differences in recidivism when boot camp releasees are compared to others. One possibility is that the boot camps operating today are different from those that were studied in the past in ways that make them more therapeutic. That is, the boot camps we studied may have more therapeutic components that will have an impact on the youth once they are released. For example, they may devote less time to drill and ceremony and more time to the type of cognitive skills programs that have been found to be effective in reducing recidivism (Johnson & Hunter, 1995; Knott, 1995; Little, Robinson & Swan, 1996). Or, in comparison to the earlier boot camps, they may devote more time to individualized planning and less to physical training.

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Considering how rapidly these camps are spreading in the juvenile justice system, it is surprising that more research examining outcomes has not been completed.

Another possible explanation for the differences in perceptions and the failure to find differences in recidivism is that the camps may have an atmosphere that leads the youth to view them very positively but the specific components necessary for changing behavior are no more available in the boot camps than in traditional facilities. As the Canadian correctional researchers have asserted, there are components that must be in place for treatment to be effective (Cullen & Gendreau, 1989; Gendreau & Ross, 1987). For instance, programs based on a cognitive behavioral and social leaning theory are found to be more effective than those using a non-directive relationship-oriented counseling or psycho-dynamic, insight-oriented counseling methods (Andrews et al., 1990; Gendreau, Little, & Goggin, 1996; Lipton & Pearson, 1996). Treatment programs must have therapeutic integrity (be delivered as planned and designed by trained personnel). Treatment must be of sufficient intensity and duration (Gendreau, Little, & Goggin, 1996). Staff in boot camps may be enthusiastic about the programs because they are new and highly visible. They may attempt to counsel, help and treat the youth. However, if this treatment is not done in a manner that is consistent with "appropriate" therapeutic programming (Gendreau & Goggin, 1997; Gendreau, Gogin & Paparozzi, 1996; Gendreau, Little, & Goggin, 1996) the treatment may be no more effective than what is done in the traditional institutions despite the fact that the youth perceive it as better. From this perspective, the environment of boot camps is perceived as more positive than traditional facilities but the perceptions do not reflect the actual situation in regard to quality correctional programming. Despite the fact that the environment of the boot camps is perceived as positive, the treatment aspects of the program may not reach the

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level (quality, intensity, duration, integrity) necessary to have an impact on recidivism.

With all the above cautions in mind, if these perceptions of the environments of these institutions reflect true differences in the environments or the perceived environments, than we would have to conclude that the boot camps provide an atmosphere that is more positive from the perspective of juveniles. Even if the environmental characteristics do not reach the level necessary to impact future behavior it still appears that boot camps create an atmosphere that juveniles perceive as more constructive than more traditional institutions. Possibly, this is the first step in creating a quality institution where therapeutic programming will be able to effectively be administered.

One of the concerns from our results is the juveniles' perception of danger from staff. Critics of boot camps assert that the confrontation nature of the interactions between staff and juveniles lead juveniles to fear staff. Yet, our findings suggest there are no differences between the boot camps and the traditional facilities. In both facilities, on occasion (rarely or sometimes), juveniles report that staff say mean things to inmates, grab, push or shove them and even place residents in fear of being hit punched by staff members. Certainly, one goal should be to decrease the frequency of such behaviors.

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References

Ajdukovic, D. (1990). Psychosocial climate in correctional institutions: Which attributes describe it? Environment and Behavior, 22, 420-432.

Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P., & Cullen F.T (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. Criminology, 28, 369-404.

Bottcher, J., Isorena, T., & Belnas, M. (1996). LEAD: A boot camp and intensive parole program: An impact evaluation, second year findings. State of California, Department of the Youth Authority, Research Division.

Clawson, H., Coolbaugh, K., & Zamberlan, C. (1998). Further Evaluation of Cleveland's Juvenile Boot Camp: A Summary Report. Paper presented at the Annual Meeting of the American Society of Criminology in Washington, DC.

Cohen, J. (1977). Statistical Power for the Behavioral Sciences (revised edition). New York: Academic Press.

Comrey, A.L., & Lee, H.B. (1992). A First Course in Factor Analysis (2nd edition). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Cowles, E., & Castellano, T. (1995). "Boot camp" drug treatment and aftercare intervention: An evaluation review (NCJ 153918). Washington, DC: National Institute of Justice.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 397-334.

Cullen, F.T., & Gendreau, P. (1989). The effectiveness of correctional rehabilitation: Reconsidering the "Nothing Works" debated. In L. Goodstein & D. MacKenzie (eds.). The

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American Prison: Issues in Research and Policy. NY: Plenum Press.

Gendreau, P., & Andrews, D.A. (1994). The Correctional Program Evaluation Inventory. Unpublished Manuscript, University of New Brunswick.

Gendreau, P., & Goggin, C. (1997). Correctional treatment: Accomplishments and realities. In P. VanVoorhis, M. Braswell & D. Lester (Eds.) Correctional Counseling & Rehabilitation. Cincinnati: Anderson.

Gendreau, P., & Ross, R. (1987). Revivication of rehabilitation: Evidence from the 1980s. Justice Quarterly, 4, 349-408.

Gendreau, P., Goggin, C., & Paprozzi, M. (1996). A review of research for practitioners. Federal Probation, 60, 64-70.

Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! Criminology, 34, 401-433.

Gimbel, C., & Clawson, H. (1998). Further Evaluation of Cleveland Juvenile Boot Camp. Paper presented at the Annual Meeting for the American Society of Criminology in Washington, DC.

Goffman, E. (1961). Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. Chicago: Aldine.

Johnson, G., & Hunter, R.M. (1995). Evaluation of specialized drug offender program. In R.R. Ross & B. Ross (eds.), Thinking Straight. Ottawa: Cognitive Center.

Johnson, R. & Toch, H. (1982). The Pains of Imprisonment. Beverly Hills, CA: Sage.

Knott, C. (1995). The STOP programme: Reasoning and rehabilitation in a British setting. In J. McGuire (ed.), What Works: Reducing Re-offending: Guidelines from Research and

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Practice. John Wiley & Sons Ltd.

Lipsey, M. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. Cook et al. (Eds.). Meta-analysis for explanation: A casebook. New York: Russell Sage Foundation.

Lipton, D., & Pearson, F.S. (1996). The CDATE Project: Reviewing research on the effectiveness of treatment programs for adult and juvenile offenders. Paper presented at the Annual Meeting of the American Society of Criminology, Chicago, IL.

Little, G.L., Robinson, K.D., & Swan, E.S. (1996). Review of outcome data with MRT: Seven year recidivism results. Cognitive Behavioral Treatment Review, 5, 1-7.

Logan, C.H. (1993). Criminal justice performance measure for prisons. In Performance Measures for the Criminal Justice System (pp. 19-60) . U.S. Department of Justice (NCJ-143505).

Lutze, F. (1998). Are shock incarceration programs more rehabilitative than traditional prisons? A survey of inmates. Justice Quarterly, 15, 547-556.

MacKenzie, D.L. (1997). Criminal Justice and Crime Prevention. In L.W. Sherman, D. Gottfredson, D. MacKenzie, J. Eck, P. Reuter, & S. Bushway (Eds.), Preventing Crime: What Works? What Doesn't? What's Promising (pp. 9-1-9-76) Washington, D.C.: National Institute of Justice.

MacKenzie, D.L., & Hebert, E.E. (1996). Correctional Boot Camps: A Tough Intermediate Sanction. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs.

MacKenzie, D.L., & Brame, R. (1995). Shock incarceration and positive adjustment

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during community supervision. Journal of Quantitative Criminology, 11, 111-142.

MacKenzie, D.L., & Souryal, C. (1995). A "Machiavellian" perspective on the development of boot camp prisons: A debate. University of Chicago Roundtable. Chicago: University of Chicago Press.

MacKenzie, D.L., & Parent, D. (1992). Boot camp prisons for young offenders. In J. Byrne, A. Lurigio, and J. Petersilia (Eds.) Smart Sentencing: The Emergence of Intermediate Sanctions (pp. 103-122) Sage: Newbury Park, CA.

MacKenzie, D.L., Styve, G.J., & Gover, A.R. (1998). Performance based standards for juvenile corrections. Corrections Management Quarterly, 2, 28-35.

MacKenzie, D.L., Brame, R., McDowall, D., & Souryal, C. (1995). Boot camp prisons and recidivism in eight states. Criminology, 33, 327-357.

Marlowee, D.H., Marin, J.A., Schneider, L.I., Vaitkus, M.A. & Bartone, P. (1988). A Look at Army Training Centers" The Human Dimensions of Leadership and Training. Washington, DC: Department of Military Psychiatry, Walter Reed Army Institute of Research.

Meachum, L.M. (1990). Boot camp prisons: Pros and cons. Paper presented at the Annual Meeting of American Society of Criminology, Baltimore, MD.

Moos, R. H. (1971). Differential effects of the social climates of correctional institutions. Journal of Research in Crime and Delinquency, 7, 71-82.

Moos, R.H. (1974). Correctional Institutions Environment Scale Manual. Consulting Psychological Press: Palo Alto, CA.

Morash, M. & Rucker, L. (1990). A critical look at the ideal of boot camp as a correctional reform. Crime and Delinquency, 36, 204-222.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Peters, M. (1996a). Evaluation of the impact of boot camp for juvenile offenders: Cleveland interim report. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Peters, M. (1996b). Evaluation of the impact of boot camp for juvenile offenders: Denver interim report. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Peters, M. (1996c). Evaluation of the impact of boot camp for juvenile offenders: Mobile interim report. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Raupp, E. (1978). Toward Positive Leadership for Initial Entry Training. A Report to the Task Force on Initial Entry Training Leadership. Fort Monroe, VA: United States Army Training and Doctrine Command.

Steinhart, D. (1993, January/February). Juvenile boot camps: Clinton may rev up and old drill. Youth Today.

Wright, K. N. (1985). Developing the Prison Environment Inventory. Journal of Research in Crime and Delinquency, 22, 257-277.

Wright, K. N. (1991). A study of individual, environmental, and interactive effects in explaining adjustment to prison. Justice Quarterly, 8, 217-242.

Wright, K.N., & Goodstein, L. (1989). Correctional environments. In L.Goodstein & D.L. MacKenzie (Eds.), The American Prison: Issues in Research and Policy. New York: Plenum.

U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention (1994). Conditions of Confinement: Juvenile Detention and Correctional Facilities. Washington, D.C.:

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Government Printing Office.

U.S. Department of Justice, Federal Bureau of Prisons (1993). Prison Social Climate Survey: Staff Version and Resident Version. Washington, D.C.: Government Printing Office.

Zachariah, J.K. (1996). An overview of boot camp goals, components and results. In D. MacKenzie & E. Hebert (Eds.), Correctional Boot Camps: A Tough Intermediate Sanction. Washington, D.C.: Government Printing Office.

Zamble, E. & Porporino, F. (1990). Coping, imprisonment and rehabilitation: Some data and their implications. Criminal Justice and Behavior, 17, 53-70.

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Table 1
Demographic Comparison of Boot Camp and Comparison Facility Populations

Characteristic		Boot Camp (n = 2668)	Comparison (n = 1848)
Gender (% male)		92.1	95.6
Race (%)	African American	35.3	32.0
	White	34.1	31.1
	Hispanic	18.5	19.2
	Native American	3.7	5.6
	Asian	1.2	1.9
	Other	6.7	9.3
Age, M (SD)*		16.1 (1.2)	16.3 (1.4)
Sentence Length, M (SD)*		9.46 (14.4)	16.2 (26.5)
Age at first arrest, M (SD)*		13.5 (1.9)	12.9 (.75)
Length of incarceration, M (SD)*		3.01 (3.4)	6.54 (8.1)
Number of Prior Commitments, M (SD)*		2.59 (2.3)	2.96 (2.6)
Family Violence Scale, M (SD)*		1.55 (.64)	1.66 (.75)
Substance Use Scale, M (SD)*		1.48 (.27)	1.46 (.28)
Alcohol Abuse Scale, M (SD)*		1.69 (.31)	1.64 (.31)

* $p<.05$

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Table 2
Adjusted Mean Scale Scores of Boot Camps and Comparison Facilities

Scale	Adjusted Means (SD)		Effect Size	Facilities consistent with the adjusted overall mean
	Boot Camp	Comparison		N (max. 22 facilities)
Therapeutic Programs*	3.66 (.99)	3.25 (1.0)	.41	21
Activity*	3.97 (.82)	3.50 (.91)	.54	21
Structure*	3.83 (.69)	3.47 (.68)	.49	22
Preparation for Release*	3.88 (.69)	3.73 (.73)	.21	21
Control*	3.14 (.59)	2.73 (.56)	.71	21
Resident Danger*	1.96 (.78)	2.49 (.77)	-.68	21
Environmental Danger*	2.31 (.88)	2.85 (.79)	-.65	21
Risks to Residents*	2.29 (.81)	2.72 (.85)	-.52	20
Justice*	3.10 (.79)	3.08 (.74)	.03	18
Care*	3.36 (.75)	2.12 (.68)	1.73	17
Danger from Staff*	2.45 (1.0)	2.27 (1.0)	.18	15
Quality of Life*	3.02 (.66)	2.86 (.71)	.23	15
Freedom*	2.11 (.74)	2.61 (.73)	-.68	11

* interaction significant at $p < .001$

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THE ENVIRONMENT AND WORKING CONDITIONS IN JUVENILE BOOT CAMPS AND TRADITIONAL FACILITIES

Ojmarrh Mitchell
Doris Layton MacKenzie
Angela R. Gover
Gaylene J. Styve

Abstract

This national study of juvenile correctional facilities compared the correctional environments of 25 juvenile boot camps to those of 22 traditional juvenile facilities. Data on perceived environmental conditions for juveniles and work climate for staff, as well as demographic characteristics, were collected from 1,233 juvenile correctional facility staff. While there was some regional variation, in comparison to staff employed in traditional juvenile correctional facilities, boot camp staff perceived the environmental conditions for juveniles as having significantly more activity, control, justice, structure, caring, and therapeutic programming, and believed that their releases were better prepared for the future. Boot staff also perceived their facilities as having less danger for residents and staff, as well as having less general environmental danger and risks to residents. Furthermore, boot camp staff perceived their work climates as generally more favorable than comparison facility staff. In contrast to the opinions of many boot camp critics, these data suggest that the boot camp environment has more of the environmental components suggested by psychological theorists as being necessary for effective correctional treatment.

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Boot camps have become increasingly popular as short-term residential sanctions for juvenile delinquents. Boot camps originated in adult corrections as a more punitive intermediate sanction for offenders of marginal seriousness, emphasizing drill and ceremony and physical activity similar to basic training in the military (Gowdy, 1996). Recently boot camps have been incorporated into juvenile corrections and have since proliferated. In 1996, MacKenzie and Rosay (1996) identified 36 juvenile boot camps; yet, only one of these juvenile boot camps had opened before 1990. The emergence of boot camps appears to have come primarily as a response to a shift in the prevailing juvenile justice philosophy and an increase in the number of juvenile offenders (Gowdy, 1996, p.1). Policymakers appear to have moved away from the traditional juvenile justice philosophy of rehabilitation, and increasingly espouse protection of the public and deterrence of juvenile offenders as the most important goals of juvenile justice (Feld, 1999). Politicians and the public appear to expect boot camps to be sufficiently punitive to achieve both of these goals, and therein lies much of the appeal of boot camps.

The rapid spread of juvenile boot camps occurred in spite of many researchers' concerns that boot camps may not be appropriate for juvenile offenders. Advocates of boot camps argue that the structure and discipline of these programs result in a healthy and constructive environment that forces individuals to make changes in their lives (Clark & Aziz, 1996; MacKenzie & Hebert, 1996). Such environments are believed to be advantageous to therapy, education, and other treatment activities (Clark & Aziz, 1996; Cowles & Castellano, 1995). Conversely, many researchers knowledgeable about corrections and behavioral change assert that positive change occurs in an interpersonally supportive environment—an environment radically different from that of the confrontational, militaristic boot camp model. According to many psychological theorists, the boot camp environment is antithetical to effective treatment (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990; Gendreau, Little, & Groggin, 1996; Lipsey, 1992; Morash & Rucker, 1990; Sechrest, 1989).

Further, the extant research assessing the treatment effectiveness of juvenile boot camp correctional programming consistently has found that boot camps are no more effective than more traditional facilities (Bottcher, Isorena, & Belnas, 1996; Peters, 1996a, 1996b, 1996c). However, all of this body of research has assessed juvenile boot camp program effectiveness through the problematic measure of post-incarceration official recidivism. While a number of commendable studies have compared recidivism rates of juveniles released from boot camps to those of juveniles released from traditional facilities (Bottcher et al., 1996; Peters, 1996a, 1996b, 1996c), such measures of the effectiveness of correctional programming are by themselves inadequate, as official measures of recidivism rely on numerous factors beyond the control of correctional practitioners (Boone

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& Fulton, 1995: DiIulio, 1993; Gottfredson, 1987). For example, Gottfredson (1987) asserts measures of criminal behavior such as recidivism "may depend not only on the behavior of the persons . . . [but] also depend on the behavior of police, prosecutors, judges, or probation and parole officials" (p.14).

A number of practitioners and criminologists argue that measures more immediate to the control of correctional facilities may yield more equitable measures of correctional performance (Logan, 1993). One set of measures assessing these facility characteristics are measures of the quality of correctional conditions, which quantify the extent to which correctional environments are conducive to rehabilitation and positive behavioral change. From this perspective, high-quality correctional environments should provide residents safety, structure, therapeutic programming, activity, and emotional support (Logan, 1993; DiIulio, 1993). The impact of a facility's environment on inmates' adjustment and behavior has been well-documented in the research literature (Ajdukovic, 1990; Goffman, 1961; Johnson & Toch, 1982; Moos, 1971; Wright, 1985, 1991; Wright & Goodstein, 1989; Zamble & Porporino, 1990). Previous researchers have noted that facilities "possess unique and enduring characteristics that impinge upon and shape individual behavior" (Wright & Goodstein, 1989: 266), both in the facility and after they leave. Measures of correctional performance assessing the quality of the correctional environment instead of recidivism have the advantage of being independent of the actions of other criminal justice agencies.

As yet, little is known about the specific conditions of confinement in juvenile boot camps in comparison to more traditional juvenile correctional facilities. Most of the extant literature concerning components of boot camps have focused on adult inmates' perceptions of the environment (Lutze, 1998), or their attitudes towards the boot camp program and its impact on their future (MacKenzie and Shaw, 1990; MacKenzie and Souryal, 1995). In general, boot camp inmates have perceived the environment as having some components conductive to rehabilitation, such as safety and discipline; however, boot camps were not perceived to include more "internally" important components such as emotional feedback and support (Lutze, 1998). Adult inmates typically view boot camp programs as a positive experience that will assist them in the future (MacKenzie & Shaw, 1990; MacKenzie & Souryal, 1995).

While most previous studies of environmental conditions have used data from institutional records or inmate perceptions, we believe that a unique perspective can be gained by asking correctional facility staff for their perceptions of the environment for the inmates. The correctional staff perspective is expected to be insightful as staff spend a great deal of time in correctional facilities, and have a tremendous amount of interaction with inmates. The accumulation of these experiences qualifies correctional staff as discerning observers and evaluators of

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the correctional environment. Staff work from a theoretical perspective whether tacitly understood or openly acknowledged. The task, then, is to make these views explicit in order to understand what model drives their interactions with juveniles under their care (Gottfredson, 1984).

The present study attempts to address the issues of the appropriateness of boot camps for juveniles and offers an alternative, perhaps more equitable, measure of correctional effectiveness. The present authors do not attempt to measure correctional performance through recidivism; rather, the authors assess correctional performance through measuring staff perceptions of each facility's conditions of confinement and quality of correctional programming. With these research goals in mind, the conditions of confinement and the work climate in 47 juvenile correctional facilities were examined from the perspective of staff working in 25 boot camps and 22 traditional juvenile facilities. Interest focused on comparing how staff in the different types of facilities perceive the correctional environment and programming for juveniles, and the working conditions for themselves. The authors examined whether boot camps were viewed by staff as providing safe, supportive environments, conducive to positive growth and change, or whether boot camps were viewed by staff as focusing primarily on deterrence by creating a punitive, disagreeable environment.

This study is valuable to juvenile correctional policy as the continued proliferation and funding of juvenile boot camps may not be justifiable in the absence of answers to issues raised in the above. The present study is also a valuable addition to the correctional literature examining juvenile boot camps, as much conjecture has been written about the appropriateness of the boot camp model for juveniles, but no previous research has empirically assessed this question.

Hypotheses

From the previous research on adult inmate perceptions, recidivism, and description of boot camps, the authors expected to find that the staff in the boot camps perceive their correctional environments as having more activity, structure, and safety, while having less freedom for juvenile inmates. Furthermore, the authors expected staff in the traditional facilities to perceive the environments of their facilities as having more components important for positive behavioral change, such as care, therapeutic programming, planning for the future, and preparation for release. That is, boot camp staff would emphasize the structure, order, and active aspects of the facilities in order to force delinquents to obey rules, follow directions, and behave appropriately. In contrast, comparison facilities staff would be expected to perceive more treatment, individualized programming, fair and just procedures, and reintegration planning, reflecting the emphasis of their facilities.

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Methodology

This research project began by identifying and locating all juvenile boot camps in operation at the commencement of the research project (April 1997). At that time, 50 privately and publicly funded secure residential boot camps were identified. These facilities were contacted and asked to participate in the research project. Twenty-seven of the 50 facilities agreed to participate in the research project and completed the evaluation process. Twenty-three programs did not participate for various reasons: parental consent issues, staffing and resource limitations, impending program closure, etc. Thus, the 27 boot camps agreeing to participate in this project represented 54% (27 out of 50) of the residential juvenile boot camps operating in 1997.[1] (Note two boot camps were later eliminated, as no comparison facility was available for these facilities).

In order to assess how the experiences of residents in boot camps differed from those in traditional facilities, a comparison facility for each boot camp was selected. Comparison facilities were selected for this research project by identifying those secure residential facilities where the juveniles would have been confined if the boot camp program were not in operation. This method of selection was chosen to ensure that the residents at the comparison facilities were as similar as possible to the boot camp residents. The chief administrator at each boot camp, with this definition of a comparison facility in mind, recommended the most appropriate comparison facility. Comparison facilities were then contacted and asked to join the research project. All of the 22 comparison facilities identified agreed to participate in the research project.

Note that there were only 22 comparison facilities for the 27 boot camps. The discrepancy between the two types of facilities was due to the fact that in three states, two different boot camp administrators identified the same non-boot camp facility as the most appropriate comparison facility. In these instances, one comparison facility served as the control facility for two boot camps; consequently, three comparison facilities served as control facilities for six boot camps.

Survey Administration

The staff survey was administered by a survey facilitator, who was an employee of each facility. The research investigators recommended that the survey

[1] As a high percentage of all juvenile boot camps in operation at the time of study agreed to participate in the study, the researchers do not expect their sample of facilities to be meaningfully different from the population of all juvenile boot camps in operation at the time of the study.

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facilitator distribute the survey packets to all staff members having direct contact with the residents. The investigators also recommended that staff be given time during their shift to complete the approximately 30-minute survey. The researchers stressed to staff that participation in the survey was voluntary and all responses would be kept strictly confidential. All data were collected between April 1997 and August 1998.

Scale Development

Numerous scales have been developed to measure the environments of correctional facilities: the Social Climate Scale (Moos, 1974), the Prison Environment Inventory (Wright, 1985), the Prison Social Climate Survey (Federal Bureau of Prisons, 1993), the Conditions of Confinement Study (Office of Juvenile Justice and Delinquency Prevention, 1994), Quality of Confinement (Logan, 1993), and the Correctional Program Evaluation Inventory (Gendreau & Andrews, 1996). All of these measures assess correctional environments/climates using quantitative indices designed to evaluate components of the correctional atmosphere believed to be integral in promoting behavioral change.

An analysis of these scales reveals a considerable amount of consensus regarding which aspects of the correctional environment are viewed as important to achieving a high quality correctional environment. These scales measure similar constructs: activity/involvement, safety, support/care, order/structure, etc., and often ask similar questions. The current authors modeled the scales utilized in the current evaluation after the above-mentioned measures of correctional environments.

Staff Survey

The evaluation's 216-item staff survey contained 20 scales and 11 demographic questions. Fifteen of the scales concern staff perceptions of the environmental conditions in their facilities; these scales were designed to measure the staff's perceptions of residents' quality of confinement at each facility. The environmental conditions scales comprised the following 15 scales: Structure, Activity, Control, Freedom, Resident Danger, Staff Danger, Environmental Danger, Risks to Residents, Care, Quality of Life, Justice, Therapeutic Programs, Preparation for Release, Planning, and Individual Emphasis.

The second component of the staff survey—the work experiences/attitudes scales—were designed to measure staff perceptions of the juvenile residents and how well each institution was run from an employee's point of view. The work experiences/attitudes scales were Staff Communication, Personal Stress, Job Satisfaction, Support of Staff, and Juvenile Culpability.

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All of the above-mentioned scales use five-point Likert scales to measure the construct of interest, with the exception of the Planning and Preparation for Release scales, which use both five-point Likert scale items and yes-no-uncertain response options.

Scale Analysis

The scales utilized in the national evaluation were not validated measures; therefore, all the scales were examined for internal reliability using an array of statistical devices. All of the scales were scrutinized by both Barlett's Test of Sphericity and the Kaiser-Meyer-Olkin test to measure the appropriateness of factor analysis. Using the above statistical devices, all the scales were deemed appropriate for factor analysis. Confirmatory factor analysis, using Principal Components and Varimax rotation with list-wise deletion of missing data, was performed on all of the hypothesized scales. After the confirmatory factor analysis had been performed, Cronbach's alpha reliability test was performed to test the internal reliability of each scale. The Individual Emphasis scale did not meet the researchers' reliability coefficient criterion of .60; therefore, it was excluded from all analyses. Descriptions of each scale and scale reliabilities are reported in Table A1 and A2, in the Appendix.

Demographic Information

Respondents were asked to describe themselves by a variety of demographic, background, and occupational characteristics, including age, race, education, experience working with juveniles, law enforcement experience, military experience, correctional training, job title, length of employment in current facility, frequency of contact with residents, and primary shift worked.

Analysis of Variance Model

Using an analysis of variance model (general linear model, [GLM]), we examined whether there were differences between boot camps and comparison facilities on the environmental and work experiences/attitudes scales, independent of demographic and regional variations. The environmental conditions and work experiences/attitudes scales were the dependent variables in the following analyses. The GLM model attempted to answer two questions: Were there significant differences between boot camps and comparison facilities in general on the scales after controlling for demographic and regional differences; and, if so, how consistent were these differences across regions?

The GLM model employs three categories of independent variables. First, in order to remove the possibility that the detected differences in staff perceptions are due to demographic dissimilarities, all of the models contain independent

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variables which control for the demographic differences. Second, the researchers expected to find regional differences between facilities, which were independent of type of facility. For example, perhaps the quality of juvenile correctional facilities differs from one state to the next, which would in turn produce regional differences between staff perceptions of quality of the correctional environment. The GLM contains a series of variables, which control for regional differences that may exist between facilities independent of the type of facility. To accomplish this task, all of the regional pairs of facilities, that is each boot camp and paired comparison facility in the same geographic area (usually the same state, but some larger states had more than one pair of facilities), were entered into the model. Stated another way, all of the facilities located in the same region were grouped into a separate variable for each region. These variables were then entered into the model to control for variations that are due strictly to regional differences.[2]

Finally, the GLM contains the two variables of interest: type of facility (boot camp or comparison facility) and an interaction term between type of facility and region. The type of facility variable determines whether there are general differences between the two types of facilities, while the interaction term determines whether the general difference between boot camps and comparison facilities was consistent across regions, i.e., the 22 pairs of facilities. If the interaction was significant in the analysis, we used contrast statements to compare the difference between each regional pair of facilities to the overall mean difference between boot camps and comparison facilities in order to determine which pairs differed from the overall difference between boot camps and comparison facilities.

Stated differently, the type of facility variable determines whether there is a general (overall) difference between boot camps and comparison facilities. The interaction terms indicate whether the difference between a boot camp and its geographically similar paired comparison facility differs significantly from the overall difference between boot camps and comparison facilities. Thus, the type of facility variable indicates whether there are significant differences between the two types of facilities, and the interaction term measures how consistently the difference between each pair of boot camp and comparison facility agrees with the overall (mean) difference between boot camps and comparison facilities.

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[2] Note that in order to protect the confidentiality of the facilities involved in the study, all of the regions were assigned a random number. Also, some larger states had two pairs of boot camps and comparisons; thus, there are more regions (22) than there are different states participating in the study (19).

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Results

Sample

A sample of 1,233 respondents was obtained.[3] These respondents came from 47 juvenile facilities (25 boot camps and 22 comparison facilities) in 19 states. The overall response rate for all 47 juvenile correctional facilities was 64%. The response rate of boot camps was 70% (N = 646), while the comparison facilities had a 58% response rate (N = 587).

Demographic Comparison

Table 1 shows the demographic characteristics of the boot camp staff and the comparison facility staff. The staff showed several significant differences on some of the variables. Most notably, the boot camp staff had less education, more law enforcement experience, more military experience, and had worked less time at the current facility, which was expected given the newness of most residential juvenile boot camps. The boot camp staff also were more racially diverse, with a higher proportion of minority staff members than the comparison facility staff. Furthermore, there was a small, but statistically significant, difference in age between the two types of staff, with boot camp staff being slightly younger. More of the comparison sample identified their occupation as correctional officer, teacher, or counselor; more of the boot camp staff were drill instructors. The two groups of staff were demographically similar on all of the remaining characteristics.

Comparisons of Environmental Conditions and Staff Work Experiences

Boot camp and comparison facility staff means, adjusted for the control variables, on each of the environmental conditions and work experience/attitudes scales are shown in Tables 2 and 3. As shown in Table 2, even after controlling for regional and demographic differences, boot camps were perceived by their staff as having lower levels of freedom for residents, higher levels of structure, and more control over inmates than the levels reported by comparison facility staff on the same measures. Boot camps were also considered to be less dangerous for residents and staff, to have fewer environmental dangers, and to have fewer risks to residents. Boot camps were perceived to involve more activity, to be more caring and just, and to have a higher quality of life. Furthermore, they

[3] These figures exclude the two boot camps that did not have comparison facilities.

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Table 1
Demographic Comparison of Boot Camp and Comparison Facility Staff

Characteristic	Boot Camp Staff (N = 646)	Comparison Facility Staff (N = 587)
Gender (% Male)	68.9	63.6
Race/Ethnicity (%)*		
African-American	21.4	19.0
White	63.8	70.4
Hispanic	9.2	5.6
Other	5.7	4.9
Age, M (SD)*	35.4 (9.4)	39.3 (10.8)
Highest Level of Education (%)*		
High School/Technical Training	16.5	13.7
Some College	35.3	22.7
College Degree	30.9	37.8
Graduate Study	17.3	25.7
Formal Training Prior to Work in this Facility (% Yes)	70.4	65.1
Previous Law Enforcement Experience (% Yes)*	37.3	19.2
Military Experience (% Yes)*	51.8	24.9
Years in Current Facility, M (SD)*	1.9 (2.8)	6.4 (6.5)
Occupational Category (%)*		
Correctional officer	11.5	19.9
Medical staff	1.1	1.3
Psychologist	.5	.9
Administrative personnel	10.4	10.5
Teacher	14.0	22.2
Counselor	12.7	30.6
Caseworker	3.8	4.9
Drill instructor	39.3	.5
Other	6.7	9.1
Prior Experience in a Juvenile Facility (in Years), M (SD)	1.8 (4.2)	1.5 (3.4)
Frequency of Contact with Juveniles (%)		
Yearly	1.7	1.2
Monthly	2.1	1.6
Weekly	2.5	2.4
Every day	93.8	94.8
Predominant Shift (%)		
Day	55.0	57.0
Evening	18.2	23.1
Night	9.9	7.3
No predominant shift	16.8	12.5

*$p < .05$

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were viewed as providing significantly more effective therapeutic programming, taking more effective steps to prepare juveniles for release, and helping juveniles better plan for their futures.

Table 3 compares boot camp and comparison facility staff's perceptions of the work experiences/attitudes scales. Boot camp staff, in contrast to comparison facility staff, perceived significantly less personal stress and more job satisfaction. Boot camp staff also perceived more support from other staff in their facilities and more communication among staff. Moreover, boot camp staff in comparison to comparison facility staff rated the juveniles under their care as being significantly less culpable for their own misbehavior.

However, the interaction term was found to be significant in all of the scales, indicating that there was some variation in the difference between boot camps and comparison facilities by their geographic location. There were two major

Table 2

Boot Camp and Traditional Facility Comparison on the Environmental Conditions Scales

Scale	Boot Camp	Comparison	Consistency of Finding	Model Statistics	
	Mean (SD)	Mean (SD)	(%)	F	R^2
Activity	4.50 (.03)	4.02 (.03)*	95	9.32**	.35
Control	4.20 (.02)	2.79 (.03)*	91	13.63**	.44
Freedom	2.15 (.02)	2.66 (.03)*	86	18.24**	.51
Justice	4.31 (.02)	4.11 (.03)*	86	5.61**	.24
Structure	4.40 (.03)	4.03 (.03)*	86	7.06**	.29
Resident Danger	2.05 (.02)	2.61 (.03)*	100	22.57**	.56
Staff Danger	2.03 (.03)	2.56 (.03)*	95	15.51**	.47
Environmental Danger	1.76 (.03)	2.26 (.03)*	91	14.81**	.46
Risks to Residents	1.67 (.03)	2.00 (.03)*	91	7.18**	.29
Care	4.07 (.02)	3.70 (.03)*	91	10.03**	.36
Quality of Life	3.85 (.02)	3.62 (.03)*	77	8.60**	.33
Programs	4.01 (.03)	3.59 (.03)*	95	7.87**	.31
Preparation for Release	4.34 (.03)	4.06 (.04)*	77	7.38**	.30
Planning	4.40 (.03)	4.12 (.03)*	82	7.30**	.29

*Significant difference at the $p < .001$ level.
**Model significant at the $p < .001$ level.

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types of interactions—magnitudinal and directional (see Figure 1 and Figure 2 for a graphical presentation of the interactions). When there were magnitudinal differences, the *magnitude* of the difference between a specific pair of facilities differed from the overall mean difference between all boot camps and comparison facilities; however, the direction of the difference was consistent with the overall difference. For example, the overall means for boot camps and comparison facilities on the Freedom scale were 2.15 and 2.66, respectively, a difference of .51, with the comparison facilities having the larger mean. The data analysis revealed that for the Freedom scale there was a significant interaction and the follow-up contrast comparison indicated that the comparison facility in Region 21 had a mean of 2.80 and the boot camp had a mean of 1.94, a difference of .86.[4] This is a magnitudinal difference because the direction of the difference between the means is in the same direction as the overall difference between all boot camps and comparison facilities (i.e., the comparison facility had more freedom than the boot camp), but the difference between facilities in Region 21 was significantly larger than the overall difference.

Table 3

Boot Camp and Traditional Facility Comparison on theWork Experiences/Attitudes Scales

Scale	Boot Camp	Comparison	Consistency of Finding	Model Statistics	
	Mean (SD)	Mean (SD)	(%)	*F*	R^2
Activity	4.50 (.03)	4.02 (.03)*	95	9.32**	.35
Job Satisfaction	3.65 (.03)	3.47 (.03)*	86	3.75**	.18
Support of Staff	3.75 (.03)	3.46 (.04)*	82	5.17**	.23
Personal Stress	1.89 (.04)	2.13 (.04)*	91	3.24**	.16
Juvenile Culpability	2.63 (.03)	2.83 (.04)*	95	3.10**	.16
Staff Communication	3.74 (.04)	3.43 (.05)*	91	4.18**	.20

*Significant difference at the $p < .001$ level.
**Model significant at the $p < .001$ level.

[4] Group pairs were given arbitrary numbers to protect the confidentiality of the sites.

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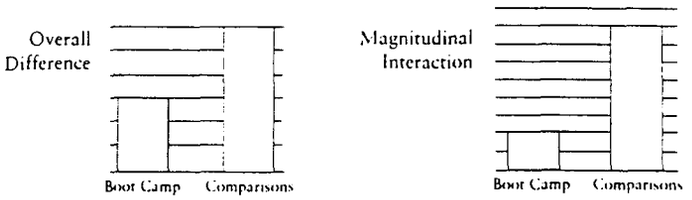
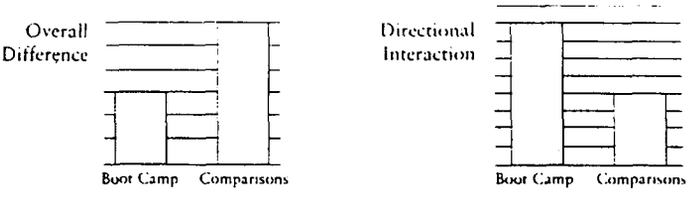
Figure 1
Illustration of Magnitudinal Interaction



More interesting for our purposes were the directional interactions, because these directional interactions indicate that the difference between a boot camp and its paired comparison facility was inconsistent with the overall mean difference between boot camps and comparison facilities in the *direction* of the difference. For example, in the follow-up contrasts for the Freedom scale, Region 4 also was found to exhibit a directional interaction. The means were 2.96 and 2.86, respectively, for the boot camp and the comparison facility pair at this site. Thus, instead of perceiving less freedom than the comparison facility, the boot camp in this region perceived more freedom for juveniles, which was considered a directional interaction because it was *inconsistent* with the overall finding.

Figure 2
Illustration of Directional Interaction



The consistency of the overall difference between boot camps and comparison facilities is reflected in the fourth column of Tables 2 and 3, with higher values indicating a more consistent finding. Consistency of finding is the quotient of the number of regions displaying differences between boot camps and comparison facilities consistent with the overall findings to the total number of regions (22). Hence, the Activity scale had a consistency of 95%, as 21 of the 22 regions perceived the difference between boot camps and comparison facilities similarly. Twelve of the 14 environmental conditions scales—Control, Resident Danger, Staff Danger, Environmental Danger, Activity, Care, Risks to Residents, Structure, Justice, Freedom, Programming, and Planning—had four or fewer regions out of the 22 matched pairs of facilities displaying directional interactions, a consistency of finding of at least 82% (18 of 22).

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y
Model Statistics

F	R^2
9.32**	.35
3.75**	.18
5.17**	.23
3.24**	.16
3.10**	.16
4.18**	.20

dentiality of the sites.

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The interaction term was significant on all of the work experience/attitudes scales; however, none of the work experience/attitudes scales had more than four directional interactions. The Support of Staff and Job Satisfaction scales had four and three directional interactions, an 82% and 86% consistent finding, respectively. Personal Stress, Juvenile Culpability, and Staff Communication each had two or fewer directional interactions, at least a 91% consistent finding.

Analysis of the follow-up contrasts revealed that the results were less consistent for the Quality of Life and Preparation for Release scales. Both the Quality of Life and Preparation for Release scales exhibited five directional interactions. For these scales, the majority of boot camp staff in the 22 matched pairs of facilities (at least 17 of 22 regions, or 77%) perceived their environments more favorably on these scales than comparison facility staff, but the consistency of these findings was marginal.

The authors also examined whether any region consistently demonstrated directional interactions (see Table 4). All but four of the matched pairs of facilities exhibited directional interactions on two or fewer of the environmental conditions scales (see columns 2 and 3 of Table 4). Thus, of the 22 regions, 82% (18/22) of these facilities perceived the differences between boot camps and comparison facilities on the environmental conditions scales similarly. The exceptions to these otherwise consistent findings were Regions 22, 19, and 9, which all displayed six directional interactions, and Region 17, with five directional interactions on the 14 environmental conditions scales. These four regions did not appear to follow the overall difference between boot camps and comparison facilities as well as the other regions. That is, for these regions, the differences between boot camps and comparison facilities were not consistently similar to the overall differences between boot camps and comparison facilities.

The high number of directional interactions in Region 19 may be explained by the fact that the comparison facility in this region was not a truly traditional facility (i.e., training school or detention center). The comparison facility in this region was a residential forestry camp, which utilized a treatment-oriented philosophy with a high level of therapeutic programming and vocational training. These qualitative observations are buttressed by the fact that this comparison facility was perceived by its staff to have high scores on those scales associated with a treatment-oriented philosophy (Care, Programs, Quality of Life, etc.) Region 22 was dissimilar from the other regions in that the boot camp in this region was recently opened at the time of the survey, while the comparison facility was an older, well-established facility. The newness of the boot camp facility could account for some of the directional differences, as the boot camp staff may have not been fully accustomed to the boot camp philosophy at the

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time of the staff survey. This view is supported by the findings that the boot camp staff in this region perceived their environment as having lower scores on the scales that we expected boot camps to score strongest on, i.e., structure and activity.

We are unable to offer any explanations as to why Regions 9 and 17 displayed above average numbers of directional interactions on the environmental conditions scales. These sites do not appear to differ from the other regions in any apparent systematic manner.

Table 4

Number of Directional Interactions by Region

	Directional Interactions			
Scale	Environmental Conditions Scales	Consistency of Finding[a] (%)	Work Experiences Scales	Consistency of Finding (%)
Region 1	0	100	0	100
Region 2	3	79	3	40
Region 3	2	86	2	60
Region 4	1	93	0	100
Region 5	0	100	1	80
Region 6	0	100	0	100
Region 7	0	100	0	100
Region 8	0	100	0	100
Region 9	6	57	0	100
Region 10	0	100	0	100
Region 11	1	93	0	100
Region 12	0	100	0	100
Region 13	0	100	1	80
Region 14	3	79	0	100
Region 15	0	100	0	100
Region 16	0	100	0	100
Region 17	5	64	0	100
Region 18	0	100	1	80
Region 19	6	57	3	40
Region 20	1	93	0	100
Region 21	0	100	0	100
Region 22	6	57	1	80

[a] Consistency of finding is the number of consistent findings divided by the total number of scales: 14 for the environmental conditions, 5 for the work experiences/attitudes.

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Discussion

Opponents of juvenile boot camps claim that these programs have harsh, punishment-oriented, and uncaring environments, which are antithetical to effective treatment (Morash & Rucker, 1990). The findings of the only previous study (Lutze, 1998) comparing the correctional environment of an adult boot camp to that of a traditional prison partially supports the conclusions of Morash and Rucker. Lutze concluded that the correctional environment of the adult boot camp she studied did not differ from a traditional prison in providing support for positive internal behavioral change. The present study's findings clearly were in opposition to both these previous studies.

As hypothesized and in concordance with the work comparing adult correctional environments (Lutze, 1998), perceptions of the environment revealed that boot camps were perceived to be significantly safer than comparison facilities on all of the measures of facility dangerousness. These finding are of utmost importance, as previous researchers have concluded that without a safe correctional environment, inmates are forced to focus on self-defense instead of internal change (Toch, 1977; Wright, 1985; Lutze, 1998). Also as expected, staff in boot camps perceived their facilities as having less freedom, but more control, structure, and activity, which is consistent with the discipline-oriented philosophy of boot camps. However, unexpectedly, boot camp staff perceived the environment of their programs as more caring, more just, more focused on individualized planning, incorporating more effective rehabilitative programming, having a higher quality of life, and better preparing residents for release.

Moreover, analysis of the work experiences/attitudes scales revealed consistent, significant differences between the two types of facility staff. Boot camp staff reported more job satisfaction, more support from other staff, more communication among staff, and less personal stress than did comparison facility staff. Boot camp staff also perceived that their residents were less culpable in their misbehavior than comparison facility staff.

These findings suggest that boot camp staff not only perceive the environment of boot camps as being more conducive to rehabilitation for juveniles, but also that the boot camp environment seems to produce more favorable work experiences for staff. In general, these findings were very consistent across sites, except in regard to quality of life and preparation for release; it should be noted, however, that even on these measures the majority of the paired sites (at least 77%) perceived the boot camp environment more favorably. Based upon these results, the authors conclude that while there was some variation across regions, in general there were consistent, significant differences between the quality of the correctional environment of boot camps and comparison facilities, with boot

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camps being overwhelmingly perceived more favorably. However, it is also possible that characteristics other than the military atmosphere, such as the newness of the boot camps or type of staff hired, may have led to some of these differences in perceptions.

The current study provides evidence of the efficacy of boot camp programming. Correctional policymakers deliberating the future of boot camp programs should take note of the present study's findings. While boot camps may not be a panacea against future criminality, our findings suggest that they are not the harmful, abusive environments some critics portray them to be.

This study has shown that valid measures of correctional programming effectiveness other than recidivism exist and should be the focus of future analyses. Evaluating correctional programs solely on the criterion of recidivism has limited value as many factors affect recidivism rates. It may prove productive in many instances to focus on the quality of interactions and programming within correctional facilities as intermediate indicators of correctional programming. Measures assessing how well correctional institutions and programs perform at those tasks directly within their control, such as providing safe, just, active, caring, controlled environments conducive to positive behavioral change are equally valid, necessary measures of correctional performance. Based upon these measures of program success, the environments of boot camps were clearly judged more favorably by the people who perhaps know correctional facilities best—their own staff.

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REFERENCES

Ajdukovic, D. (1990). Psychosocial climate in correctional institutions: Which attributes describe it? *Environment and Behavior, 22*, 420–432.

Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology, 28*, 369–404.

Boone, H. N., Jr., & Fulton, B. (1995). *Results-driven management: Implementing performance-based measures in community corrections*. Washington DC: American Probation and Parole Association, 1995.

Bottcher, J., Isorena, T., & Belnas, M. (1996). *LEAD: A boot camp and intensive parole program. An impact evaluation: Second year findings*. Sacramento: State of California, Department of the Youth Authority, Research Division.

Clark, C. L., & Aziz, D. W. (1996). Shock incarceration in New York State: Philosophy, results, and limitations. In D. L. MacKenzie & E. E. Hebert (Eds.), *Correctional boot camps: A tough intermediate sanction*. Washington, DC: Government Printing Office.

Cowles, E., & Castellano, T. (1995). *"Boot camp" drug treatment and aftercare intervention: An evaluation review*. Washington, DC: National Institute of Justice.

DiIulio, J. J., Jr. (1993). Rethinking the criminal justice system: Toward a new paradigm. In *Performance measures for the criminal justice system*. Washington, DC: Bureau of Justice Statistics and Princeton University.

DiIulio, J. J., Jr. (1991). *No escape: The future of American corrections*. New York: Basic Books.

Federal Bureau of Prisons (1993). *Prison social climate survey: Staff version and resident version*. Washington, DC: Government Printing Office.

Feld, B. C. (1999). Juvenile and criminal justice systems' responses to youth violence. In M. Tonry & M. Moore (Eds.), Youth violence. *Crime & Justice, 24*, 189–261. Chicago: University of Chicago Press

Gendreau, P., & Andrews, D. A. (1996). *Correctional program evaluation inventory*. Unpublished manuscript.

Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. Chicago: Aldine.

Gottfredson, D. M. (1987). Prediction and classification in criminal justice decision making. In M. Tonry & D. M. Gottfredson (Eds.), *Crime & Justice: An Annual Review of Research*, 9, 1–19.

Gottfredson, G. D. (1984) A theory-ridden approach to program evaluation: A method for stimulating researcher-implementer collaboration. *American Psychologist, 39 (10)*, 1101–1112.

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Gowdy, V. B. (1996). Historical perspective. In D. L. MacKenzie & E. E. Hebert (Eds.), Correctional boot camps: A tough intermediate sanction. Washington, DC: Government Printing Office.

Johnson, R. & Toch, H. (1982). *The pains of imprisonment*. Beverly Hills, CA: Sage.

Lipsey, M. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. Cook et al. (Eds.), *Meta-analysis for explanation: A casebook*. New York: Russell Sage Foundation.

Logan, C. H. (1992). Well kept: Comparing quality of confinement in private and public prisons. *The Journal of Criminal Law and Criminology, 83*, 577–613.

Logan, C. H. (1993). Criminal justice performance measures for prisons. *In Performance measures for the criminal justice system*. Washington, DC: Bureau of Justice Statistics and Princeton University.

Lutze, F. E. (1998). Are shock incarceration programs more rehabilitative than traditional prisons?: A survey of inmates. *Justice Quarterly, 15*, 547–566.

MacKenzie, D. L. (1997). Criminal justice and crime prevention. In L. Sherman, D. Gottfredson, D. L. MacKenzie, J. Eck, P. Reuter, & S. Bushway. *Preventing crime: What works, what doesn't, what's promising*. A report to the U.S. Congress prepared for the National Institute of Justice.

MacKenzie, D. L., Brame, R., McDowall, D., & Souryal, C. (1995). Boot camps and recidivism in eight states. *Criminology, 33*, 327–357.

MacKenzie, D. L., & Herbert, E. E. (1996). *Correctional boot camps: A tough intermediate sanction*. Washington, DC: Office of Justice Programs.

MacKenzie, D. L., & Rosay, A. (1996). Correctional boot camps for juveniles. In *Juvenile and adult boot camps*. Laurel, MD: American Correctional Association.

MacKenzie, D. L., & Shaw, A. (1990). Inmate adjustment and change during shock incarceration: The impact of correctional boot camp programs. *Justice Quarterly, 7*, 125–150.

MacKenzie, D. L., & Shaw, A. (1993). Impact of shock incarceration on technical violations and new criminal activities. *Justice Quarterly, 10*, 463–487

MacKenzie, D. L. & Souryal, C. (1995). A "Machiavellian" perspective on the development of boot camp prisons: A debate. *University of Chicago roundtable*. Chicago: University of Chicago Press.

MacKenzie, D. L, Styve, G. J., & Gover, A. R. (1998). Performance-based standards for juvenile corrections. *Corrections Management Quarterly, 2*, 28–35.

Moos, R. H. (1971). Differential effects of the social climates of correctional institutions. *Journal of Research in Crime and Delinquency, 7*, 71–82.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Moos, R. H. (1974). *Correctional institutions environment scale manual.* Palo Alto, CA: Consulting Psychological Press.

Morash, M., & Rucker, L. (1990). A critical look at the ideal of boot camps as a correctional reform. *Crime and Delinquency, 36*, 204–222.

Office of Juvenile Justice and Delinquency Prevention (1994). *Conditions of confinement: Juvenile detention and correctional facilities.* Washington, DC: Government Printing Office.

Peters, M. (1996a). *Evaluation of the impact of boot camps for juvenile offenders: Denver interim report.* Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Peters, M. (1996b). *Evaluation of impact of boot camps for juvenile offenders: Cleveland interim report.* Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Peters, M. (1996c). *Evaluation of impact of boot camps for juvenile offenders: Mobile interim report.* Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Sechrest, D. (1989). Prison "boot camps" don't measure up. *Federal Probation, 53*, 15–20.

Toch, H. (1977). *Living in prison: The ecology of survival.* New York: Macmillan.

Wright, K. N. (1985). Developing the prison environment inventory. *Journal of Research in Crime and Delinquency, 22*, 257–277.

Wright, K. N. (1991). A study of individual, environmental, and interactive effects in explaining adjustment to prison. *Justice Quarterly, 8*, 217–242.

Wright, K. N., & Goodstein, L. (1989). Correctional environments. In L. Goodstein & D.L. MacKenzie (Eds.), *The American prison: Issues in research and policy.* New York: Plenum.

Zamble, E. & Porporino, F. (1990). Coping, imprisonment and rehabilitation: Some data and their implications. *Criminal Justice and Behavior, 17*, 53–70.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

APPENDIX

Table A1
Description of Environmental Conditions Scales

Scale	Scale Description and Cronbach's Alpha
Control	This nine-item scale examined staff's perceptions of how much discipline the institution demands of its residents (coefficient α = .72)
Freedom	This seven-item scale assessed staff perceptions of the amount of choice present in the daily lives' of residents (coefficient α = .70).
Justice	This 11-item scale examined perceptions of how fairly the institution is run (coefficient α = .77).
Care	This scale used 10 items to assess the amount of care and amicability staff members believe there is between the institution and the juveniles in their custody (coefficient α = .73).
Activity	This seven-item scale measured how busy residents typically are in their daily activities (coefficient α = .79).
Individual Emphasis	This four-item scale measured staff perceptions of how much individual attention the residents receive (coefficient α = .54). The alpha coefficient for this scale did not meet the standard for inclusion in the data analysis.
Environmental Danger	This scale, using eight items, measured staff perceptions of how much general institutional danger each facility poses to residents (coefficient α = .71).
Resident Danger	This scale measured perceptions of how much of a threat residents are to the safety of other residents (coefficient α = .85).
Staff Danger	This scale measured perceptions concerning how much danger staff believe residents pose toward the safety of staff members (coefficient α = .75).
Preparation for Release	This seven-item scale measured staff's perceptions of residents' readiness to make a smooth transition back into society upon their release from custody (coefficient α = .68).
Risk to Residents	This scale contained seven items concerning the existence of hazardous conditions within each facility, which could potentially affect residents (coefficient α = .71).
Planning	This scale used 11 items to measure staff perceptions of the amount of planning residents have made toward their futures (coefficient α = .69).
Programs	This scale used 11 items to measure how beneficial staff members believe the residents' experiences in the institution have been (coefficient α = .90).
Quality of Life	This nine-item scale assessed perceptions of the quality of food, living spaces, and the amount of privacy, etc. residents received (coefficient α = .67).
Structure	This 10-item scale measured staff perceptions of the amount of regimentation residents are subject to in their daily activities (coefficient α = .80).

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Table A2
Description of Work Experiences/Attitudes Scales

Scale	Scale Description and Cronbach's Alpha
Support of Staff	This scale measured staff perceptions of the relationships between staff members and facility administrators, supervisors, and other staff members (coefficient α = .88).
Staff Communication	This scale used seven items to evaluate how effective lines of communication are between the various levels of staff (coefficient α = .93).
Personal Stress	This 14-item scale determined the amount of stress, depression, anxiety, and anger staff members have experienced in the past six months (coefficient α = .91).
Juvenile Culpability	This six-item scale measured staff's perceptions of how culpable the residents are in their behavior (coefficient α = .61); e.g., "Most of these kids are good kids, they have just had a tough life."
Job Satisfaction	This scale used 15 items to measure staff satisfaction with their jobs, coworkers, supervisors, facility administration, and training (coefficient α = .89).

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