

PROGRAMS IN CORRECTIONAL INSTITUTIONS

(Revised 5-02-2001)

Prison Industry/Work

Albright, S. & Denq, F.(1996). Employer attitudes toward hiring ex-offenders. *The Prison Journal* , 76 (2), 118-137.

A survey was administered by mail to 83 Houston and Dallas employers to ascertain their attitude towards hiring of ex-offenders. Findings indicate that the level of education, government incentives and the relationship of the crime to the job determine employer willingness to hire ex-offenders. Employers did not wish to hire ex-offenders whose crime related to the job, but when bonding was available, these employers responded more favorably. Employers were reluctant to hire ex-offenders who committed violent and/or sexual crimes. This study suggests that jobs commensurate with the skills of ex-offenders are integral to successful reentry.

Baro, A. L. (1999) Effects of a cognitive restructuring program on inmate Institutional behavior. *Criminal Justice and Behavior*, 26 (4), 466.

This recidivism study examines the effects of a cognitive program on 123 prison inmates using data from the department of corrections computer system. The researcher concludes that further study is needed to gain a more specific understanding of why assaults and disobeying direct orders decreased significantly while the total number of major misconduct incidents did not. This study demonstrates that the "Strategies for Thinking Productively" program has considerable potential and warrants further research attention. The department of corrections discouraged random sampling and the use of race as an independent variable.

Bass-Horchuck, J. (1997, November/December). The new face of PHILACOR. *American Jails*, 39-42.

The achievements of the Philadelphia Correctional Industries(PHILACOR) are acknowledged in this writing. A new management team and staff with expansion of the sales and marketing group along with revamping the product line are cited as reasons for job expansion and increases in production. Philcor emphasizes inmate pride as an important element in their success.

Brantley, J. (1999, September 4). Putting prisoners to work shouldn't mean loss of jobs. *The News Press*.

The merits and downside of prison industries is examined in this opinion piece. The author explains how private industry benefits from using inmate laborers who are often paid lower wages than are paid to workers in Mexico. The author cautions that such a trend will eventually impact all forms of labor.

Conner, A.H. (1960, June). "For Satan finds some mischief still for idle hands to do. *Federal Probation*.

An historical view of prison work programs and the establishment of Federal Prison Industries are presented in this article. This anecdotal piece describes various systems utilized to keep prisoners busy, as well as, abuses of the system. The author concludes that prison industry should develop a skill, promote self-respect and "substitute an honest motive for an unhealthy thought."

Correctional officers: Turnover, Security and Safety. (1996). Tallahassee, FL. Florida House of Representatives of Committee on Corrections.

A sample of 220 officers, representing all institutions, was used for this study. The high degree of correctional officer attrition was attributed to relatively low salaries, poor working conditions and increased violence at the state prisons. Officers also cited understaffing and required overtime, management favoritism, unreliable security and facility deficiencies, and lack of professionalism as major problems. Moreover, few officers are available to supervise inmate programs that would reduce inmate idleness.

Davis, P. J. (1999, September 5). Prison laborers largely ignored resource pool. *The News Press*.

Inmate labor to repatriate work from overseas labor markets is encouraged by the author of this commentary. As CEO of PRIDE Enterprises of Florida, Pamela Davis suggests that U.S. businesses must seek nontraditional solutions to their labor shortages. The article reports that prisoners eager to work provide not only economical benefits, as well as, social benefits. The author claims that PRIDE workers have a 16 percent recidivism rate compared to the national average of 40 percent.

Dennis, M. L., McCroskey, B. J., & Dennis, K. L. (2000, February/March). Meaningful employment needed to reduce recidivism. *Offender Employment Report*, 1 (3), 33-38.

This essay contends that unemployment leads to poverty that leads to crime. The authors support meaningful employment as the answer to reduction in crime. They argue that meaningful employment validates the person as productive and law abiding.

Finn, P. (1998, July). Job placement for offenders in relation to recidivism. *Journal of Offender Rehabilitation*, 28 (2), 89-106.

Various programs that have been successful in finding jobs for ex-offenders are offenders in their search for permanent employment are reported. The author described in this essay. Discussions relative to obstacles commonly faced by ex-offenders explains that many programs are successful because they stress job readiness before job placement.

Flanagan, T.J. & Macguire, K. (1993). A Full employment policy for prisons in the United States: Some argument, estimates, and implications. *Journal of Criminal Justice*, 21 (2), 117-130.

Utilitarian, habilitative, and humanitarian reasons are used to support the argument for full prisoner employment in the essay. It is suggested that inmate employment programs can help to alleviate many financial problems of correctional facilities. Additionally, employment offers useful and productive activities to inmates.

Flanagan, T.J. (1989). *Prison labor and industry*. New York: Plenum Press.

These authors support improvement of prison work programs. They argue that the public needs to be aware of past mistakes, present limitations, and reasonable future expectations. This article maintains that deficiencies found in prison industries must be addressed through comprehensive, costly, and non-profitable programs of academic and vocational education.

Flanagan T.J., Thornberry, T. P., Maguire, K.E.& McGarrell, E. F. (1988). *The effect of prison industry employment on offender behavior: Final report of the Prison Industry Research Project*. The Hindelang Criminal Justice Research Center, State University of New York.

Two large samples of inmates who participated in prison industry work programs are compared to inmates who were non participants in industry work programs. The mechanism through which industry participation encourages better institutional adjustment and the reasons for the lack of a relationship between industry participation and post-release adjustment are discussed. The study concluded that participation in industry positively effected inmate conduct within the prison environment. The study found, however, that participation in prison industry was unrelated to post-prison recidivism.

Grieser, R.C., Crawford, T.M. & Funke, G.S. (1985). *The development of jail industries*. Washington, D.C. : U.S. National Institute of Corrections.

Data is examined on jail industries collected through a telephone survey of jail administrators or deputies in 74 jurisdictions. Many administrators cited industries as reducing inmate idleness. Administrators with no industry in place expressed a desire to bring industries into their jails.

Grieser, R. C. (1988, August). Model approaches: Examining prison industry that works. *Corrections Today*, 50 (5), 174-178.

This essay maintains that prison industries achieves three goals: they reduce idleness, reduce the cost of incarceration through self-sustaining operations and they provide training that prepares inmates for jobs upon release. This article explains the four organizational models of prison industries: state-use model, partnership model, corporate model, and the private sector model. The feature that best distinguishes the models from each other is the level and degree of private sector involvement. The author designed this article to assist correctional managers in making informed choices relative to prison industry involvement.

Hoffman, J. W. (2000, March/April). Building trade. *Corrections Technology and Management*, 4 (2).

A program in Springfield, South Dakota prison that allows inmates to build houses for the elderly is described in his composition. The program initiated by Governor Bill Janklow has been a huge success. By mid-1999 the state had produced 438 homes that are sold by the Department of Housing. The inmates are working and learning new trades and the elderly, disabled and low-income families are provided affordable housing.

Ingley, G. S. (1989. October). Workin for a livin. *Police*.

This opinion piece supports correction industries as a means to curb the cost of crime to society, reduce inmate idleness, and manage overcrowded prisons. Correctional Industries argue that employing inmates provides offenders with the opportunity to develop valuable skills that will translate into experience upon their release.

Lafer, G. (1999. September/October). Captive Labor. *The American Prospect*.

This opinion piece examines the employment of prisoners and the relationship with private enterprise. Corporations use prisoners to repair copiers, make automobile parts, and make airline reservations. The prisoners are paid low wages, receive no health insurance, no sick leave, vacation time, or overtime. The companies pay no unemployment insurance, nor payroll or social security taxes. The author urges legislators to pass laws banning prison industries from competing directly with the private sector.

Liu, B. (1999, December 30). Prison inmates offered the escape of work. *Management and Technology*, 16.

Advocates for prison labor promote the merits of hiring inmates in this article. Testimonials are offered from managers in the South Carolina Department of Corrections who work with prisoners on a daily basis. Company officials discuss increased revenues and tell of the benefits the industries provide to inmates.

Maguire, K. L. , . Flanagan , J & Thornberry ,. P. (1988). Prison labor and recidivism. *Criminology*, 4 (1).

Data collected by the Prison Industry Research Project is used in a quasi-experimental design. This research examines whether involvement in prison industries results in lower recidivism among ex-offenders. For the purpose of this research, recidivism is defined as any felony arrest following release. This study concludes that participation in prison industry slightly increased the incidence of felony rearrest.

McHutchinson, J. (1999, March). *The social and economic benefits and costs of commercial industries: a foundation study*. Sydney, Australia: NSW Department of Corrective Services (Research Publication No.40).

This essay recommends the collection of empirical data to support the position that commercial industries promote positive outcomes in correctional programs. This information could then be used as baseline data for comparison on rehabilitation and post release employment to promote future development of commercial industries.

Miller, R. (1997, March/April). Inmate labor in the 21st century. *American Jails*.

This essay predicts a bright future for jail work and industries programs as demand for inmate labor increases. With the growth, however, the author predicts that the increased visibility of jail industries will trigger some opposition. Managers facing criticism relative to working conditions are urged to become more proactive.

Moses, M. C. (2000, April/May). Oregon's 40-hour workweek: History in the making. *Offender Employment Report* 1 (4), 49-64.

Legislation effective April 1995, made Oregon the first and only state with a constitutional mandate requiring all inmates in state facilities to work 40 hours per week. Proponents of this legislation claim that this program will prepare ex-offenders to reenter society with practical skills and viable work ethics. Critics, on the other hand, suggest that this legislation will encourage competition between free-world workers and incarcerated offenders.

Orr, D., Sprock, A. & Vaughan, M. (1996, December). An evaluation of private sector prison industries: A report to the states.

The Thomas Jefferson Program in Public Policy at the College of William and Mary prepared this report for the Council of Governors' Policy Advisors. The report presents four case studies of Nevada, South Carolina, Texas, and Wisconsin. The topics discussed include political process, public reaction, incentives offered to private businesses, and recommendations.

Policy review of inmate idleness reduction activities administered by the department of corrections. (1996). Tallahassee: FL: Florida Office of Program Policy, Analysis and Government Accountability.

This audit evaluates efforts by the Florida Department of Corrections to reduce inmate idleness in prison. This report explains that the primary obstacle to providing work opportunities is funding. In addition, space limitations, security issues and statutory restricting on programs prevents state prisons from providing work to their inmates. This report urges prisons officials to develop incentives that expand work and educational programs.

Rossman, S., Sridharan, & Buck, J. (1998, June). *The impact of the Opportunity to Succeed program on employment success.* National Institute of Justice Journal.

Unstable employment has long been identified as risk factors for engaging in criminal behaviors. The "Opportunity to Succeed (OPTS) program promotes comprehensive aftercare and includes employment as an integral part of the program. This study uses self-report data on 261 clients to evaluate employment outcomes. This research concludes that OPTS has a positive effect on full-time employment.

Saylor, W. F. & Gaes, G. G. (1991, May). *Prep study links UNICOR work experience with successful post-release outcome*. Washington, D.C. : U.S. Department of Justice, Federal Bureau of Prisons. The Post Release Employment Project (PREP) began to collect data in 1987 on 7,000 federal inmates. The study compared inmates involved in training and work experience to those who did not. This study outlines the effect of prison work experience and vocational training on offenders' behavior following release into the community. This research concludes that in-prison work and training programs may reduce recidivism.

Schumacker, R. E., Anderson, D & Anderson, S. (1990). Vocational and academic indicators of parole success. *Journal of Correctional Education*. This study followed 760 releasees for 12 months. Data was collected over a 12-month period on background variables, vocational enrollment and completion, academic background, employment and violation status. A stratified proportional random sampling procedure was used to select and equate inmate groups. The study concluded that individuals who completed vocational training and/or those with a GED or higher level of education were most successful.

Sherman, L. W., Gottfredson, D. & MacKenzie, D. (1997). *Preventing crime: What works, what doesn't, what's promising*. Washington, D.C.: Office of Justice Programs. This report evaluates all types of programs funded by the U. S. Department of Justice. Among 500 evaluations analyzed, types of programs were deemed to "work" if at least 2 methodologically rigorous studies reported statistically significant crime prevention effects. Each study was deemed promising if at least one accepted study reported prevention effects.

Stratton, J. R., & West, J. P. (1972). *Role of Prison Industries: A Summary Report*. University of Iowa (Iowa City, IA). Washington, D.C.: Department of Justice, Law Enforcement Assistance Administration, National Institute of Law Enforcement and Criminal Justice [Sponsors] (Accession No. 001004).

Authors author argue that the primary goal of prison industries is to create attitudinal change and develop skills. Based on these beliefs, a review of organizational attitudes within the state of Iowa and industries in nearby states are used. This piece offers recommendations and makes observations.

Wees, G. (1997, May). Work and educational release 1996: Programs are numerous, but participation rates remain low. *Corrections Compendium*, 22 (5), 8-23.

This research examines work and educational release programs in the United States and Canada. A survey gathered data on prevalence of such programs, rate of participation, fees paid by working inmates and assessment of programs. Of 45 U.S. respondents, 40 (89%) noted the existence of work release programs representing 1.8 percent of all State and Federal inmates. Most respondents report many benefits to the work and education release programs with few negatives.

Wilson, D. B., Gallagher, C. A., Coggeshall, M. B., & Mackenzie, D. L. (1999). A quantitative review and description of corrections-based education, vocation and work programs. *Corrections Management Quarterly*, 3, 8-18. A quantitative synthesis of evaluations on the effectiveness of programs to reduce recidivism is presented. This research maintains that the ultimate measure of the effectiveness of corrections-based education, vocation, and work programs is their impact on recidivism. Results reveal that all participants in these programs recidivated at a lower rate than nonparticipants.

Behavior in Prison

Canada Correctional Service (1989). Contraband control final report, Volumes I and II.

This Canadian study reports on the most effective measures for controlling contraband in their institutions. The research team reviewed reports, policies and procedures, surveyed various jurisdictions, and visited several institutions. The research team then proposed ways to reduce prison contraband.

Dallo, M. (1996, August). Colorado's youth offender system offers juveniles a second chance. *Corrections Today*, 66-68.

A 14-point plan instituted by Colorado Governor Roy Romer in 1993 to deal with juvenile violence is described in this commentary. The Colorado Youth Offender System (YOS) goals are: identifying disruptive youth, instilling protocol, introducing teamwork and cultivating high standards of conduct. The program has been criticized for being too regimented for very young offenders and being too expensive. The program does not have empirical evidence of its success.

Derosia, V. R. (1998). *Living inside prison walls: Adjustment behavior*. Westport, Connecticut: Praeger Publishers.

This study compares 30 educated inmates with occupations and social positions to 30 non-advantaged inmates on their adjustment to prison life. Inmate interviews were used to gather information on the prison experience. This study concluded that advantaged offenders often involved themselves in positive institutional programs and seldom became involved in misconduct. The researchers recommend that the institutions could encourage good behavior by housing well-behaved inmates with both advantaged and disadvantaged inmates. This housing arrangement might create opportunities for more positive interactions and more program participation.

Dintz, S & Ohio Governor's select committee on corrections. (1994). *Final report and recommendations of the Governor's select committee on corrections*. (National Institute of Justice No. 154183).

Ohio Governor George V. Voinovich requested this report in response to a 1993 riot at the Southern Ohio Correctional facility. The Governor sought recommendations for changes and improvements in the Ohio Penal system. Their goal was to make the institutions safe, secure, and create a less-stressful, humane environment. The researchers examined policies, practices, and philosophies of the Ohio Department of Rehabilitation and Correction and offers recommendations along with their underlying principles.

Finn, P. (2000, October/November). Colorado's Life Skill's Immersion Program. *Offender Employment Report*, 2 (1), 1-2, 11-13.

Colorado's Life Skills Program (LSIP) is discussed in this article. The program represents a collaboration between the State Department of Corrections and the Community College of Denver and is grant funded. Staff members claim that the program reduces idleness and clients enrolled in the program are seldom discipline problems.

Finn, P. (1996, September). No-frills prisons and jails: A movement in flux. *Federal Probation*, 60 (3), 35-44.

The status of the widespread movement to eliminate inmate privileges is reported in this writing. Most of the information for this article was collected by telephone interviews with correction managers in eight states. This article explores constitutional issues, the impact of elimination of privileges on reoffending, and the impact on costs and security. Correction's costs are the only area in which there is some empirical data regarding the effects of the elimination of inmate privileges. Many correction managers oppose the elimination of privileges that keep inmates occupied, thus reducing their time to cause trouble. Evidence is lacking on the impact of the no-frills movement on recidivism. Impacts are likely to vary depending on which privileges are targeted and how they are eliminated or restricted.

Foster, T.W. (1982). Mushfaking – a compensatory behavior of prisoners. *Journal of Social Psychology* 117, 115-125.

The term “mushfaking” is examined in this report. The term is defined by Ohio inmates as the process of producing contraband items from whatever materials are available to inmates in penal institutions. The authors contend that mushfaking can increase the social solidarity and informal power of inmates in relation to the formal authority structures of prisons.

Gendreau, P., Little, T., Goggin, C. (1997). Predicting prison misconduct. *Criminal Justice and Behavior*, 24 (4).

Meta-analysis examines 39 studies from 1940 to 1995 on inmate behavior. They concluded that inmates evaluated upon intake are more successful in most programs and have less behavioral problems. Research reported that Correctional Officers have wide discretion in issuing disciplinary infractions and revealed little correlation between misbehavior slips and self-report data.

Hamm, S. (1989). The condition of effective implementation. *Criminal Justice and Behavior*, 16 (2), 166-182.

This essay encourages the investigation of the behaviors of public officials responsible for implementing treatment policies. The author suggests that the motivations and characteristics of the individuals charged with implementing programs in correctional facilities directly impacts the success of these programs. This article offers strategies for the implementation of programs in both supported and non-supportive environments.

Horne, A. M. (1977, June). Inservice training in a correctional setting: Facilitating change. *Federal Probation*, 3-39.

Implementation of human relations training programs for correctional institution staff members is described in this critique. The original goal of the training program was to train permanent staff so that the advantages of consultation would be ongoing rather than terminating when the delinquent youth leave the facility. The article reports that the social climate of the institution improved after the staff revised the program to make it more in tune with the training.

Howard, C. & Stohr, M. K. (1994, March). Processing inmate disciplinary infractions in a federal correctional institution: Legal and extralegal correlates of prison-based legal decisions. *Prison Journal*, 74 (1), 4. This research focuses on the extent to which legal and extralegal variables impact the outcomes of institutional disciplinary procedures. This study examines 390 inmate disciplinary reports at a federal facility for one year, obtained inmate personal information from their computer system and examined inmate files for criminal history. The study also included demographic information on the hearing officers. The research used logistic regression analysis and concluded that severity of sanctions is related to both legal and extralegal variables.

John Howard Associates (1980). *Stateville revisited – shakedown/shakeup –one year later*. [Archival microfiche]. Rockville, MD: National Institute of Justice [Producer] National Criminal Justice Reference Service [Distributor].

This report discusses the actions taken after a series of incidents in the Stateville, Illinois Prison system. Several measures were taken to restore order and improve prison conditions. Despite these changes, disciplinary action against inmates has increased. This report recommends that prison administration institute policies and procedures that are fair and promote better education and training of corrections staff.

Light, S. C. (1990, December). Measurement error in official statistics: Prison rule infraction data. *Federal Probation*. The reliability and validity of prison rule infraction data is questioned in this writing. The potential for error caused by correctional officer discretion, definition of events, detection of events, along with environmental/contextual influences are all discussed. Errors were found to be both intentional as well as unintentional.

Lovell, D. & Jamelka, R. (1996, June). When inmates misbehave: The cost of discipline. *Prison Journal*, 6 (2). The costs of infractions at a medium-security prison were analyzed for this study. This study uses staff interviews, the department's computerized inmate record system and data from the Division of Management and Budget at the Department of Corrections to calculate cost of prison infractions. This research suggests that these costs need to be considered in disciplinary and treatment policies within prison.

MacKenzie, D. L., Brame, R. & Waggoner, A. R. & Robinson, K. D. (1996). *Examination of the Impact of Moral Reconciliation Therapy (MRT) in the Oklahoma Department of Corrections*. Washington, D.C., U.S. Department of Justice, National Institute of Justice.

This research analyzed data on offenders to determine if participation in Moral Reconciliation Therapy (MRT) was associated with a decrease in misconduct while in prison or a reduction in recidivism within the community. Recidivism was defined as a return to the Oklahoma Department of Corrections. The researchers also estimated a probability of failure based on inmate characteristics that are known to be associated with misconduct, such as sex, age, and criminal history. The researchers estimated participants' likelihood of failure after release (recidivism) in two similar ways. First-time offenders in the program were compared on the basis of characteristics associated with recidivism to determine whether the releasees could have been expected to recidivate if they had not enrolled in MRT.

Montgomery, R. H., Jr. (1997, February). Bringing the lessons of prison riots into focus. *Corrections Today*.
Suggestions are offered in this article to reduce the likelihood of riots. Large crowded institutions are often blamed for rioting and prisoner misconduct. Strategies are offered to prevent riots and contraband while maintaining a secure environment.

Steelman, D. & The Correctional Association of New York (1984). Doing Idle Time: An Investigation of Inmate Idleness in New York's prisons and recommendations for change. *The Correctional Association of New York*.
This report provides data from an investigation based on site visits to eight maximum-security prisons, interviews with prison officials and others familiar with the prisons, and administration of questionnaires to the other prisons' staff. They conclude that overcrowding is a prime contributor to idleness which increases tension among inmates and between inmates and staff, and fosters boredom and frustration that make prison disturbances almost inevitable. This report establishes that in many New York institutions, approximately 24 percent of the prison population were completely idle. This report offers recommendations to alleviate idleness.

Szostak, E. W. (1998, July/August). Maintaining safety and security by managing contraband. *American Jails*, 12 (3).
The author of this opinion piece stresses the importance of keeping contraband out of correctional facilities. The readers are educated as to the various innocuous items that can be converted into weapons and also the methods used by correctional facilities to find and destroy weapons.

Walters, G. D. (1999, September). Short-term outcome of inmates participating in the lifestyle change program. *Criminal Justice and Behavior*, 26 (3).

Psychological forms of intervention are explored in this follow-up study of 291 inmates. The purpose of this study was to evaluate the program's ability to foster positive prison and community adjustment in a group of criminal offenders. According to this research, inmates who completed at least one phase of the Lifestyle Change program received fewer disciplinary reports in prison. The lack of uniform follow-up periods resulted in inconclusive findings relative to release outcomes.

Weisburd, D., & Chayet, E. S. (1989, June). Good time: an agenda for research. *Criminal Justice and Behavior*, 16 (2).

This essay supports the need for empirical research on the issue of good time in prisons. Good time is defined as a diverse set of correctional policies that allows inmates to gain a reduction in prison sentences. The increased need to ensure effective prison management has made good time an issue of growing importance in the criminal justice system.

Williams, V. L. & Fish, M. (1974). *Convicts, codes, and contraband – the prison life of men and women*. Cambridge, MA.: Ballinger Publishing Company. This text examines inmate culture, economy and socialization. Information is gathered from the literature, observations, previous studies and writings. prison hustling is reviewed and discussed.

Vocational Education

Black, L. R. (1996, August). Exemplary programs make all participants winners. *Corrections Today*.

The Kansas Department of Corrections (KDOC) use of female inmates to renovate housing is the topic of this article. The KDOC work with the City of Topeka and is responsible for the rehabilitation of homes and ultimate of the homes to tax roles. Their partnership with KDOC allows inmates to gain skills in the areas of painting, carpentry, electric, plumbing and tile installation. These skills translate into jobs once the inmates are released.

Brandon, A., D. & Wierschem, D. C. (1997). *Vocational Programs: Description and Exploratory Study*. Albany, NY: New York State Department of Correctional Services (Accession No. 014111).

This report provides an overview of the Department's Vocational Education Program, its mission and objectives. Also included is a brief description of a preliminary study of vocational job titles achieved by students and the impact of vocational education on recidivism. The study follows a 1992 released cohort of offenders from the NYS DOC for a period of three years and revealed that inmates who earned six or more vocational job titles had lower recidivism rates than individuals earning fewer job titles. This study defines recidivism as a return to prison. Also, inmates who earned a GED or high school diploma returned at a lower rate than those who did not have a diploma, regardless of the number of job titles earned. This study recommends that future research must examine the relationship between institutional programs and post-release employment.

Canestrini, K. (1993). *Follow-up study of Industrial Training Program Participants*. Albany, NY: New York State Department of Correctional Services (Accession No. 011757).

Inmates who participated in the Corcraft Industrial Training Program (ITP) from April 1988 to August 1993 are followed for 12-month intervals following release. For the purposes of this study, recidivism is defined as a return to DOC custody – for 302 successful ITP participants, 79 unsuccessful participants who were removed from the program, and a control group of first-time releasees from DOC custody who did not participate in the ITP. This study concluded that the probability of return to DOC custody was significantly lower for successful ITP participants than for both unsuccessful participants and the control group.

Chadbourne, R.D. (2000, March/April). Jobs for Inmates. *Corrections Technology and Management*, 4 (2).

A successful life-skills program in Massachusetts is chronicled in this report. The program is funded by a 1999 grant from the Corporation for Public Management. The program provides 84 hours of classroom work during three weeks to both males and females. The director of the program uses a "refuse to fail" management style that resulted in a drop in the facility prisoner population.

Debor, S. T. (1984). *Vocational Program Participation and Recidivism*. Lansing, MI: Michigan Department of Corrections, Facilities Program Evaluation Unit (Accession No. 004646).

This study discusses whether there is a correlation between the rate of participation of offenders in vocational education programs and the incidence of recidivism after release.

From prison to payroll: Program prepares offenders for job market.(1999, December). *Correctional Education Bulletin*, 3 (3), 1, 6.

Employability skills programs in Pennsylvania are discussed in this article.

Wayne Silkett developed the program and he plans to teach corrections officials from throughout the state how to run the program in their own facilities. The author admits that the program teaches only how to get a job and how to keep it, however, it does not teach offenders any skills needed to do a job.

Mackinem, M., Goodale, K., & Caughman, S. (1995). Modest Program, Modest Gains: An Outcome Study of Day Reporting Program. Columbia, SC: South Carolina Department of Probation, Parole, and Pardon Services (Accession No. 013208).

These outcome studies demonstrate that the Stayin' Straight program was effective in lowering probation failure rates and rates of rearrest for program graduates. Substance abuse treatment, vocational rehabilitation services, and extensive case management were examined. This study asserts that this program moderately affected offender behavior and extended the time between arrests for program graduates.

General Education

Adams, K., Bennett, K. J., Flanagan, T. J., Marquart, J., Cuvelier, S., Fritsch, E., & Longmire, D.R. (1994). A large-scale multidimensional test of the effect of prisoner education programs on offenders' behavior. *The Prison Journal*, 74 (4), 433-449.

Computerized school records and records from the Texas Department of Corrections were used to track 14,000 inmates released in 1991-92. Findings from this research revealed that inmates at the lowest educational level received the most benefit from participation in these academic programs.

Batiuk, M.E., Moke, P & Rountree , P. W. (1997). Crime and rehabilitation: Correctional education as an agent of change-a research note. *Justice Quarterly*, 14 (1).

The impact of post-secondary correctional education on recidivism is explored in this research. The study concludes those inmates with higher levels of education were more successful in their employment search and recidivate less frequently over an extended follow-up period than did their less educated counterparts. This study compared two groups of inmates released during a two-year period. Recidivism was defined as a return to prison for any cause and was measured 10 years after the subjects were released from prison.

Brooks, J. (1992). Addressing recidivism: Legal education in correctional Settings. *Rutgers Law Review*, 44 (3), 699-742.

An increase in recidivism is blamed on punitive correctional goals in this article. The author supports legal education classes that will give inmates the tools they need to be successful once they leave prison. The author contends that exposure to legal education can help inmates gain a sense that they are part of the society that creates laws. The author further contends that teaching inmates the law-making process will illustrate their relationship to it so they will respect society's laws when they return to the streets.

Crickmay, H.L. (1977, March). The three R's in jail. *Federal Probation*, 39-42.

The merits of providing education to prisoners is discussed in this essay. The author claims that literacy can improve an individual's ability to hold a job and become self-supporting thus reduce recidivism. The article offers no data on recidivism, however, encouraging ratings from former students are provided.

Debor, S. T., & Libolt A. L. (1983). *Introduction to the Data Base: Design, Methodology, Univariate Frequency Distributions*. Lansing, MI: Michigan Department of Corrections. Facilities Program Evaluation Unit.

The Facilities Program Evaluation Unit has generated an extensive database that is used to study the relationships between prisoner involvement in department of corrections education programs, educational achievement, and outcomes in the community following transfer to community residential programs or parole.

Dickman, C. (1987). *Academic Program Participation and Prisoner Outcomes*. Lansing, MI: Michigan Department of Corrections. Facilities Research and Evaluation Unit (Accession No. 005490).

This study seeks to determine if a correlation exists between inmates' participation in an academic program and their academic achievement, recidivism rate, and employment success. The study found a general relationship between academic program completion and lower recidivism.

Duguid, S., Hawkey, C., & Pawson, R. (1996). Using recidivism to evaluate effectiveness in prison education programs. *Journal of Correctional Education*, 47 (2), 74-85.

This article argues for an evaluative methodology that will enable prison educators to assess what works in their programs, for whom it works, and why it works. A current research project in Canada and England is used to examine curriculum and teaching techniques, and limitations of case studies. This piece also questions the practicality of using recidivism as a measure of effectiveness for prison education programs.

Gerber, J. & Fritsch, E.J. (1993). *Prison education and offender behavior: A review of the scientific literature*. Huntsville, Texas: Sam Houston State University.

Literature evaluating outcomes of educational programs in adult corrections is reviewed in this report. Adult, vocational, and social education programs are examined.

Linton, J. (1998, June). Inmate education makes sense. *Corrections Today*.

Over the years, educational programs for inmates have faced enhancement, elimination and cutbacks. This article written by the director of correctional education in Maryland contends that education of inmates is a positive investment in society's future. This author promotes education as means of reducing recidivism.

McCollum, S. G. (1977, June). What works! *Federal Probation*. This anecdotal piece examines correctional education and training experiences in federal facilities. Correctional administrators have discovered that voluntary involvement by inmates in federal institutions is high for most programs. This article claims that quality education and training works to reduce recidivism.

Miller, M. L. & Hobler, B. (1996, August). Delaware's life skills program reduces inmate idleness. *Corrections Today*. The success of the Delaware Life Skills program is attributed to its ability to attract correctional educators who are motivated to help incarcerated students succeed. The program serves four adult facilities in Delaware and boasts of 8.1 percent recidivism rate. The program also tracks offenders returned from work release centers and halfway houses for rule violations.

O'Neil, M. (1990). Correctional higher education: Reduced recidivism? *Journal of Correctional Education*.

Researchers agree that post-release success of inmates depends in a large part upon the treatment received during incarceration. This research uses attendance records at a junior college in Alabama to randomly select 258 participants for a recidivism study. Results conclude that participation in correctional education programs result in some decrease in recidivism.

Orosz, C. L. (1996, August). LASER treatment changes criminal behavior. *Corrections Today*.

A three-year federal grant allows implementation of LASER(Life, Attitude, Skills, Educational Retraining) project in Dauphin County, Pennsylvania. The curriculum includes units on self-development, stress and anger management, drug and alcohol awareness and interpersonal and family relationships. An evaluation report issued in March 1996 called LASER "the first prison education program that is multifaceted in its approach."

Porporino, J. & Robinson, D. (1992). *Can educating adult offenders counteract recidivism?* Ontario, CAN: Correctional Service of Canada.

Thirty-eight released offenders who participated in Adult Basic Education (ABE) programs while incarcerated were interviewed for this study. Forty-seven percent indicated ABE helped them a great deal and thirty percent felt ABE helped very much. Math skills were said to be more beneficial than reading and writing skills in promoting positive changes in their lives and relationships.

Wilson, D. B., Gallagher, C. A., Coggeshall, M. B., & Mackenzie, D. L. (1999). A quantitative review and description of corrections-based education, vocation and work programs. *Corrections Management Quarterly*, 3 (4), 8-18. A quantitative synthesis of evaluations on the effectiveness of programs to reduce recidivism is presented. This research maintains that the ultimate measure of the effectiveness of corrections-based education, vocation, and work programs is their impact on recidivism. Results reveal that all participants in these programs recidivated at a lower rate than nonparticipants.

Williams, D. (1996, August). Project LEAD builds bridges. *Corrections Today*.

Project LEAD (Life Enrichment and Development), the program that started in the Genesee County Sheriff Department in Flint, Michigan is examined in this article. This program integrates academics, life skills, vocational and community linkages with a mission to provide programs to meet the needs of the incarcerated, the community and the criminal justice system.

Wolford, B., McGee, Raque, T., & Coffey, D. (1996, August). Collaboration works for at-risk and delinquent youths. *Corrections Today*.

The 1990 Kentucky Educational Reform Act (KERA) sought to enhance educational services for at-risk and delinquent youth in the Commonwealth of Kentucky. This article discusses the program goals for this agency.

Worth, R. (1995, November). A model prison. *Crime*.

A federal prison in Bradford, Pennsylvania is discussed in this article. The prison costs taxpayers far less than most federal prisons and has had no escapes, homicides, or suicides since it opened in 1989. No recidivism studies have been conducted on former inmates, however, staff members claim that parolees return to prison far less than from other institutions. The prison has instituted many programs to build morale and 47 percent of the inmates are enrolled in classes.

Wright, R. L. (1997). Towards integrative correctional education programs: Some obstacles, some suggestions. *Journal of Correctional Education* 48 (1).

The Correctional Service of Canada (CSC) encourages correctional educators to incorporate more effective offender programs. The goal of CSC is to provide the offender with exposure to innovative programs and interventions that will contribute to their ability to succeed once they are released.

Rehabilitation

Atlanta, Georgia Office of Research and Evaluation (1982). An analysis of the Offender Rehabilitation Program. Case files of 129 clients are examined for any significant factors that might explain rehabilitation. This research revealed that the level of seriousness and degree of violence on the prior police record was a strong predictor of recidivism. Another influence identified was the extent to which the youth was liked. The study reported that the more the staff members liked an individual, the less criminal behavior they predicted he would commit in the future.

Andrews, D. A., Bonta, J., Gendreau, P. & Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28 (3).

Reasons for the collapse of the ideological hegemony of the individualized treatment ideal for prison populations are explored in this research. This study investigates earlier reviews and concludes that some treatment is effective with some offenders under some circumstances. This analysis suggests that when treatment and/or services are designed specifically for offenders, the benefits are greater than criminal sanctions not involving rehabilitation.

Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation. *Criminal Justice and Behavior*, 17(1),19-52. Four principles of classification for rehabilitation are evaluated within the context of basic research and theory in the psychology of criminal conduct. The research reveals that offender's characteristics that best determine levels, targets and type of rehabilitation are: risk of recidivism, criminogenic need, and responsivity of offenders to different service options. It is further suggested that helpful linkages among case, service, and outcome be recommended by the principles of risk, need, and responsivity.

Belkin, J. Blumstein, A. & Glass, W. (1973). Recidivism as a feedback process: An analytical model and empirical validation. *Journal of Criminal Justice*, 1, 7-26.

The authors of this study use a feedback model of the criminal justice system that incorporates people arrested for the first time and individuals with prior arrests is presented in this analysis. The feedback system is "a continuing input of people arrested for the first time and a cycling of individuals with prior arrests" into the criminal justice system. The authors maintain that such a model would allow criminal justice system planners to assess the impact of possible actions on the future arrests and system workloads.

Block, K. (1999). Recidivism: Why is it so difficult to measure. *Offender employment report*.

This study examines the various steps used to determine recidivism. The author argues that recidivism must be defined by the definition that makes the greatest use of information concerning the type of program and it's likely effects.

Conner, A.H. (1960, June). "For Satan finds some mischief still for idle hands to do. *Federal Probation*, 40-48.

An historical view of prison work programs and the establishment of Federal Prison Industries are presented in this article. This anecdotal piece describes various systems utilized to keep prisoners busy, as well as, abuses of the system. The author concludes that prison industry should develop a skill, promote self-respect and "substitute an honest motive for an unhealthy thought."

Cullen, F. T. and Applegate, B. K. (1997). *Offender Rehabilitation: Effective Correctional Intervention*. Brookfield, Vermont: Dartmouth Publishing Company.

This research conducts a quantitative synthesis of the literature with recidivism as the outcome variable. The author seeks to determine what program work by using improved research methods in their analysis of programs. Their evaluations consistently confirm that few programs have any effect on recidivism.

Dennis, M. L., McCroskey, B. J., & Dennis, K. L. (2000, February/March). Meaningful employment needed to reduce recidivism. *Offender Employment Report*, 35-36, 44-46..

This essay contends that unemployment leads to poverty that leads to crime. The authors support meaningful employment as the answer to reduction in crime. They argue that meaningful employment validates the person as productive and law abiding.

Dennis, K. L. & McCroskey B. J. (2000, February/March). Using behavioral job placement techniques. *Offender Employment Report*, 1 (3), 33-38.

Various job-searching strategies are outlined in this opinion piece. A positive attitude is a must when seeking a job. The author also stresses that structured time is essential to a productive job search. The author supports the philosophy that the behavioral job placement process needs a family support system along with equipment such as a computer to track job information.

Diiuilo, J. J., Jr. (1996, February). Prisons are a bargain, by any measure. *Corrections Forum*, 3, 34,38.

This opinion piece supports incarceration as a deterrent to crime. Incarceration is hailed as cost effective while sending a message to criminals that they will be punished. This article supports the building of more prisons, longer sentences for offenders, and less parole. Finally, the author suggests that politicians who fail to protect society from criminals should not be reelected.

Earnest, E. (1996, August). Youth day treatment program works for Alabama. *Corrections Today*.

This review describes the Community Intensive Treatment for Youth (CITY) program of Alabama, an alternative to incarceration. The program tracks enrollees for one year after termination from the program. Data collected from the court show that 72 percent of these individuals had no new adjudications from the time of enrollment in the program to the one-year period after termination. The program has been cost effective as well.

Finn, P. (1998, July). Job placement for offenders in relation to recidivism. *Journal of Offender Rehabilitation*, 28 (2), 89-106. Various programs that have been successful in finding jobs for ex-offenders are reported. The author described in this essay. Discussions relative to obstacles commonly faced by ex-offenders in their search for permanent employment are reported. The author explains that many programs are successful because they stress job readiness before job placement.

Friedman, C. J. & Mann, F. (1976). Recidivism: The fallacy of prediction. *International Journal of Offender Therapy and Comparative Criminology*, 20 (2), 153-164.

This longitudinal study seeks to determine the accuracy of staff member's predictions of recidivism for juvenile offenders. The youth were followed for two years. During this period, the study found that despite staff member's contact with the youth during the rehabilitation programs; staff members were unable to predict violent and nonviolent criminal behavior accurately.

Gottredson, S. D. & Taylor, R. D. (1985). *Prediction of recidivism: neighborhood effects*. Washington, D.C.: National Institute of Justice. The influence of neighborhood context on recidivism is examined for this research. The study used various data files on 1,033 Baltimore, Maryland offenders. The final analysis was limited to 67 neighborhoods having 619 offenders.

Harer, M. D. (1995). Recidivism among Federal prisoners released in 1987. *Journal of Correctional Education*, 46 (3), 98-128. Study of over 1100 inmate records from various data collections reported recidivism rates were directly related to prison misconduct. Also, recidivism rates were lower for inmates released through a halfway house, inmates with post-release employment, or inmates living with a spouse. Recidivism rates were higher for Blacks and Hispanics or when inmates were released to an urban area with higher unemployment rates that translated into a larger percent of families living in poverty in the community.

Hopkins, A. J. (1988, July). *Offender recidivism report*. Annapolis, MD. State of Maryland, Division of Correction status report. This statistical report was prepared for the House Appropriations Committee and the Senate Budget and Taxation Committee to provide an evaluation of several programs. A computerized statistical tool call Repeat Incarceration Supervision Cycle is described and reviewed. This report maintains that recidivism is an imprecise measure of program effectiveness and is impacted by a number of variables over which the programs have no control.

Houston, M. (2000, June/July). Case management and caseload size: A management brief. *Offender Employment Report*, 67-68. This opinion piece stresses the importance of administrators in offender job placement programs focus on the whole client and all their needs. Job retention in many instances requires that ongoing family-centered support be provided. This author recommends small caseloads for managers. It is believed that increased service intensity improved employment rates, but spreading resources too thinly can reduce program effectiveness.

Hyatt, I. (1960, June). Stone walls do not a citizen make. *Federal Probation*, 53-54.

The need to establish long-range plans for rehabilitation of inmates is emphasized in this article. The author states that the aim of imprisonment should be to create a productive citizen. A psychological foundation is needed to deal with emotions and character of people who are distrustful, suspicious who have been reared in a hostile environment. The author suggest that time spent in prison should be a fruitful learning experience that will ultimately result in the release of men rather than "ex-cons."

Ivanko, K. (1997, April). Reality check: Shifting gears to rehabilitation. *Corrections Today*.

This writer of this opinion piece asserts that the rate of crime continues to escalate while incarceration is at record high levels. The author advocates investigation of alternative to incarceration to include the help of families, schools, and churches.

Jenkins, H. D., Steurer, S. J., McGarrell, & Pendry, J. (1995). A post release follow-up of correctional education program completers released in 1990 - 1991. *Journal of Correctional Education*, 46 (1).

This article evaluates studies that demonstrate that some programs do work for some inmates. The author concludes that educational attainment while in prison appears to make a difference when inmates return to the community.

Kruttschnitt, C., Uggen, C. & Shelton, K. (2000). Predictors of desistance among sex offenders: The interaction of formal and informal social controls. *Justice Quarterly*, 17 (1), 61-87.

Researchers examined event history analysis to study the impact of formal and informal social control on recidivism. A sample of 556-predominately male and white sex offenders was followed for 5 years. Researchers gathered information from pre sentence investigation reports, the criminal complaints, psychological and medical records, treatment and probation reports along with criminal history checks. This research concludes that offenders who were consistently employed were less likely to recidivate.

Lab, S. P. & Whitehead, J. T. (1990). From “nothing works” to “the appropriate Works”. The latest stop on the search for the secular grail.” *Criminology*, 28 (3).

This review is a response to the Andrews, et al. Study. The authors attempt to “set the record straight.” They suggest that the Whitehead and Lab studies dated 1988 and 1989 may have been presented in a cynical tone and incorrectly portray them as rehabilitation critics. This review reports that some rehabilitation programs were effective, however, many programs were ineffective.

Linster, R., Lattimore, P., & Visher, C. (1990). *Predicting the recidivism of serious juvenile offenders*. Washington, D.C.: National Institute of Justice. Recidivism patterns among 1949 male juvenile offenders are examined. Researchers collect data on criminal histories, personal and family characteristics, arrests, and convictions. This data is explored for its implications on recidivism.

Mackinem, M., Goodale, K., & Caughman, S. (1995). Modest Program, Modest Gains: An Outcome Study of Day Reporting Program. Columbia: SC: South Carolina Department of Probation, Parole, and Pardon Services (Accession No. 013208).

These outcome studies demonstrate that the Stayin’ Straight program was effective in lowering probation failure rates and rates of rearrest for program graduates. Substance abuse treatment, vocational rehabilitation services, and extensive case management were examined. This study asserts that this program moderately affected offender behavior and extended the time between arrests for program graduates.

McCollum, S. G. (1977, June). “What works!” *Federal Probation*. This anecdotal piece examines correctional education and training experiences in federal facilities. Correctional administrators have discovered that voluntary involvement by inmates in federal institutions is high for most programs. This article claims that quality education and training works to reduce recidivism.

Mitchell, C., Emodi, A., & Loehfelm, W. (1996, August). Developing an inmate program that works. *Corrections Today*.

A Massachusetts Department of Corrections report claims that 90 percent of all inmates in their system have substance abuse problems. This study prompts the state to call for implementation of programs to target substance abusers. After establishment of the Correctional Recovery Academy (CRA), managers reported a noticeable difference in the behavior of inmates who completed the program.

Rice, E. , Poe, J. R. , Hawes, J.R.B. & Nerden, J. T. (1980). *Assessment of Quality Vocational education in State Prisons: Successful Programs and the Components that Permit Them to Succeed*. Bethesda, MD: System Sciences Raleigh, NC: Conserva, Inc. Washington, DC: Sponsored by U.S. Department of Education, Bureau of Adult and Vocational Education (Accession No. 009985). The overall purpose of this study was to differentiate, analyze, describe, and distribute information about ideal programs and the critical components or strategies within the programs that result in a reduction in recidivism and an increase in post-release employment. This study uses three measures of success (post-release employment, recidivism, and in-program success) to gauge the effectiveness of nine exemplary corrections-based vocational education and training programs. Each description includes detail using standard categories such as staffing patterns, instructional methods, and participant characteristics and discusses variables that contributed to program success. This research uses a quasi-case study approach to collect data on nine programs. Transitioning was cited as an essential component in successful programs.

Ross, R. R. & Fabiano, E. A. (1985). *Time to think: a cognitive model of delinquency prevention and offender rehabilitation*. Johnson City, TN: Institute of Social Sciences and Art.

This study recommends that effective rehabilitation programs must address cognitive, behavioral, emotional and situational problems of ex-offenders. Authors suggest that developmental delays contribute to criminal behavior and support building skills of ex-offenders in all areas to increase their chances of a successful re-entry into society.

Schumacker, R. E., Anderson, D., & Anderson, S. (1990). Vocational and academic indicators of parole success. *Journal of Correctional Education*. This study followed 760 releasees for 12 months. Data was collected over a 12-month period on background variables, vocational enrollment and completion, academic background, employment and violation status. A stratified proportional random sampling procedure was used to select and equate inmate groups.

Udell, D. S., Morton, F. & Green, G. (1989). Oklahoma's nonviolent intermediate offender program: A success in rehabilitation. *Journal of Offender Counseling*, 9 (2), 22-28. A study traces recidivism among 403 Oklahoma males who participated in the Regimented Inmate Discipline (RID) program in 1984-1985. The programs subjects young, substance abusing participants to 90-120 days of military style discipline while providing introductions to several occupations. The program's recidivism rate was 16% compared to 54% rate for the general Oklahoma prison population.

Wenda, W. T. (1997). The relationship between life skills-literacy and vocational education and the self-perception of eleven domains and global self-worth of adult incarcerated males. *Journal of Correctional Education*, 48(1). This quasi-experimental study compares 28 inmates with a control group. The relationship between a life-skills program and the social adjustment of adult male inmates is examined. The study demonstrated statistically significant gains in inmates who participated in the life skill program. Success is attributed to the education intervention.

Wexler, H. K. , Falkin, G. P. & Lipton, D. P. (1990, March). Outcome evaluation of a prison therapeutic community for substance abuse treatment. *Criminal Justice and Behavior*, 17 (1). This research reports on the relationship between drug abuse and crime and supports prison-based drug treatment. This study compares inmates who participated in a drug treatment program to two groups who did not participate. The findings claim that therapeutic programs can produce significant reductions in recidivism rates.

Wilkinson, R. A. (1996, August). What works? *Corrections Today*. This essay argues that one of the most important topics in corrections today is “what works and what doesn’t in correctional practices.” The authors who is experienced in corrections presents several programs that have been found to be effective in corrections. This piece is presented to share and borrow ideas from the best practices.

Williams, D. (1996, August). Project LEAD builds bridges. *Corrections Today*. Project LEAD (Life Enrichment and Development) , the program that started in the Genesee County Sheriff Department in Flint, Michigan is examined in this article. This program integrates academics, life skills, vocational and community linkages with a mission to provide programs to meet the needs of the incarcerated, the community and the criminal justice system.

Wilson, D. B., Gallagher, C. A., Coggeshall, M. B., & Mackenzie, D. L. (1999). A quantitative review and description of corrections-based education, vocation and work programs. *Corrections Management Quarterly*, 3 (4), 8-18. A quantitative synthesis of evaluations on the effectiveness of programs to reduce recidivism is presented. This research maintains that the ultimate measure of the effectiveness of corrections-based education, vocation, and work programs is their impact on recidivism. Results reveal that all participants in these programs recidivated at a lower rate than nonparticipants.

Worth, R. (1995, November). A model prison. *Crime*.

A federal prison in Bradford, Pennsylvania is discussed in this article. The prison costs taxpayers far less than most federal prisons and has had no escapes, homicides, or suicides since it opened in 1989. No recidivism studies have been conducted on former inmates, however, staff members claim that parolees return to prison far less than from other institutions. The prison has instituted many programs to build morale and 47 percent of the inmates are enrolled in classes.

Wright, R. L. (1997). Towards integrative correctional education programs: Some obstacles, some suggestions. *Journal of Correctional Education* 48 (1).

The Correctional Service of Canada (CSC) encourages correctional educators to incorporate more effective offender programs. The goal of CSC is to provide the offender with exposure to innovative programs and interventions that will contribute to their ability to succeed once they are released.

Zamble, E. & Porporino, F. (1990). Coping, imprisonment, and rehabilitation: Some data and their implications. *Criminal Justice and Behavior*, 17 (1), 53-70.

The primary goal of this study was to determine how prisoners cope with problems and how well or how poorly treatment needs are being fulfilled in prison. The study suggests that for treatment programs to be maximally effective, they should be implemented as early in the term as possible to capitalize on motivation. Best results were achieved when treatments was given at the end of the term.