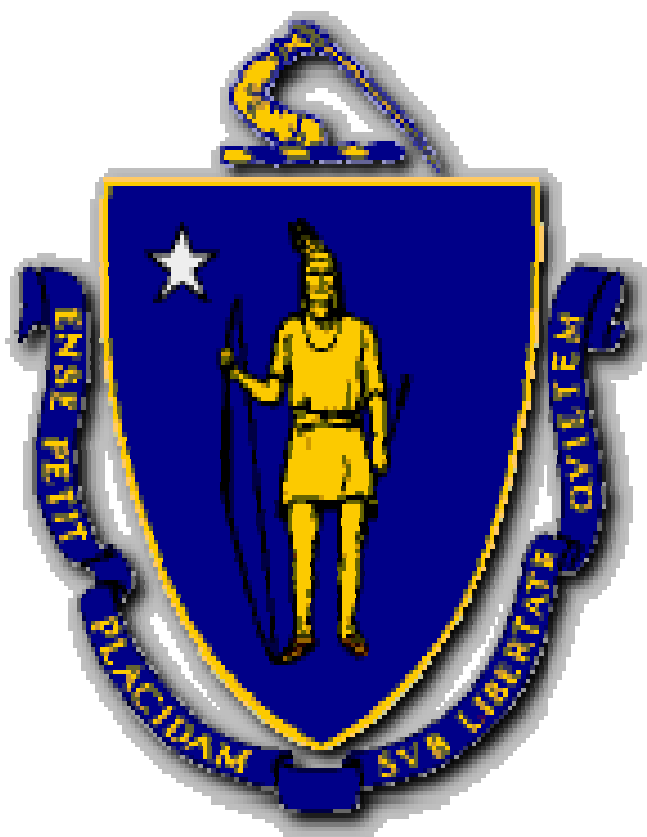


# **GED and Recidivism: 1998 Releases from the Massachusetts Department of Correction**



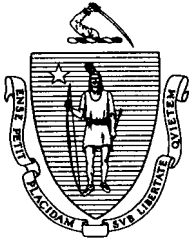
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## Introduction and Executive Summary

This study examined how obtaining a GED in prison affected recidivism for Massachusetts Department of Correction inmates. To determine these effects, a combination of cluster and convenience sampling (both of which were non random) were used to identify two groups for comparison from inmates released to the street during 1998. The Control group consisted of inmates who entered prison with less than a 12<sup>th</sup> grade education and did not obtain their GED in prison; the Treatment, or GED group, consisted of those who entered prison with less than a 12<sup>th</sup> grade education and obtained their GED prior to release from prison. Recent literature has detailed the impact of obtaining a GED in prison which specifically suggests that correctional education greatly assists in lowering recidivism rates for offenders after they are released in to the community. Factors of race, gender, age, and offense type have also been evaluated and research suggests that these factors are significant in the impact of education on recidivism.

Several factors limited the findings of the study: a) the small size of the Treatment group relative to the Control group, b) certain characteristics of the two groups had statistically significant differences that may confound comparisons, and c) the number of cases is small for some of the subcategories within each group. These limitations are discussed later in the report.

Results from these groups were compared using cross-tabulation analysis, and chi-square statistics were examined to determine significant differences within a range of characteristics. The analysis revealed a number of significant differences. Some of the more salient findings are presented below.

- One of the most important findings in this research was the makeup of the Control and GED groups. In theory, the cluster and convenience sampling method should have produced two groups with equivalent characteristics, except for the variable of GED obtainment. The two groups were remarkably different however, and the unique characteristics of the GED group must be taken into account with the reduced recidivism.
- Inmates who obtained their GED in prison (GED group) (n = 220) had lower overall rates of recidivism (the rate of inmates re-incarcerated or reconvicted within three years of release) than those who did not obtain their GED (Control group) (n = 692). The recidivism rate for the GED group was 48.2%, while the rate for the Control group was 57.8%, producing a 9.6 percentage point difference. Of the total inmate population that was released to the street in 1998, 53% (n=1,490) were re-incarcerated or re-convicted within three years.
- Data examining recidivism by gender showed a larger reduction of recidivism for women who obtained their GED in prison than for men who also obtained their GED in prison, a decrease of 33.7 percentage points for women versus 5.6 points for men. For women, the Control group recidivism rate stood at 59.6% (n = 223) and the GED group 25.9% (n = 27). For men, the Control group recidivism rate was 56.9% (n = 469) and the GED group 51.3% (n=193). The difference was statistically significant for women only.

- Some of the largest impacts were seen in relation to Age at Incarceration. The recidivism rate for offenders under 24 and age 30-34 at incarceration showed significant differences for those who obtained their GED in prison versus those who did not.
- For Security Level at Release, the recidivism rate declined by 23.0 points for those who obtained their GED among releases from medium security facilities.
- An examination of recidivism rates by offender race/ethnicity showed only one significant decrease in the recidivism rate. The Hispanic population who received their GED had a 20.2 point recidivism rate difference in comparison with Hispanic offenders who did not.

## Literature Review

Correctional education can become a controversial budget item for state, local, and federal correctional agencies. Budget constraints have become tighter since the 1980s when prison populations began to rise nationally. In Massachusetts, population trends reflect a 74 percent rise in the prison population from 1985 to 2005.<sup>1</sup> Additionally, corrections agencies have also had a greater burden to justify the use of money for prison programming, including education. This burden has shifted both with philosophical changes moving toward a “tougher” stance on crime and with greater competition for all government funding. Most recently, an emphasis on government accountability has also demanded that government agencies provide data-driven evidence of positive outcomes resulting from their programs and services. Current research is seeking to find trends, inmate GED graduate population characteristics, and the impact that correctional education has on recidivism rates. Specifically, studies suggest that correctional education greatly assists in lowering recidivism rates for offenders after they are released into the community. Research has also identified certain reasons why correctional education is successful and how it impacts inmates. Factors of race, gender, age, and offense type have also been evaluated and research suggests that these factors are significant in the impact of education on recidivism. Like any program, correctional education is not 100 percent effective, and some studies have offered insight as to why a portion of ex-inmates re-offend after earning a diploma behind bars.

The purpose of this study was to examine the issue addressed in the research, determining if the obtainment of a General Education Development certificate (GED) in prison affect the rate of recidivism when compared to those who were eligible, but did not obtain a GED. Goals of this examination included a determination if the factors of race, gender, age at incarceration, age at release, marital status, original offense, classification to lower custody, security level, first release, release type, time served, and last grade completed impacted recidivism rates for inmates who earned a GED while incarcerated versus those who did not with similar education levels upon commitment to the Massachusetts Department of Correction.

### Educational Trends of Prison Populations

Educating the prison population appears to be a necessary budgetary expense when some of the population’s characteristics are examined. Research indicates that half of all male dropouts nationwide will at some point spend time in prison<sup>2</sup> and that these same dropouts are 3.5 times more likely to be arrested in their lifetime than high school graduates.<sup>3</sup> Research also indicates that between 75 and 80 percent of the United States prison

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<sup>1</sup> Research and Planning Division, MADOC, calculated from figures reported in the 1985 and 2005 reports on inmates active in the Massachusetts Department of Correction on January 1 of 1985 and 2005.

<sup>2</sup> Gendron, D. & Cavan, J.J. (1990) Managing a successful inmate-education program: Why and how? *Community College Review*, 18(1), 31-39. Retrieved February 15, 2007 from EBSCOhost.

<sup>3</sup> Messemer, J.E. & Valentine, T. (2004) The learning gains of male inmates participating in a basic skills program. *Adult Basic Education*, 14(2), 67-89. Retrieved February 15, 2007 from Proquest.

population does not hold a high school diploma or GED and that approximately 60 percent are functionally illiterate.<sup>4</sup>

The Bureau of Justice Statistics (BJS) illustrates the divide between the general public and incarcerated populations when it comes to attainment levels in education. A 2003 bulletin reported marked differences in educational attainment. The report revealed that, while 81.6 percent of the general public held high school diplomas or some post-secondary education, only 31.9 percent of the 1997 prison population entered prison with a high school diploma or some post-secondary education. This 49.7 percentage point gap suggests a substantial difference in the life chances of people with and without a high school diploma.

### Goals of Correctional Education

The role of education in the correctional environment has multiple aspects. Gordon and Weldon<sup>5</sup> (2003) describe the commonly accepted goals of correctional education as providing inmates with basic academic and vocation skills; providing an opportunity to change personal behavior, attitudes and values; to reduce recidivism, to cut inmate idleness allowing for passive control on inmate behavior; and to support the operational needs of the institution. Education is a tool in the rehabilitation of offenders, to assist them in developing assets, in terms of both credentials and cognitive skill levels that will enable them to be law-abiding, productive citizens upon release. Education programs bring a sense of normalcy that contributes to a positive and safe correctional environment. They reduce “prisonization” and foster pro-social norms.<sup>6</sup>

### Benefits of Correctional Education

#### *Reduction of Recidivism*

Throughout the literature, the effectiveness of a correctional education program was often measured by the reduction of recidivism by its graduates as compared to a control group that did not participate in the program. It is important to note, however, that recidivism was defined in various ways by various researchers, including any combinations of re-arrests, re-incarcerations, new convictions, parole revocation, and return to state prisons only.<sup>7</sup> The examined time frame for these offenses also varied, ranging typically from one year to three years.

Almost invariably, research has supported the contention that inmates who participate in programs have lower likelihoods of re-offending. Some researchers, such as Gehring and

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<sup>4</sup> Gee, J. (2006) Education in rural county jails: Need versus opportunity. *Journal of Correctional Education*, 57(4), 312-325. Retrieved February 15, 2007 from Proquest; Messemer, J.E. & Valentine, T. (2004) The learning gains of male inmates participating in a basic skills program. *Adult Basic Education*, 14(2), 67-89. Retrieved February 15, 2007 from Proquest.

<sup>5</sup> Gordon, H.R. & Weldon (2003) The impact of career and technical education programs on adult offenders: Learning from behind bars. *Journal of Correctional Education*, 54(4), 200-209. Retrieved February 15, 2007 from Proquest.

<sup>6</sup> Harer, M. D., “Prison Education Program Participation and Recidivism: A Test of the Normalization Hypothesis,” Federal Bureau of Prisons, Office of Research and Evaluation, Washington, D.C., 1995.

<sup>7</sup> Tewksbury, R. & Stengel, K.M. (2006) Assessing correctional education programs: The students’ perspective. *Journal of Correctional Education*, 57(1), 13-25. Retrieved February 15, 2007 from Proquest.

Eggleston (2000) of the Center for the Study of Correctional Education, suggest that recidivism alone is not a fair marker by which to judge these programs.<sup>8</sup> Corrections agencies do not justify their disciplinary practices by comparing the rates of recidivism for inmates whose rule violations were informally resolved with those who were given steep, formal sanctions. Though a correctional organization as a whole can be judged by recidivism outcomes, education is one of few individual disciplines in corrections held directly responsible for recidivism impacts. Correctional systems apply this standard unequally to education programs even as education suffers marginalization due to focus shifted toward relieving overcrowding, decreased funding and staffing, the frequent transfers of inmates between facilities, and a growing interest in substance abuse treatment at the expense of education.<sup>9</sup> Other evaluation criteria, such as disciplinary impact and compliance with national educational standards are infrequently applied or explored.

Recidivism is only one criterion by which governments can evaluate educational programming. In addition, the system of security measures and programs makes it difficult to isolate the sole effect of educational programs. Both ethical and practical concerns in a prison prevent the use of random assignment studies to examine education programs in isolation. Despite the unique set of challenges associated with research designs and the prison settings, numerous studies have analyzed correctional education programs, most of which were in relation to recidivism.

There was consistent agreement amongst researchers that prison based education programs aide in the reduction of recidivism.<sup>10</sup> Likewise review of college-level and vocational course participation found positive results from correctional education.<sup>11</sup> From analyses on the Federal prison system<sup>12</sup> to several studies on state facilities,<sup>13</sup> conclusions of GED

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<sup>8</sup> Gehring, Thom and Carolyn Eggleston, "Recidivism as a Measure of Correctional Education Program Success," *Journal of Correctional Education*, June 2000. 51(2):197-205.

<sup>9</sup> Lawrence, Sarah, Daniel Mears, Glenn Dubin, and Jeremy Travis, "The Practice and Promise of Prison Programming," The Urban Institute, Justice Policy Center, May, 2002.

<sup>10</sup> Torre, M. E. & Fine, M. (2005) Bar none: Extending affirmative action to higher education in prison. *Journal of Social Issues*, 61(3), 569-594. Retrieved February 15, 2007 from Proquest; Gordon, H.R. & Weldon (2003) The impact of career and technical education programs on adult offenders: Learning from behind bars. *Journal of Correctional Education*, 54(4), 200-209. Retrieved February 15, 2007 from Proquest; Wilson, D.B., Gallagher, C.A., Coggeshall, M.B., & MacKenzie, D.L. (1993) A quantitative review and description of corrections-based education, vocation, and work programs. *Corrections Management Quarterly*, 3(4), 8-18. Retrieved February 15, 2007 from Proquest; Case, P. & Fasenfest, D. (2004) Expectations for opportunities following prison education: A discussion of race and gender. *Journal of Correctional Education*, 55(1), 24-39. Retrieved February 15, 2007 from Proquest; Nuttall, J., Hollmen, L. & Staley, M. E. (2003) The effect of earning a GED on recidivism rates. *Journal of Correctional Education*, 54(3), 90-94. Retrieved February 15, 2007 from Proquest; Gerber, Jurg and Eric J. Fritsch, "The Effects of Academic and Vocational Program on Inmate Misconduct and Recarceration," In *Prison Education Research Project: Final Report*, Huntsville, Texas: Sam Houston University. Wilson, David, Catherine Gallagher, and Doris L. MacKenzie, "Meta-Analysis of Corrections-Based Education, Vocation, and Work Programs for Adult Offenders," *Journal of Research in Crime and Delinquency*, vol. 37, issue 4, November, 2000, pp. 347-368. Cullen, Francis T. and Paul Gendreau, "Assessing Correctional Rehabilitation: Policy, Practice, and Prospects," In *From Policies, Processes, and Decisions of the Criminal Justice System, Criminal Justice 2000*, Julie Horney, ed., 2000, vol. 3, pp. 109-175; Holley, Phillip, and Dennis Brewster, "An Examination of the Effectiveness of GED Programs Within the Oklahoma Department of Corrections," *Journal of the Oklahoma Criminal Justice Research Consortium*, vol. 4, August 1997/1998.

<sup>11</sup> Lawrence, Ibid.

<sup>12</sup> Harer, Ibid.



obtainment and prison-based education are successful in reducing recidivism were found frequently regardless of how recidivism was defined or the amount of time measured post release.

Some of this research has been criticized for not accounting for self-selection bias, not taking into account the effects of other factors affecting recidivism (such as drug treatment and post-release services), not examining incremental improvement in inmate behavior or re-offense, and relying on incomplete educational data.<sup>14</sup> The criticism reflects the realities of criminal justice research. Studies with greater methodological rigor<sup>15</sup> have addressed these issues, and still found that correctional education and GED attainment assists in reducing recidivism.

A comprehensive study on GED recidivism impact was completed in 2001 by the Correctional Education Association (CEA) in Lanham, Maryland.<sup>16</sup> They gathered data from Maryland, Minnesota, and Ohio in order to determine the effect of GED attainment while incarcerated on both recidivism and employment variables. They drew from inmate records, national criminal record information, and state labor records in addition to gathering more than 500 variables on each inmate, including criminal history, family and community background, economic status, employment history, cognitive skills, offender perspectives on education, parole supervision, and reentry preparedness. The CEA study demonstrated that offenders who earned their GEDs had lower rates of re-arrest, re-conviction, and re-incarceration (collectively and in each state) than the comparison group who did not have a GED and did not get a GED while in prison. Employment rates among the comparison groups (only Maryland and Minnesota were compared) showed no statistically significant difference, however, researchers found that for each of the three years that the groups were followed, the GED group earned higher incomes than the non-GED group.

The CEA study is one more argument that supports the conclusion that prison education programs are as effective as GED or high school training in the community. This further links the findings of additional research on educational achievement and life chances to correctional education. Education in prison can bridge the gap.

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<sup>13</sup> MTC Institute, Ibid.; Hull, Kim A., Stewart Forrester, James Brown, David Jobe, and Charles McCullen, "Analysis of Recidivism for Participants of the Academic/Vocational/Transition Education Programs Offered by the Virginia Department of Correctional Education," Journal of Correctional Education, vol. 51, Issue 2, June, 2000, pp. 256-261.

<sup>14</sup> Tolbert, Michelle, "State Correctional Education Programs: State Policy Update," National Institute for Literacy, March, 2002.

<sup>15</sup> "Follow-Up Study of a Sample of Offenders Who Earned High School Equivalency Diplomas (GEDs) While Incarcerated in DOCS," New York State Department of Correctional Services, May, 2001, obtained on February 28, 2005 from [www.prisonpolicy.org/scans/ny\\_ged.shtml](http://www.prisonpolicy.org/scans/ny_ged.shtml); Steurer, Stephen, Linda Smith, and Alice Tracy, "Three State Recidivism Study," Correctional Education Association, Lanham, Maryland, September, 2001.

<sup>16</sup> Steurer, Stephen, Linda Smith, and Alice Tracy, "Three State Recidivism Study," Correctional Education Association, Lanham, Maryland, September, 2001.

### *Cost Savings*

Another study examined the cost savings generated through investment in correctional education. Researchers derived savings estimations from correctional education budgets and crime statistic projections, projecting that a one million dollar investment in additional incarceration time for offenders prevented 350 crimes while the same investment in correctional education prevented 600 crimes. A one million dollar investment in correctional education would prevent an estimated 26 re-incarcerations.<sup>17</sup> Even if this estimation is discounted by half in order to accommodate possible shorter sentences after first release, the value of education dollars result in multiplied savings.

### Why Correctional Education is Successful

In the general public, there is a documented history of the impact of education on many aspects of life chances and economic status. Educational attainment has been linked directly with successful employment, income over a lifetime, standard of living, personal achievement, and staying out of prison.<sup>18</sup> Prison education programs have been positively correlated with many similar results: higher wages, increased family stability, greater workforce participation, and reduced correctional system costs.<sup>19</sup> The state of Virginia looked at employment impacts of educational programs.<sup>20</sup> They found that 55 percent of released offenders who did not complete any education programs were able to hold a job for at least 90 days. For those who dropped out of programming, the percentage increased to 61 percent, and for those who completed an educational program, the figure jumped to 78 percent.

The National Center for the Study of Adult Learning and Literacy (NCSALL) has supported or publicized general research on adult learning programs and the impact of GED programs. In this research, scholars have found evidence for several very relevant conclusions about obtaining a GED. First, researchers found that the GED holders earn about 15 percent more than non-GED high school dropouts five years after obtaining a GED.<sup>21</sup> Second, researchers found that the greatest impact on earnings for those who obtain their GED was found in people whose skill levels were the lowest when they were in high school.<sup>22</sup> It would not be surprising to find that incarcerated populations are likely to be among the lowest skilled of these dropouts. Third, researchers found that the benefits of post-secondary education were the same for those who obtained their GED and those who graduated from

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<sup>17</sup> Bazos, Audrey and Jessica Hausman, "Correctional Education as a Crime Control Program," UCLA School of Public Policy and Social Research, Department of Policy Studies, March 2004.

<sup>18</sup> MTC Institute, "Programs That Help Inmates Stay Out of Prison: Growing Public Expectations," MTC Institute, November, 2003.

<sup>19</sup> MTC Institute, Ibid.

<sup>20</sup> Hull, Kim A., Stewart Forrester, James Brown, David Jobe, and Charles McCullen, "Analysis of Recidivism for Participants of the Academic/Vocational/Transition Education Programs Offered by the Virginia Department of Correctional Education," *Journal of Correctional Education*, vol. 51, Issue 2, June, 2000, pp. 256-261.

<sup>21</sup> Cain, Alice Johnson, "Is the GED Valuable to Those Who Pass It?" in *Focus on Policy: Connecting Research and Policy*, vol. 1, issue 1, April, 2003.

<sup>22</sup> Murnane, Richard J, John B. Willett, and John H. Tyler, "Who Benefits from Obtaining a GED: Evidence from High School and Beyond," obtained on February 15, 2006 at [www.ncsall.net/?id=771&pid=658](http://www.ncsall.net/?id=771&pid=658).

high school.<sup>23</sup> This conclusion supports the fact that a GED is an effective bridge to higher education for dropouts. Of course, the benefits of a post-secondary education are even greater than a GED or high school diploma for both income and advancement.

In addition to the above mentioned benefits of earning a GED or high school diploma, some researchers delved into the prison culture to examine why education during incarceration works in reducing recidivism.

A 1995 study by the Federal Bureau of Prisons (FBOP) and a 2006 study completed by Tewksbury and Stengel both examined the self-motivation of inmates in correctional education programs. As Tewksbury and Stengel cite Stephens (1992), they bring to light the argument that “those that complete the programs are more motivated and competent to begin with, therefore resulting in greater success upon their release.”<sup>24</sup> Even if this argument holds true, the FBOP (1995) found that inmates who were less self-motivated to participate in education programs still had lower recidivism rates if they did participate regularly as compared to those who did not regularly take education classes.<sup>25</sup>

Messemer and Valentine<sup>26</sup> contend that the inmates in their study had lower rates of recidivism because they were able to attend greatly structured educational courses in a safe and secure environment. The researchers argue that due to the factors of quality education in a secure setting the inmates were likely experiencing academic success for the first time.<sup>27</sup> This individual experience, however, can differ.<sup>28</sup> Case and Fassenfest found that when inmates successfully earned a GED in prison, if the technology and materials in the program were outdated it left them overwhelmed and embarrassed when exposed to newer technology post release, making the first year very difficult for them.<sup>29</sup>

### Additional Factors that Influence Recidivism

#### *Race*

Research by Torre and Fine, Messemer and Valentine, Case and Fassenfest, and Wilson, Gallaher, Coggeshall, and MacKenzie found the correctional education programs, GED

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<sup>23</sup> Cain, Ibid.

<sup>24</sup> Tewksbury, R. & Stengel, K.M. (2006) Assessing correctional education programs: The students' perspective. *Journal of Correctional Education*, 57(1), 13-25. Retrieved February 15, 2007 from Proquest.

<sup>25</sup> Harer, Ibid.

<sup>26</sup> Messemer, J.E. & Valentine, T. (2004) The learning gains of male inmates participating in a basic skills program. *Adult Basic Education*, 14(2), 67-89. Retrieved February 15, 2007 from Proquest.

<sup>27</sup> Messemer, J.E. & Valentine, T. (2004) The learning gains of male inmates participating in a basic skills program. *Adult Basic Education*, 14(2), 67-89. Retrieved February 15, 2007 from Proquest.

<sup>28</sup> Case, P. & Fassenfest, D. (2004) Expectations for opportunities following prison education: A discussion of race and gender. *Journal of Correctional Education*, 55(1), 24-39. Retrieved February 15, 2007 from Proquest; Torre, M. E. & Fine, M. (2005) Bar none: Extending affirmative action to higher education in prison. *Journal of Social Issues*, 61(3), 569-594. Retrieved February 15, 2007 from Proquest.

<sup>29</sup> Case, P. & Fassenfest, D. (2004) Expectations for opportunities following prison education: A discussion of race and gender. *Journal of Correctional Education*, 55(1), 24-39. Retrieved February 15, 2007 from Proquest

obtainment, and inmate perceptions were significantly impacted by race.<sup>30</sup> Case and Fassenfest examined inmates' perception of their education post release, specifically their views of opportunity and value of education. They found that race had the most significant difference on their perceptions. They stated:

White males were more likely to perceive . . . courses in prison as being beneficial, reported a higher level of self esteem post education, more often reported that they had taken courses post release to continue their education and were not likely to perceive barriers to employment post release. Black males reported opposite experiences that are likely reinforced by institutionalized racism that additionally reduces opportunities. Black males reported more value in vocational training that provided a work skill, experienced lower levels of post education self esteem and reported more barriers to finding and maintaining employment. . . The white male participants . . . were less likely to see barriers to employment as being discriminatory on the part of the employer. Instead they seemed to internalize the blame for not being able to find employment. (pp. 24 & 31)

Case and Fassenfest (2004) continue, arguing that across the board, African American males had the greatest risk for recidivating. Torre and Fine (2005) found, however, that younger minorities who completed correctional education programs were more likely post release to obtain careers that gave back to their communities (working with other inmates and their families in advocacy and support) than their Caucasian counterparts.

#### *Gender*

Due to the national proportions of male and female prisoners, correctional education research was inundated with studies on male inmates. Although some studies proceeded to examine the female population, often the sample size was too small to make any generalizations.

The Bureau of Justice Statistics (2003) revealed that men and women enroll in prison education programs in approximately the same proportions, with men enrolling only slightly more often than female offenders. Other researchers have also examined the female prison population and their challenges in regards to earning GEDs and staying out of prison after release.<sup>31</sup> One study found in their research at a female maximum security institution 80 percent had histories with sexual abuse, academic problems, and limited economic

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<sup>30</sup> Torre, M. E. & Fine, M. (2005) Bar none: Extending affirmative action to higher education in prison. *Journal of Social Issues*, 61(3), 569-594. Retrieved February 15, 2007 from Proquest; Messemer, J.E. & Valentine, T. (2004) The learning gains of male inmates participating in a basic skills program. *Adult Basic Education*, 14(2), 67-89. Retrieved February 15, 2007 from Proquest; Case, P. & Fassenfest, D. (2004) Expectations for opportunities following prison education: A discussion of race and gender. *Journal of Correctional Education*, 55(1), 24-39. Retrieved February 15, 2007 from Proquest; Wilson, D.B., Gallaher, C.A., Coggeshall, M.B., & MacKenzie, D.L. (1993) A quantitative review and description of corrections-based education, vocation, and work programs. *Corrections Management Quarterly*, 3(4), 8-18. Retrieved February 15, 2007 from Proquest.

<sup>31</sup> Case, P. & Fassenfest, D. (2004) Expectations for opportunities following prison education: A discussion of race and gender. *Journal of Correctional Education*, 55(1), 24-39. Retrieved February 15, 2007 from Proquest; Torre, M. E. & Fine, M. (2005) Bar none: Extending affirmative action to higher education in prison. *Journal of Social Issues*, 61(3), 569-594. Retrieved February 15, 2007 from Proquest.

opportunities<sup>32</sup>. Due in part to issues such as these, Case and Fassenfest (2004) found that self esteem was the largest barrier for released female graduates for employment in addition to embarrassment about the felony record, and lack of assertive job seeking skills. Case and Fassenfest (2004) suggest that life skills counseling may help these women in obtaining and keeping jobs, and also may contribute to lower recidivism rates.

### *Age*

Research also showed that the age of inmates had a significant impact on obtaining GEDs and recidivism rates.<sup>33</sup> The Bureau of Justice Statistics (2003) found younger inmates have also tended to take educational courses in higher proportions than older inmates. For inmates 24 and younger, 58 percent participated in an education course since entering prison, whereas only 45 percent of those 45 and older did so. Participation rates steadily declined for each successive age group between 24 and 45. The decline also appeared when looking at GED and high school courses specifically, with 36 percent enrollment for those 24 and younger and only 15 percent for those 45 and older.

Age also had an impact on the time it took to achieve academic success. Messemer and Valentine (2004) found that it took 18 – 20 year olds much longer to achieve higher academic levels in reading, mathematics, and language skills than inmates older than 20 years of age. Looking at a similar age group, Nuttall, Hollmen, and Staley (2003) found that for offenders who earned a GED in prison, those under 21 at the time of the release had the most substantial reduction of recidivism.

### *Offense Type*

Educational attainment upon admission to prison showed slight variation across offense types. As Harlow (2003) noted, offenders convicted for drug crimes are least likely to have a GED or high school diploma. Indeed, 46.6 percent of drug offenders incarcerated in 1997 had no high school diploma and no GED. The percentages of those with no high school diploma for violent, property, and public order offenses were 37.2 percent, 37.9 percent, and 41.7 percent, respectively.<sup>34</sup> Between 1991 and 1997, there was a 44 percent increase in the number of prisoners needing basic education services leading to a GED.<sup>35</sup> Although it was self reported, Case and Fassenfest (2004) found in their study that the majority of inmates that participated in correctional education programming were incarcerated due to a range of offenses from failure to pay child support to drug offenses.

## Recidivists

Some critics have discounted the benefits of correctional education, claiming that inmates who choose to participate in education programs are already less likely to re-offend after release or are already less likely to be considered management or disciplinary problems in

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<sup>32</sup> Torre, M. E. & Fine, M. (2005) Bar none: Extending affirmative action to higher education in prison. *Journal of Social Issues*, 61(3), 569-594. Retrieved February 15, 2007 from Proquest.

<sup>33</sup> "Follow-Up Study of a Sample of Offenders Who Earned High School Equivalency Diplomas (GEDs) While Incarcerated in DOCS," New York State Department of Correctional Services, May, 2001, obtained on February 28, 2005 from [www.prisonpolicy.org/scans/ny\\_ged.shtml](http://www.prisonpolicy.org/scans/ny_ged.shtml).

<sup>34</sup> Harlow, Caroline Wolf, "Education and Correctional Populations," Bureau of Justice Statistics Special Report, January 2003.

<sup>35</sup> Harlow, Ibid.

prison. This claim ignores the importance of reinforcing and supporting good behavior among inmates and the importance of providing outlets for those who would like to be safe to follow that aim, connect with a similar social group, and have time apart from other inmates. This offender group needs these supports to facilitate choices for good behavior in what can be an oppositional prison culture and to set a law-abiding pattern prior to release.

There are, however, a percentage of inmates who obtained their GED in prison who re-offend. Some researchers offered some light on this subject in their research.<sup>36</sup> Case and Fasenfest (2004) found that when examining their total population of inmates who received prison-based education, two groups emerged with opposing views of correctional education and the criminal justice system. Regardless of race, the first group (which was the vast majority of ex-inmates) was able to take the resistance they met with employment “in stride” and as a whole adjusted well to post-release life. The second group saw their setbacks as “insurmountable” and believed success was futile.

Because the percentages of these groups parallel the percentages of recidivism, this finding suggests that those who recidivate have a self-fulfilling prophecy occurring. Although more research is needed in this area, it could be assumed that the smaller group who felt that success was futile would be more likely to recidivate than the well adjusted group.

### Purpose of Study

Research indicates that there is a positive correlation between GED obtainment by inmates during incarceration and reduced rates of recidivism post release. Research has also evaluated some of the factors that may influence the effectiveness of obtaining a GED, including race, gender, age, and offense type. The research fails, however, to examine how age at incarceration, age at release, marital status, classification to lower custody, security levels, first release, release type, time served, last grade completed prior to commitment, and other factors impact recidivism.

The purpose of this study was to determine if and how the rates of recidivism differ from inmates who obtained their GED while in prison to those who did not. This study also examined how the factors of gender, race, age at incarceration, age at release, marital status, original offense, classification to lower security, security level, first release, release type, time served, and last grade completed effected rates of recidivism. Based on the literature, it was hypothesized that among inmates who reported having less than a 12<sup>th</sup> grade education upon commitment to the Massachusetts Department of Correction, those who received their GED during their incarceration period associated with a 1998 release would have lower rates of recidivism than those who did not receive their GED in prison and were also released in 1998. It was also hypothesized that offenders who had previously violated their parole or probation would experience reconviction or re-incarceration more often then offenders being released for the first time on a given sentence.

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<sup>36</sup> Case, P. & Fasenfest, D. (2004) Expectations for opportunities following prison education: A discussion of race and gender. *Journal of Correctional Education*, 55(1), 24-39. Retrieved February 15, 2007 from Proquest; Gee, J. (2006) Education in rural county jails: Need versus opportunity. *Journal of Correctional Education*, 57(4), 312-325. Retrieved February 15, 2007 from Proquest.

## Research Methodology

This study examined how obtaining a GED while incarcerated affected recidivism rates among Massachusetts state prisoners. A combination of cluster sampling and convenience sampling were used to select this particular group of subjects; both of which were non-random.

### *Subjects*

The population studied consisted of inmates who were released to the community from Massachusetts Department of Correction (DOC) facilities during calendar year 1998 ( $n = 912$ ). Inmates for the treatment group (GED group) were selected based on three criteria. Inmates first had to report having less than a 12<sup>th</sup> grade education upon commitment to the Massachusetts Department of Correction. Secondly, inmates had to have been released by Expiration of Sentence or Parole in 1998. Lastly, inmates had to have earned their GED during their incarceration period associated with the 1998 release ( $n = 220$ ). For the control group, inmates had to report having less than a 12<sup>th</sup> grade education upon commitment to the Massachusetts Department of Correction and had to have been released by Expiration of Sentence or Parole in 1998 without earning their GED ( $n = 692$ ).

There were several strengths of this sampling method. This method incorporated all inmates with an incarceration period associated with a 1998 release and who had less than a 12<sup>th</sup> grade education at the time of commitment. This method also allowed for a comparison of those who earned their GED during their incarceration period associated with a 1998 release to those who did not. This method leaves out, however, inmates who entered the DOC with a Last Grade Completed (LGC) of 12<sup>th</sup> grader or higher and any release where the offender was not released to the community (i.e., released to a new sentence at a state, Federal or county facility, or released to and held on a warrant, or released by the court) was excluded from the sample.<sup>37</sup>

It is important to consider the findings from this study in an appropriate context. This design focused solely on GED attainment and did not examine offenders who enrolled in GED programs and failed the test, or never progressed to take the test. There was an inability to consider enrollment or completion of other inmate programs including vocational, work, substance abuse or other types of treatment programs. Participation in any of these other programs may have had potential interaction effects with GED attainment and recidivism outcomes.

### *Procedure*

#### **Process of Selecting Sample**

Subjects for this study were selected through several intricate processes.

#### Determining GED Certification

To determine who of the release cohort had received their GED certification while in prison, inmates in the recidivism file were cross-referenced against a database of inmates who had received their GED.

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<sup>37</sup> Hoover, Hollie A., "Recidivism of 1998 Released Department of Correction Inmates", Massachusetts Department of Correction, June 2004.

- The GED database, maintained by the DOC's Inmate Training and Education Division, consisted of 9,573 records of inmates who received their GED in prison, dating back to 1961.

A unique common field to link records from the two files did not exist. While the GED file contained last name, first name, date of birth, social security number, and GED date, the recidivism file used commitment number (the DOC's inmate identifier) as its primary key. Matching the files by inmate name and date of birth was disregarded because of multiple inmate aliases and/or dates of birth, possible misspelled names and other data entry errors. As a result, the recidivism file was updated to include a social security number from the Department of Correction's Inmate Management System (IMS), if one was available. The two data files were then merged using social security number as the key for matching cases.

- Of the 2,820 records, 2,669 social security numbers were imported into the file from IMS. There were 151 records with a missing social security number.
- About half of the missing social security numbers were found in the Court Arraignment Record Information (CARI) data file.<sup>38</sup> The remaining cases were put aside to manually match by name and date of birth against records in the GED file.
- The release/recidivism file was then matched against the GED file. The match between the 2,820 record recidivism file and the 9,573 GED file revealed 485 inmates had received their GED during a DOC incarceration and were in the 1998 recidivism/release cohort.

#### Determining the Comparison Group

Random assignment to the Control and GED Groups was not feasible given the correctional environment. For this reason, comparable groups were defined for this study and the effect of obtaining a GED on recidivism rates was analyzed. Due to the comparison group definitions, results were subject to some self-selection bias. The variable "Last Grade Completed" (LGC) in the release/recidivism data was used to measure education and attainment of High School diploma or GED. The inmate's highest level of education attained was reported by the inmate upon commitment to the DOC. No verification was required by the inmate, but past practice has not shown inmates to misrepresent this type of information.

Inmates from the merged file were categorized into two groups for analysis: those who had reported a LGC of less than 12<sup>th</sup> grade at time of commitment and did not receive their GED certification prior to release; and those who reported a LGC of less than 12<sup>th</sup> grade and had received their GED certification during their incarceration period associated with their 1998 release. For the purpose of this study, inmates who entered the DOC with a LGC of 12<sup>th</sup> grader or higher were not included in this analysis.

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<sup>38</sup> The CARI file is the Court Arraignment Record Information, which is maintained by the Massachusetts Board of Probation on the Massachusetts Criminal Justice Information System.



- There were 918 offenders who did not receive their GED in prison, but for whom education level data was missing. These cases were excluded from any further analysis.<sup>39</sup>
- 973 records were excluded because the LGC indicated was 12<sup>th</sup> grade or more.
- There were 69 cases excluded because they had received their GED during a previous period of incarceration (and one during a subsequent incarceration) instead of during the incarceration period associated with their 1998 release.
- The group that did not receive their GED and had an education level of less than 12<sup>th</sup> grade (Control Group) consisted of 692 records.<sup>40</sup>
- Those that received their GED during that incarceration period and had an education level of less than 12<sup>th</sup> grade (GED Group) consisted of 220 records.<sup>41</sup>
- A total of 912 offenders were analyzed for this study.

### Measuring Recidivism

Release data was obtained from the 1998 recidivism annual report data, originally extracted from two DOC databases: the current Inmate Management System (IMS) and the legacy VAX computer system. The file contained recidivism measures for released inmates that were manually collected from several sources: DOC data included electronic data and paperwork filed in inmate records, county correction inmate data, and Court Arraignment Record Information (CARI) data maintained by the Board of Probation on the Massachusetts Criminal Justice Information System.

- The 1998 recidivism file contained release and recidivism variables for 2,820 records of inmates released to the community.

Post-release data on inmates were manually collected by staff at the DOC's Research and Planning Division. Experienced research staff reviewed various criminal justice databases to determine the inmate's first conviction (re-conviction) and first return to custody (re-incarceration) since release. Data was collected up to three years post-release. If the inmate was not re-incarcerated or re-convicted during that time period, they were considered a non-recidivist. If an inmate was re-convicted and re-incarcerated during the three-year period, the first instance of either occurrence was coded. A total recidivism rate was calculated using the first date of re-conviction or re-incarceration, not the more serious of the two.<sup>42</sup>

### **Variables Examined**

In this study, several variables were examined to determine their effect on GED obtainment and recidivism. The variables and definitions as needed are as follows:

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<sup>39</sup> A potential proxy explored was Test of Adult Basic Education (TABE) scores of inmates tested upon intake. However, this information was not available in an automated format therefore it was not considered feasible.

<sup>40</sup> If an offender, who otherwise fit the study criteria, took the GED exam but did not pass the test prior to his/her 1998 release, he/she would have fallen within the Control Group.

<sup>41</sup> Seventeen cases were excluded because we could not determine LGC or records indicated that they might already have a GED or 12<sup>th</sup> grade education.

<sup>42</sup> The combined recidivism measure of reconviction or re-incarceration is used in this study due to the small number of cases in groups when information is broken out by category and recidivism outcome. It is one of the three recidivism definitions that the Department presents in its annual recidivism report.

- Recidivism = A reconviction or re-incarceration of an inmate released via parole or expiration of sentence and who was returned within three years to state prison on a new commitment or for a probation or parole violation (with or without a new offense).
- Gender = male and female
- Race = Caucasian, African American, Hispanic<sup>43</sup>, and All Other Races (self-reported by inmate at admission)
- Age at Incarceration
- Age at Release
- Marital Status = Married/Live In Partner, Single, Divorced/Separated, and Widow/Widower (self-reported by inmate at admission)
- Original Offense = the governing offense<sup>44</sup> for which the inmate was sentenced
- Classification to Lower Custody = Indicates whether an inmate, at some point during their incarceration, classified to a lower security facility (i.e. moved from a maximum security to a medium security; moved from a medium security to a minimum security)
- Security Level = The security level of the facility from which the inmate was released (Maximum, Medium, or Lower)
- First Release = Indicates whether it was an inmate's first release from a DOC institution for the current sentence or if they had been previously released and re-incarcerated because of a parole or probation violation on the current sentence
- Release Type = Parole or Expiration of Sentence
- Parole = Those whose cases were heard before the Massachusetts Parole Board and who received a favorable parole vote and released under the supervision of parole
- Expiration of Sentence = those who served their maximum term minus any earned or statutory good time.
- Last grade completed (LGC) = Last grade completed before committed to the DOC as self-reported by inmate (only analyzed in terms of recidivism rates)
- Time Served = The amount of incarcerated time (versus jail time) served by an inmate (only analyzed in terms of recidivism rates)

Variables were first analyzed to determine their frequencies, percentages, and statistical significance to obtain an accurate representation of the sample. Next, the variables were analyzed in regards to recidivism and in terms of the GED group and the control group.

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<sup>43</sup> In 2000, the Department of Correction implemented expanded race/ethnic definitions which are now currently in use. However, since this report examines the recidivism trends of inmates released in 1998, the expanded definitions are not used in this report.

<sup>44</sup> When the inmate is incarcerated for more than one offense, the governing offense is that crime associated with the sentence which retains the inmate in the system the longest (i.e. the greatest maximum discharge date).

## Sample Characteristics

In order to examine how obtaining a GED while incarcerated affected recidivism rates among Massachusetts state prisoners, two sample groups were identified and compared in this study. All 912 offenders in the study were in the custody of the Massachusetts Department of Correction and were released to the street via parole or expiration of sentence in 1998.<sup>45</sup> The first group, the Control group, consisted of state prisoners who did not get their GED while incarcerated but who entered prison with less than a high school diploma (and no previous GED) (n = 692). The second group, the GED or treatment group, consisted of offenders who obtained their GED during their incarceration period associated with the 1998 release but who had also entered prison with less than a high school diploma (and no previous GED) (n = 220). The following section describes the characteristics of these groups.

Gender: The Control and GED groups differ markedly with regard to gender. The total sample consisted of 662 males and 250 females. Women represented 32% (n = 223) of the Control group and only 12% (n = 27) of the GED group. Correspondingly, 68% (n = 469) of the Control group and 88% (n = 193) of the GED group were men. The chi-square statistic indicates that the difference in representation for the genders is significant (95% confidence level). For many criminal justice studies, men and women are studied separately, wherever possible, since there is wide acceptance that men and women have different patterns of criminal behavior. In this study, however, it was not always practical to separate the results by gender because of the small number of women in the study who received their GED (n=27). In the state's release population for 1998, women made up 26% of releases. This is not a similar proportion to the Control group or GED group.

According to general recidivism rates for the 1998 release cohort, examining both re-incarceration and reconviction, women recidivated 51% of the time, and men recidivated 53% of the time. This difference appears of scant importance in looking at differences between our Control group and GED group. Even though men and women have divergent patterns of offenses, Massachusetts data indicated that they return to prison or are reconvicted of crimes approximately at the same rates.<sup>46</sup> This indicates that we can safely aggregate men and women in this study without being concerned that their outcomes would be very different.

Race: The GED and Control groups showed significant differences with regard to race. The GED group was more heavily populated with African Americans and Caucasians and less populated with Hispanics. The number of "Other" races in each group was negligible (four in the Control group and zero in the GED group).<sup>47</sup>

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<sup>45</sup> Information reported on the total 1998 release population refers to offenders released to the street in 1998 and whose records were available for recidivism follow-up three years after release.

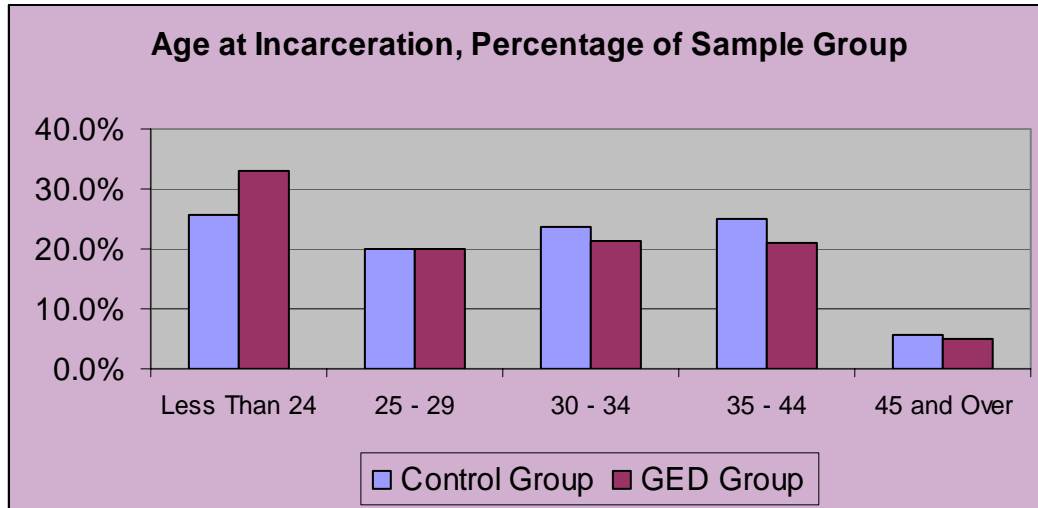
<sup>46</sup> Hoover, Ibid.

<sup>47</sup> In 1998, 'Hispanic' was still coded as a separate category for race. Currently, 'Hispanic' is a term used for ethnicity and is not considered a separate race category.

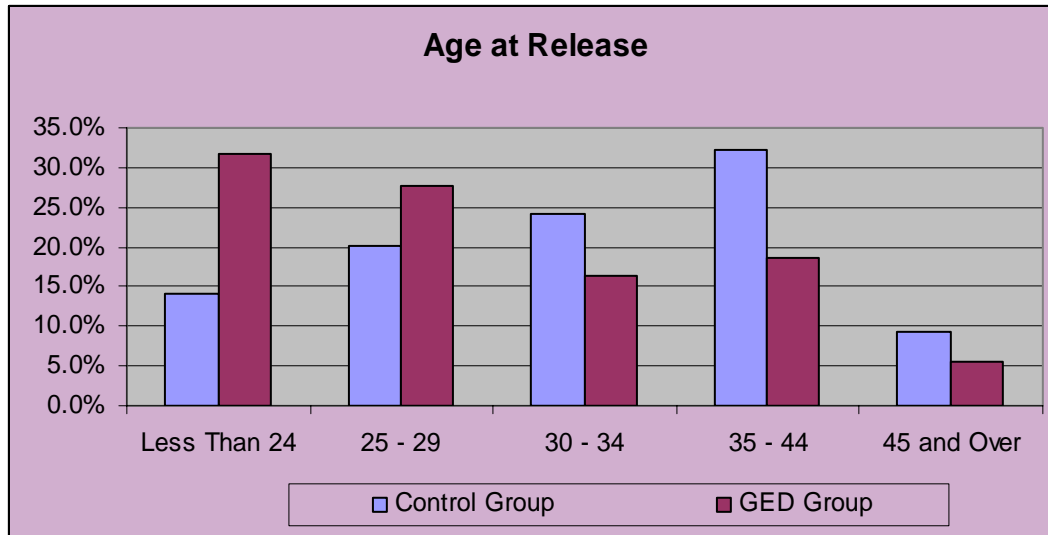
Race	Control Group	GED Group	1998 Release Population
Caucasian	43.9%	48.6%	50.7%
African American	24.7%	32.3%	26.8%
Hispanic	30.8%	19.1%	21.7%
All Other Races	0.6%	0.0%	0.8%

*Control and GED Group Chi-Square = 13.847, alpha = 0.003*

Age at Incarceration: The GED and Control groups differed significantly with regard to age at incarceration. Most notably, the GED group held a larger proportion of offenders under 24. The GED group in this study was weighted more toward younger offenders. The mean age at incarceration for the GED group was 25.4 years (Standard Deviation (S.D.) = 7.7), and 30.7 (S.D. = 8.3) for the Control group.



Age at Release: Younger offenders were more heavily represented in the GED group. The mean age at release for the GED group was 29.7 years (S.D. = 8.2), and 33.4 (S.D. = 8.6) for the Control group.



**Marital Status:** Distribution of marital status had an overwhelming percentage for “Single” for both groups. The GED group had slightly more “Single” and less “Married/Live-in Partner” than the Control group. The remaining statuses had marginal differences.

Marital Status	Control Group	GED Group	1998 Release Population
Married/Live-in Partner	13.0%	8.6%	13.2%
Single	73.0%	78.2%	71.0%
Divorced/Separated	12.6%	12.3%	14.2%
Widow/Widower	1.4%	0.5%	1.1%

*Control and GED Group Chi-Square = 8.408, alpha = 0.210*

**Original Offense Category:** Analysis of the samples revealed a statistically significant difference between the comparison groups when it comes to original offense category. More offenders in the GED group were Person and Sex offenders (violent crimes), and fewer of the GED group were Property, Drug, or Other offenders. The Control group’s distribution is similar to the 1998 release cohort’s distribution.

Original Offense Category	Control Group	GED Group	1998 Release Population
Person	34.2%	48.2%	35.2%
Sex	5.6%	14.1%	7.9%
Property	19.2%	10.5%	18.7%
Drug	26.2%	20.0%	23.6%
Other	14.7%	7.3%	14.6%

*Control and GED Group Chi-Square = 41.420, alpha = 0.000*

**Classification to Lower Custody:** This variable indicated whether an inmate, at some time in his/her current incarceration, was classified into a lower security facility (i.e. moved from a maximum security facility to a medium security facility or from medium security to minimum or pre-release). It did not mean that they released from this level facility but that

they had a history of enough progress and good conduct to have received this preferred housing classification. The GED group had a greater number of inmates with a history of being classified to lower security facilities. The 15-point difference was statistically significant.

Lower Moves	Control Group	GED Group	1998 Release Population
No Lower Moves	59.7%	45.0%	56.8%
At Least One Move to Lower	40.3%	55.0%	43.2%

*Control and GED Group Chi-Square = 14.614, alpha = 0.000*

Security Level of Release Facility: The GED group was heavily populated with offenders in Minimum or Pre-Release security and had a higher proportion releasing from Maximum security. The Control group's distribution is similar to the 1998 release cohort distribution.

Security Level of Release Facility	Control Group	GED Group	1998 Release Population
Maximum	5.2%	8.2%	4.7%
Medium	61.7%	42.3%	58.1%
Minimum/Pre-Release	33.1%	49.5%	37.2%

*Control and GED Group Chi-Square = 25.751, alpha = 0.000*

First Release: There was almost 20 percentage points in the GED group that separated each group's proportion of first releases for the current sentence. The Control group generally mirrors the 1998 release population, while the GED group is weighted with far more first releases.

First Release	Control Group	GED Group	1998 Release Population
First Release	71.0%	90.0%	74.0%
Not a First Release	29.0%	10.0%	26.0%

*Control and GED Group Chi-Square = 32.78, alpha = 0.000*

Release Type: A larger proportion of the GED group was paroled prior to their maximum incarceration date in comparison with the Control group.

Release Type	Control Group	GED Group	1998 Release Population
Parole	29.2%	39.5%	35.1%
Expiration of Sentence	70.8%	60.5%	64.9%

*Control and GED Group Chi-Square = 8.268, alpha = 0.004*

## GED Recidivism Results

The following findings describe the results of cross-tabulation analysis that examined recidivism rates between offenders who obtained their GED while incarcerated and offenders who had less than a 12<sup>th</sup> grade education and did not obtain their GED. A series of cross-tabulations were examined in order to control for various factors that may have otherwise distorted observation of the difference in recidivism rates for the two groups. Each cross-tabulation showed the recidivism rates of the Control group and the GED group, in addition to the chi-square statistic indicating whether the difference in rates was statistically significant. Recidivism was defined as reconviction or re-incarceration of an offender within 3 years after release.

First, the overall relationship between the Control group and the GED group was examined. As stated in the methodology, 912 offenders who were released from the Department of Correction's custody in 1998 were included in this study. Of these, 220 entered prison with less than a 12<sup>th</sup> grade education (and no GED) but obtained their GED during their incarceration period associated with the 1998 release, and 692 entered prison with less than a 12<sup>th</sup> grade education (and no GED) but did not obtain their GED while incarcerated. This study found that the recidivism rate for the Control group was 57.8% (400 offenders recidivated; 292 did not), while the GED group had a recidivism rate of only 48.2% (106 offenders recidivated; 114 did not). This difference was statistically significant (chi-square=6.257,  $p < .05$ ). This finding suggests that obtaining a GED while incarcerated can reduce recidivism by 9.6 percentage points.

There are several factors that could have also influenced the relationship between obtaining a GED and recidivism. This study controlled for several types of factors in separate cross-tabulations to better assess this relationship.

Gender: Amongst women, obtaining a GED appears to make a large and positive difference in recidivism. Women who obtained their GEDs while incarcerated ( $n = 27$ ) had a recidivism rate 33.7 percentage points below women who did not ( $n = 223$ ). A significant difference was not apparent for males, however, though the recidivism rate was lower for men who obtained their GED.

Controlling for Gender	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
Female ( $n=250$ )	59.6% ( $n=223$ )	25.9% ( $n=27$ )	-33.7	.001*
Male ( $n=662$ )	56.9% ( $n=469$ )	51.3% ( $n=193$ )	-5.6	.185
Total $n=912$	Control Group $n=692$	GED Group $n=220$		

\* statistically significant,  $p \leq 0.05$ .

Because gender differences are often common in criminal justice research, each of the control variable factors described below were analyzed by gender in addition to aggregate

figures. Where gender differences were remarkable, they were noted with each control variable.

Race: For Caucasian and African American inmate populations, comparison groups differed by more than 8 percentage points in recidivism rates; these differences, however, were not statistically significant. The reduced rate observed for the Hispanic population who obtained their GEDs was, however, statistically significant.

Controlling for Race/Ethnicity	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
Caucasian (n=411)	58.9% (n=304)	50.5% (n=107)	-8.4	.131
African American (n=242)	62.0% (n=171)	53.5% (n=71)	-8.5	.222
Hispanic (n=255)	53.5% (n=213)	33.3% (n=42)	-20.2	.017*
Other (n=4) <sup>a</sup>	25.0% (n=4)	-	-	-

\* statistically significant,  $p \leq 0.05$ .

<sup>a</sup> No cases in the "Other" category obtained a GED. Only four of these cases were in the Control group.

Delineation by gender appeared to make a difference when examining race. Caucasian and African American women in the Control group had far higher recidivism rates than their counterparts who completed their GEDs, and the differences were statistically significant. Caucasian women without a GED had a 3-year recidivism rate of 62.6%, while the rate for Caucasian women who earned GEDs was half that figure, 31.3%. Despite a small number of African Americans who got their GED (n=3), none of these women were re-incarcerated or reconvicted, compared with 66.7% of the Control group recidivating (n=30).

Figures for male offenders mirrored the trends in the aggregated group and demonstrated a statistically significant difference only among Hispanics.

Age at Incarceration: Age upon entering the prison system appeared to have a mixed impact on the relationship between obtaining a GED and recidivism. For offenders that were incarcerated when they were less than 25 years old, obtaining a GED made a significant difference for recidivism. The GED group's recidivism rate was 13 points lower. Offenders that were incarcerated between the ages of 30 to 34 had significantly different recidivism rates, 28.6 percentage points lower for those who obtained their GED.

Controlling for Age at Incarceration	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
24 and Under (n=300)	64.6% (n=178)	51.6% (n=122)	-13.0	.025*
25 – 29 (n=182)	54.3% (n=138)	54.5% (n=44)	+0.2	.982
30 – 34 (n=193)	67.9% (n=165)	39.3% (n=28)	-28.6	.004*
35 – 44 (n=192)	50.6% (n=172)	35.0% (n=20)	-15.6	.187
45 and Over (n=45)	28.2% (n=39)	16.7% (n=6)	-11.5	.552

\* statistically significant,  $p \leq 0.05$ .



Women may, again, represent a considerable portion of the differences observed with regard to age. Women who were incarcerated when they were less than 25 years old had much lower recidivism rates in the GED group. This was also true for women who were incarcerated when they were between the ages of 30 and 34. Male offenders did not have a statistically significant difference at any age.

Age at Release: Similar to results observed for Age at Incarceration, the reduced recidivism observed for the GED group was significant for those under 25 years old at release and for those ages 30-34 at release. In fact, the differences were larger, 19.2 and 20.9 points, respectively. For offenders age 35-44 at release, a significant difference was also observed with a slightly smaller margin of 16.2 points.

Controlling for Age at Release	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
24 and Under (n=168)	73.5% (n=98)	54.3% (n=70)	-19.2	.010*
25 – 29 (n=201)	55.0% (n=140)	55.7% (n=61)	+7	.923
30 – 34 (n=203)	65.3% (n=167)	44.4% (n=36)	-20.9	.020*
35 – 44 (n=264)	55.2% (n=223)	39.0% (n=41)	-16.2	.057**
45 and Over (n=76)	29.7% (n=64)	16.7% (n=12)	-13.0	.355

\* statistically significant,  $p \leq 0.05$ .

\*\* statistically significant,  $p \leq 0.10$ .

Females appeared to dominate the statistical differences for Age at Release as well. Men did not demonstrate statistically significant differences between the Control and GED groups in any Age at Release category, while women in the comparison groups demonstrated wide differences that supported the benefits of a GED for all age categories.

Marital Status: Marital status had a significant impact on recidivism differences for the Control and GED group for offenders who were Single or Widowed, as were the majority of the sample. An 8-point differential was observed in the GED group, illustrating the benefit of obtaining a GED.

Controlling for Marital Status*	Control Group Recidivism Rate	GED Group Recidivism Rate*	Rate Difference (GED-Control)	Chi-Square
Single or Widowed (n=688)	59.2% (n=515)	50.9% (n=173)	-8.3	.055**
Married or Live-In Partner (n=109)	55.6% (n=90)	36.8% (n=19)	-18.8	.138
Divorced or Separated (n=114)	51.7% (n=87)	40.7% (n=27)	-11.0	.319

\*\* statistically significant,  $p \leq 0.10$ .

\* One inmate in the GED group had missing information.

When analyzing this factor by gender, women appeared to dominate statistical significance. For women who were Single/Widowed and Divorced/Separated, wide differences in the Control and GED groups were observed. For women in these categories, those who earned their GEDs had an overall recidivism rate 30 or more percentage points below that of the Control group.

Original Offense Category: The difference in recidivism rates between the GED and Control groups was not statistically significant in most offense categories. The only offense category showing the difference as significant was for Person offenses.

Controlling for Original Offense	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
Person (n=343)	62.0% (n=237)	49.1% (n=106)	-12.9*	.025
Sex (n=70)	41.0% (n=39)	29.0% (n=31)	-12.0	.298
Property (n=156)	68.4% (n=133)	69.6% (n=23)	+1.2	.913
Drug (n=225)	47.5% (n=181)	47.7% (n=44)	+0.2	.980
Other (n=118)	58.8% (n=102)	50.0% (n=16)	-8.8	.507

\* statistically significant,  $p \leq 0.05$ .

Women showed the greatest statistical difference for those who had committed Person offenses. These women, if they did not obtain a GED, had a recidivism rate of 69.8% and only a 10.0% recidivism rate if they obtained their GED.

Classification to Lower Custody: This variable indicated whether an offender had received a transfer to a lower security facility during their incarceration. Though it did not mean that they necessarily released from a lower security facility, it acknowledged that an inmate was moved to a lower security facility that endorsed their progress and suitability for such placement at one time. Another factor in movement to lower security is the amount of sentence served by the inmate. No significant difference was found for this variable.

Controlling for Move to Lower Security	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
No Lower Move (n=512)	60.5% (n=413)	50.5% (n=99)	-10	.069
At Least One Lower Move (n=400)	53.8% (n=279)	46.3% (n=121)	-7.5	.169

If female offenders are separated out, women who never moved to lower security appeared to benefit greatly from obtaining their GED. It should be noted, however, that there are far less security level options for women, which may account for the greater number of women without any lower moves. The female Control group's recidivism rate stood at 63.0%, while those who obtained their GED had a rate of only 23.1%, producing a statistically significant difference of 39.9 percentage points.

Security Level of Release Facility: Data by security level yielded skewed results. Offenders released from Medium security had an extraordinarily large difference in the rates of recidivism for both men and women. The Medium Security Control group had a rate of almost 63%. The GED group's rate was just under 40%. The 23-point difference between the two was statistically significant. The largest pool of released offenders came from Medium security institutions, both in the study and for the Massachusetts Department of Correction as a whole. Oddly, the GED group in both the Maximum and Lower security facilities had higher recidivism rates. These results did not approach statistical significance, however.

Controlling for Security Level of Release Facility	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
Maximum (n=54)	58.3% (n=36)	66.7% (n=18)	+8.4	.554
Medium (n=520)	62.8% (n=427)	39.8% (n=93)	-23.0	.000*
Lower (n=338)	48.5% (n=229)	52.3% (n=109)	+3.8	.511

\* statistically significant,  $p \leq 0.05$ .

Both men and women in the GED group demonstrated statistically significant reductions of recidivism for those released from Medium security. Women who obtained their GED had a recidivism rate 32.4 points below the Control group, and men who obtained their GED had a rate 22.4 points below the Control group.

First Release: DOC analysis of the 1998 release cohort showed that offenders released for the first time on a given sentence had a far less likelihood of recidivating than an offender who was returned to prison to continue serving a sentence following a parole or probation violation. For this reason, the first release factor was controlled. The GED group for First Release proved to have a lower recidivism rate, with a difference of 7 points. There was no statistically significant difference between the GED and Control groups for the Not a First Release category.

Controlling for First Release	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
First Release (n=689)	53.4% (n=491)	46.0% (n=198)	-7.4	.079**
Not a First Release (n=223)	68.7% (n=201)	68.2% (n=22)	-0.5	.964

\*\* statistically significant,  $p \leq 0.10$ .

When examining only women on their First Release, the benefits of obtaining a GED remain statistically significant.

Release Type: There are two types of release categories: (1) Parole - those whose cases were heard before the Massachusetts Parole Board and who received a favorable parole vote and released to supervised parole and (2) Expiration of Sentence - those who served their

maximum term minus any earned or statutory good time. Offenders who obtained their GED appeared to re-offend less often despite either release type. The difference was large, 11.2 points significant for the Expiration of Sentence releases only, however.

Controlling for Release Type	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
Paroled (n=289)	61.4% (n=202)	52.9% (n=87)	-8.5	.177
Expiration of Sentence (n=623)	56.3% (n=490)	45.1% (n=133)	-11.2	.021*

\* statistically significant,  $p \leq 0.05$ .

When disaggregated by gender, women who got their GED remain with statistically significant gains for those released by Expiration of Sentence.

Time Served: The analysis of time served was separated by gender since women offenders released from the DOC mostly consisted of county sentences which were quite short, most often less than one year. This gives women a distinct challenge for even accessing GED programming and especially in having enough time to achieve a GED prior to release.

For women who served six months to one year and earned their GED, statistically their rates of recidivism were reduced when compared to the Control group. Although the difference in rates for this group was tremendous, nearly 48 points, caution must be used when interpreting these results due to the small sample size. Though the recidivism rate difference for women who served 6 months to < 1 year was statistically significant, there were only seven women in this category who earned their GED and 45 women for the control group. In this case, the rate difference is decisive, 47.9 points, but there are six times more women in the Control group than the GED group. In each sentence length category for females, concern existed over the relatively small counts, and the findings should be viewed with caution. The differences are worth noting, however, and warrant further research with a larger sample size.

Controlling for Time Served, Females	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
< 6 Months (n=155)	63.0% (n=154)	100% (n=1)	+37.0 <sup>a</sup>	.444
6 Mos. to < 1 Yr (n=52)	62.2% (n=45)	14.3% (n=7)	-47.9	.018*
1 to < 3 Yrs (n=24)	46.7% (n=15)	44.4% (n=9)	-2.3	.916
3 Yrs or More (n=19)	11.1% (n=9)	10.0% (n=10)	-1.1	.937

\* statistically significant,  $p \leq 0.05$ .

<sup>a</sup> Note that only one woman obtained her GED and served 6 months or less. This single case was a recidivist.

For men, the impact of obtaining a GED did not show a significant difference for any time served categories except for those who served 5 to < 7 years. This difference was large at 17 points.

Controlling for Time Served, Males	Control Group Recidivism Rate	GED Group Recidivism Rate	Rate Difference (GED-Control)	Chi-Square
< 1 Year (n=132)	60.5% (n=114)	61.1% (n=18)	+0.6	.962
1 to < 3 Yrs (n=188)	66.9% (n=136)	67.3% (n=52)	+0.4	.959
3 to < 5 Yrs (n=137)	58.8% (n=85)	59.6% (n=52)	+0.8	.927
5 to < 7 Yrs (n=114)	49.4% (n=77)	32.4% (n=37)	-17.0	.088**
7 Yrs or More (n=91)	33.3% (n=57)	29.4% (n=34)	-3.9	.698

\*\* statistically significant,  $p \leq 0.10$ .

Last Grade Completed: The offender's Last Grade Completed (LGC) offered a look at each offender's starting place in regards to GED testing preparation. Significant differences were found for offenders whose LGC were between the 7<sup>th</sup> and 9<sup>th</sup> grades and for those who completed the 11<sup>th</sup> grade. These differences were between 14 and 16 points in reducing recidivism rates for the GED group. It should also be noted that the highest percentage of inmates in the Control group had LGC of 7<sup>th</sup> – 9<sup>th</sup> grade, while the GED group had the highest percentage of inmates with LGC of 10<sup>th</sup> grade.

Controlling for Last Grade Completed**	Control Group Recidivism Rate	GED Group Recidivism Rate**	Rate Difference (GED-Control)	Chi-Square
≤6 <sup>th</sup> Grade (n=51)	42.6% (n=47)	25.0% (n=4)	-17.6	.493
7 <sup>th</sup> – 9 <sup>th</sup> Grade (n=331)	56.1% (n=271)	41.7% (n=60)	-14.4	.043*
10 <sup>th</sup> Grade (n=257)	63.2% (n=182)	58.7% (n=75)	-4.5	.498
11 <sup>th</sup> Grade (n=259)	58.9% (n=192)	43.3% (n=67)	-15.6	.027*

\* statistically significant,  $p \leq 0.05$ .

\*\*14 inmates in the GED group had missing information

Some additional investigation was conducted for this study to examine whether obtaining a GED might also lengthen the time between release and date of recidivism for those with a GED. The findings for this component of the study were inconclusive yet still suggestive that obtaining a GED may have a beneficial effect. For this analysis component, any offenders who were not reconvicted or re-incarcerated during the three-year follow-up period were excluded, focusing only on offenders who recidivated.

First, offenders were re-incarcerated or reconvicted in the first, second, or third years after release were examined. While the findings were not statistically significant, the GED group was more heavily proportioned to recidivate in the third year and had a smaller proportion recidivating in the first year.

**Summary Table of Significant Findings, DOC GED and Recidivism Study**

	Significant Category	Rate Difference (GED Control)	Significance Level .10	Significance Level .05
<b>Gender</b>	Female	- 33.7		√
<b>Race/Ethnicity</b>	Hispanic	- 20.2		√
<b>Marital Status</b>	Single or Widowed	- 8.3	√	
<b>Last Grade Completed</b>	7 <sup>th</sup> – 9 <sup>th</sup> Grade	- 14.4		√
	11 <sup>th</sup> Grade	- 15.6		√
<b>Age At Incarceration</b>	24 Yrs or Less	- 13.0		√
	30 - 34 Yrs	- 28.6		√
<b>Age At Release</b>	24 Yrs or Less	- 19.2		√
	30 - 34 Yrs	- 20.9		√
	35 - 44 Yrs	- 16.2	√	
<b>Governing Offense Category</b>	Person	- 12.9		√
<b>Time Served, Females</b>	6 Months to < 1 Yr	- 47.9		√
<b>Time Served, Males</b>	5 to < 7 Yrs	- 17.0	√	
<b>First Release</b>	First Release	- 7.4	√	
<b>Release Type</b>	Expiration of Sentence	-11.2		√
<b>Security Level of Release Facility</b>	Medium	-23.0		√

## Discussion

In this GED and recidivism analysis on the 1998 releases from the Massachusetts Department of Correction, the purpose of the study was to determine if and how the rates of recidivism differed from inmates who obtained their GED while incarcerated to those who did not. The study was created to determine how race, gender, age at incarceration, age at release, marital status, original offense, classification to lower custody, security levels, first release, release type, time served, and last grade completed impacted recidivism rates for inmates who earned a GED in comparison to inmates who had not. Based on the literature, it was hypothesized that among inmates who reported having less than a 12<sup>th</sup> grade education upon commitment to the Massachusetts Department of Correction, those who received their GED during their incarceration period associated with a 1998 release would have lower rates of recidivism than those who did not receive their GED in prison and also released in 1998. It was also hypothesized that offenders who had previously violated their parole or probation would experience reconviction or re-incarceration more often than offenders being released for the first time on a given sentence.

With respect to differing rates of recidivism between the GED group and the Control group, the results of this study found that the inmates who earned their GED during their incarceration associated with the 1998 release had lower rates of recidivism than the inmates who did not earn their GED while incarcerated, thus accepting the research hypothesis. This finding coincides with the literature in that correctional education and GED obtainment assists in lowering recidivism. In addition to this significant finding, other variables also had compelling results.

Inmate gender was analyzed in this study and produced findings suggesting that women may be driving some of the significant differences found among several controlling factors. If this is true, then educational programs for women may be an important target for increased Department resources. If the Department pursues a strategy to boost the number of women participating in GED programs, areas to examine would include the process of referral and placement and how programs are tailored to fit women's shorter sentences. One way to expand programs and capitalize on in-reach opportunities may be to connect women with GED programs in their communities where they can continue progress upon release.

Inmate race/ethnicity was also examined and appears to be a significant factor in the GED group in regards to recidivism. Out of the four categories for race/ethnicity that were analyzed (Caucasian, African American, Hispanic, and Other), only the Hispanic population in the GED group had statistically significant reduced rates of recidivism. As such, strategizing to increase the number of Hispanic GED graduates may be fruitful. As of January 1<sup>st</sup> 2005, Hispanic offenders<sup>48</sup> comprised 27 percent of the incarcerated population. In addition, they made up 21 percent of inmates released into the community.<sup>49</sup> As indicated by these numbers, this is a significant population to reach. Hispanic offenders who obtained

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<sup>48</sup> In 2000, the Department of Correction implemented expanded race/ethnic definitions which are now currently in use. However, since this report examines the recidivism trends of inmates released in 1998, the expanded definitions are not used in this report. .

<sup>49</sup> Current Hispanic population figures were obtained from the Inmate Statistics Report for January 1, 2005, and release figures obtained from the 2004 release data file of releases to the street.

their GED in prison prior to release in 1998 were underrepresented among offenders obtaining their GED. Though Hispanics made up 28 percent of the 912 offenders in this study who entered prison with less than a 12<sup>th</sup> grade education, they represented only 19 percent of the group who obtained their GED. Given the more than 20 point reduction in recidivism of Hispanic offenders who obtained their GED, an increase of participation for this group could produce a large reduction in the number of offenders re-offending in Massachusetts. Reducing language barriers through bilingual education staff and creating effective outreach may begin to address these issues.

Age is known to generally impact recidivism in that offenders tend to ‘age out of crime’ and younger offenders have presented some of the greatest challenges to crime reduction. Among young offenders, this study’s results suggest that obtaining a GED makes a positive difference. Offenders less than 25 years of age at incarceration who obtained their GED in prison were associated with a reduction in recidivism of 13 percentage points. Similarly, offenders less than 25 years old at release who obtained their GED had a recidivism rate 19.2 points lower than those who did not. These results strengthen the argument for intervening early in the criminal career of offenders by ensuring that they have the most basic education to spur continuation in other programs: education and vocational training either throughout their prison sentences or upon release into the community. In 2004, 28 percent of those released to the community were less than 25 years old at incarceration, another substantial segment of the release population.

For offenders in the study who were age 30-44 at release, significant reductions in recidivism rates were also observed for those who obtained their GED in prison: a 20.9 point decline in recidivism rates for offenders age 30-34 years at release, and a 16.2 point decline for those age 35-44 at release. Offenders in these age groups made up more than 40 percent of releases to the street during 2004 (43.6%). The significant and large reduction in recidivism for this group, as well as the size of this population amongst released offenders, is telling of the impact that education can have on crime, and the utility of basic education even with offenders in their 30’s and 40’s.

Although it was not discussed in the research, this study found that marital status had a statistically significant impact on recidivism rates, especially for women. Inmates who were single or widowed showed a significant reduction in recidivism if they earned their GED while incarcerated. Women showed additional significance in the status of divorced/separated. Because there was no previous research on this variable, it is difficult to speculate as to why this relationship between marital status, GED obtainment, and recidivism rates is occurring.

The original offense of inmates also had a statistically significant result. Recidivism was significantly reduced for GED earners incarcerated for a Person offense (and subsequently released from prison). The offense type was also noteworthy in the population of the GED group. This group had a statistically significant percentage of inmates who had Person and Sex offenses than the Control group. One could assume that these offenders were also serving longer sentences (5 – 7 years), which, for the variable of Time Served, was the only length that had significant reductions in recidivism.



The Massachusetts Department of Correction defines violent offenses as those committed against a person in addition to sex offenses. The vast majority of violent offenses are committed against persons. Public safety concerns in the community would also place a premium on reducing these types of offenses. Thirty-four percent of offenders released by the Massachusetts Department of Correction in 1998 had committed person offenses. Of all 1998 releases who were re-incarcerated, offenders originally committing person crimes also committed more than half of the new person offenses.

This study observed a 12.9 point reduction in recidivism for person offenders who obtained a GED, which suggests that if an increased number of more serious offenders entered education programs in medium and maximum security level facilities, larger recidivism reductions may be achieved. Offenders in medium security facilities also showed substantial reductions in recidivism rates (23 percentage points) when they obtained their GED.

Inmates who were released for the first time on a sentence (not first prison release ever) had statistically significant lower rates of recidivism for those who earned a GED while incarcerated. This finding supports the second research hypothesis that offenders who had previously violated their parole or probation would experience reconviction or re-incarceration more often than offenders being released for the first time on a given sentence.

Inmates who were released via expiration of sentence also resulted in statistically significant reduced recidivism for the GED group. As stated previously, offenders who were released via parole were being supervised regularly, and if they violated any condition of their parole terms, reconviction or re-incarceration was a likely outcome, increasing their likelihood of recidivism. It appears that education had a large impact on recidivism regardless of this factor, however, considering that offenders from the GED group who were released via parole still had much lower rates of recidivism when compared to the Control group.

Although the results were varied within the security level variable, inmates who earned a GED who were also released from medium security facilities had significantly lower rates of recidivism than the Control group. Future research is also needed in this area to determine why medium security level facilities have lower rates than maximum or minimum/pre-release security facilities. Reasoning could include availability of GED programs in these facilities, longer sentences for inmates in maximum and medium security facilities allowing for more time to complete a GED program, and differing population characteristics in the separate security levels.

For the last grade completed, although the results were significant, they were not necessarily surprising. The greatest reduction of recidivism was found for those who completed between the 7<sup>th</sup> and 9<sup>th</sup> grade, and those who completed the 10<sup>th</sup> grade. For those that completed between the 7<sup>th</sup> and 9<sup>th</sup> grade, it can be assumed that these offenders were serving longer sentences as it would take considerable time to complete all the work necessary to earn a GED during that incarceration period. In terms of recidivism rates, the amount of work that the inmate dedicated to earning their GED may have influenced them to avoid illegal involvement once they were released back to the community. For offenders who entered prison with a 10<sup>th</sup> grade level of education, they have had more motivation to earn their GED seeing that they didn't have far to go to meet the GED requirements.

Throughout the course of this study, several steps were taken to increase the internal validity. A major strength of this research was finding significant differences between the GED and Control group as it highlighted the unique characteristic about the inmates who enrolled and graduated from the GED program. In theory, the combination of cluster and convenience sampling methods should have provided two groups with equivalent characteristics, except for GED obtainment. The two groups were remarkably different, however, as shown statistically in Sample Characteristics. This “factor x” (which may be the compilation of all the differences in all the variables) may be so influential to begin with that it lends itself more to the reduction of recidivism than any single variable examined. GED obtainment reduced recidivism, regardless of the substantial differences between the GED and Control group, and further research is needed to fully explain why.

In addition, the ability to use quantitative data in this study, such as the actual number of recidivists, strengthened the face validity for this study. There was very little use of interpretative or quantitative data with the exception of inmates self-reporting the last grade of school completed, which, as previously explained, was never found to be inaccurate.

Throughout the course of this study, several factors arose that created weakness in the internal and external validity of the results. There was a selection bias that affected the internal validity creating a weakness in the study. For the purpose of this study, inmates were selected if they entered prison with less than a 12<sup>th</sup> grade education, if they had been released by Expiration of Sentence or Parole in 1998, and if they earned their GED during their incarceration period associated with the 1998 release. Inmates were excluded from the GED group if they failed the test or did not complete the program. Inmates were also excluded from the GED group if they had obtained a GED in a prior incarceration. By eliminating these cases, this study does not give a complete representation of the impact that correctional education has on recidivism.

What we observed in the 1998 release population for Massachusetts mirrors findings across correctional education literature. Obtaining a GED in prison can substantially reduce offender likelihood of re-incarceration or reconviction.

We found a 17 percent reduction in the recidivism rates of offenders who obtained their GED versus those who did not with similar education backgrounds. Coupled with the substantial and significant cost-savings associated with reduced recidivism, the results present a compelling argument for investing in GED programs in prison. In 2004, there were 2,434 offenders released from Massachusetts state prisons to local communities. The Department of Correction’s mission is to provide safe and secure housing, but another important aspect is to prepare offenders for their ultimate release into society and provide tools and skills for their successful reintegration into society.

The reductions reported in this study touch some of the most prevalent offender population segments housed in the Massachusetts Department of Correction and releasing to Massachusetts communities. Education research, among the public and prison populations, has demonstrated the importance of GED attainment and the crime, employment, and income impacts it can have. For this reason, and because this study revealed the persistence of GED impact across many of the Department of Correction’s major population segments, the potential role of GED in fulfilling the Department’s recidivism reduction mission can

scarcely be overstated. Future research is needed in several areas, including separate studies for males and females, and the ability to have equivalent sample groups, both in size and composition.

This research leads to conclusion that correctional education, particularly GED programs, has a marked impact on the core goal of many state prison systems, to reduce recidivism. The nation's prisoners have a wide gap to cover if they are to bridge the difference between their current educational attainment and existing levels in the general public. Concrete benefits result from correctional education and can help keep offenders safely in the community, providing a better standard of living for themselves and their families. The GED is an important basic credential for this purpose. If its actual cost savings approaches estimations, these programs, at least, pay for themselves. Education programs can certainly appeal to general correctional priorities by reducing inmate idleness, reinforcing positive behavior, and serving as a social normative factor in institutions. All these results benefit staff, offenders, and the community. The evidence of GED attainment reducing recidivism continues to grow.