

# **A Review of the Literature on Higher Education and Contemplative Interventions in Prisons**

**The Chillon Project  
The Center for Compassion, Integrity and Secular Ethics  
at Life University**

Mass incarceration is one of the most pressing social issues in the United States. Imprisoning more of its own citizens than any other country in the world (both per capita and in absolute number), recent estimates pose there are nearly 1.6 million, disproportionately poor, undereducated, and minority inmates in our state and federal prisons (Carson, 2014; Davis, Bozick, Steele, Saunders, & Miles, 2013). This massive population has exploded primarily from “prison works” and “tough on crime” policies over recent decades, which abetted a 500% increase in prison population since 1972 (King, Mauer, & Young, 2005). However, with an \$80 billion annual cost to the nation (Kearney, Harris, Jácome, & Parker, 2014) and a recidivism rates of up to 70% (Durose, Cooper, & Snyder, 2014; but see below for detail), the value of solutions and improvements in these systems has been pushed to center stage, as prison reform has become a hot issue spanning both sides of the political spectrum.

## **Recidivism**

Recidivism is defined differently in many studies, “including reoffending, rearrest, reconviction, reincarceration, technical parole violation, and successful completion of parole.” An important analysis published by the RAND corporation reviewing the literature on higher education in prisons noted that in “the pool of 50 studies that had recidivism outcomes, the majority used reincarceration as the outcome measure (n = 34).” Within the operational definition of recidivism, the time period is vital for determining what is considered recidivism in each study. The RAND document notes that “The most frequently used time periods in the 50 eligible studies were one year (n = 13) and three years (n = 10).” Furthermore, “The majority of studies report that the odds of recidivism are lower in the treatment group. The odds ratio [for the more rigorous group of research examined the Level 4 and Level 5 studies] is 0.61 (p < 0.05, 95 percent confidence interval = 0.44 to 0.85), indicating that the odds of recidivating among treatment group members in these experimental studies are 61 percent of the odds of recidivating among comparison group members.”

In a RAND meta-analysis, researchers found 58 eligible studies from 1112 documents, among which “50 studies used recidivism as an outcome variable, 18 studies used employment as an outcome variable, and four studies used achievement test scores as an outcome variable.” The results showed that “the majority of studies are of recidivism and employment and the majority of effect sizes come from Level 2 and Level 3 studies on the Maryland SMS and Do Not Meet Standards according to the WWC rating scheme—suggesting that, on average, the field of correctional education research is limited in its ability to assess whether correctional programs yield a causal effect on recidivism and employment”. But in this study the researchers

focus solely on the studies that received effect sizes rating of Level 4 or Level 5, a more rigorous approach.

Several studies suggest that receiving a post-secondary education in prison is significantly associated with lower recidivism and post-release employment (Borden, Richardson, & Meyers, 2012; Steurer et al., 2010; Chappell, 2004; Davis, 2013; Duwe & Clark, 2014; Steurer et al., 2001; Stevens & Ward, 1997; Vacca, 2004)--even in comparison to GED and vocational training (Batiuk, Lahm, McKeever, Wilcox & Wilcox, 2005). Although analyses have demonstrated that post-secondary prisoner education reduces recidivism and increases employment, in 1994, the signing of the Violent Crime Control and Law Enforcement Act saw the shutdown of over 350 college prison programs when prisoners lost access to Pell Grants.(Duwe & Clark, 2014; Davis, 2013; Chappell, 2004; Fine, 2001; Steurer et al., 2001; Stevens & Ward, 1997). Duwe & Clark (2014) found that a post secondary degree increased employment chances by 11.5% over prisoners that only possessed a secondary education. A higher level education had other advantages, as rearrest rates decreased by 4.4%, reconviction rates decrease by 3.3%, reincarceration rates decreased by 2.7%, and revocation rates decreased by 6.8%. Davis (2013) had similar findings, where a meta analysis of 18 studies over 32 years revealed that a post-secondary education increased employment rates by 13%. This study further proposes that such educational efforts could save the state \$970,000 for every educated prisoner, as the proposed range of prisoner education from \$1,400-1,744 is much lower than the projected 2.07 to 2.28 million dollar range for reincarceration.

In a quasi-experimental design study conducted by Steuer et al (2001), the OCE/CEA Recidivism Study investigated the relationship between correctional education, recidivism and employment. The study looked at two main groups; a group of pre-released incarcerated men

from (a small prison) Maryland, (a medium prison) Minnesota, and (a large prison) Ohio who had participated in correctional education (N=1373) and a matched comparison group (N=1797). The data was collected with measures through a self-report Pre-Release Survey, the Educational/Institutional Data Collection Form, the Parole/Release Officer Survey, Criminal History Data, and Employment Data. The two groups were recorded using the given measures for a period of three years after release from incarceration. “In every category (re-arrest, re-conviction, re-incarceration) for every state, correctional education participants had lower recidivism rates in comparison to the matched control group.” The difference in rate of employment between the education participants and the non-participants was not statistically significant. Nevertheless, “The wages of the participants reported to the state labor departments each year (total of 3 years) were higher for the education participants compared to the non-participants. In year one the difference in wages was statistically significant.” Steurer et al. (2001) also found that upon the completion of the program, rearrest rates were 11% lower, reconviction rates were 8% lower, and recidivism rates were 10% lower in the educated groups in comparison to the uneducated participant groups across all states.

With this and other examples, society’s aversion to fund the education of incarcerated people, or “principle of least eligibility” (Petersilia, 2003), can start to be reversed. Improvement in this area could help correct inappropriate stigmas about the prison system, as well as provide a framework for where to allocate funds in the future. Bazos & Hausman (2004) analysed the comparison between the cost per crime prevented by correctional education to the cost per crime prevented through incarceration. Evidence showed that, for every one million dollars spent on correctional education, about 600 crimes are prevented, whereas for every one million dollars invested in incarceration, only about 350 crimes are prevented. Such findings showed investing

in education prevented reincarceration for 26 prisoners, and saved the state and taxpayers 20,000 dollars (Bazos & Hausman, 2004). They wrote, “What we found is that we would have needed to discount the effect size by a total of 72% in order for the costs of each crime prevention method to break even. Another way to look at this is that correctional education would only have to be responsible for a 6% reduction in recidivism for its costs to break even with those of incarceration. Research shows that the true effect of correctional education on reductions in recidivism is most likely somewhere between ten and twenty percent.”

### **Financial Effect**

In an extensive report using a “public-engagement and decision making tool to assess policy proposals and make recommendations to improve health outcomes that are associated with the proposals,” Human Impact Assessment (HIA) which employs methods of “extensive reviews of scientific literature and grey literature, data collection from existing resources, focus groups, and subject matter expert interviews” found that “when incarcerated people participate in correctional education, it has the potential to reduce crimes. Once released, formerly incarcerated people are about 10-20% less likely to re-offend than those who do not participate in education programs. Between 2000-2005, New York State spent 36% more on higher education and saw a decrease of 19.5% in violent crime rates. A 5% increase in graduation rates resulted in an annual crime related savings of \$286,896,473 and an additional annual earnings of \$170,426,743.” In reference to another study by Davis et al. (2013) there is “strong quantitative evidence of the effectiveness of college programs in prison in reducing recidivism, which is defined as reincarceration (rather than reoffending, rearrest, or reconviction) within three years of release from prison.” Findings from this study that “pooled recidivism effects from 19 studies, estimate

that the odds of recidivating for those who took part in college education are 51% lower than the odds for those who did not participate in these programs.” HIA translates these odds to a more relevant figure, stating “participation in college education in prison would be expected to reduce three-year reincarceration rates by 16.1%.”

The value of investing in prisoner education appears to extend further than recidivism rate reduction. While prisoner education can lower crime and in turn lower the future cost of reincarceration and the amount of tax-dollars spent, the true aim of the Chillon Project turns away from rudimentary cost-benefit analysis to see how prisoner education, particularly an education in Positive Human Development and Social Change, can be implemented to benefit society’s most marginalized and disenfranchised population, so that they can become enabled to reach their full potential as engaged citizens.

This initiative follows the call of Dan A. Lewis (1990) who remarked that our usual framework for program evaluation sometimes overemphasizes statistically verifiable outcomes instead of actual, demonstrated life improvement. That is why he claims that “researchers should study lives, placing programs in the background and putting the person in the foreground.” For that reason, this project is about ‘prisoner’ education, not ‘prison’ education. Maruna (2006) also voiced this opinion in believing that instead of solely focusing on “what works” there needs to be more of a focus of *why* and *how* people are influenced by certain programmes and how this can lead to a personal transformation. The person-centered approach assuages prisoners and provides an alternative to the deficit-model understanding of the prisoner needing to be repaired by professionals. Furthermore, these strengths-based theories or prisoner rehabilitation focus on the use of social change as a vehicle to do good and as a therapeutic enterprise. Such programs enable prisoners to contribute to the community at large via leadership roles, community

involvement and reconciliation. This is the cornerstone of the PHDSC degree, growing and teaching students to become social change agents within their world.

For example, Burnett and Maruna (2006) conducted a quasi-experimental study where they provided licensed prison workers instead of standard volunteers to the understaffed CAB, a service which provided advice on electronic products over the telephone. Each prisoner volunteered for an average of 6 months to the bureau and received minimal training to appropriately handle the CAB's computer system. The total calls and successful interactions with prisoner and non-prisoner volunteers were monitored for this period, and the results found a 134% increase in new clients, an 890% decrease in dropped calls, and a 23% increase in assisted clients over the non-prisoner workers. All 63 participant volunteers also received positive reviews from other volunteers and their supervisors, which further reinforced positive psychological improvement in the lives of the prisoners. These were supplemented by double blind interviews with individuals that had called the bureau, where individuals preferred the CAB service more when interacting with prisoners than non-prisoners. This combination of a social, educational, and positive environment brought about positive improvements. In a similar vein, secondary education could offer these same services coupled with even greater interactive and didactic opportunities, which might lead to even greater improvements in the lives of prisoners. Dowden and Andrews (1999) found similarly positive responses from prisoners who received human service interventions and were allowed involvement in justice systems. In a meta-analysis across 26 studies, median effect sizes (+0.18;k= 35;SD=.25) was correlated with a significant decrease in recidivism from 43% to 57% (P<.04). A similar effect size was found for exclusively female prisoners with a mean effect size of +.17(SD=.24).

## Prosocial Effects

Providing education to prisoners may be a powerful way to stave off potentially debilitating psychological effects that sometimes accompany prison life (Costello & Warner, 2008). In addition to working in conjunction with the current prison system to equip incarcerated persons with employable, human capital (Harper & Chitty, 2005), higher education opportunities can empower incarcerated individuals-- particularly in conjunction with contemplative and resiliency training and practice--with hope, forgiveness, courageous compassion, self-worth and capability to move forward on a path of dignity and engaged citizenship. Costello (2014) argues that when incarcerated persons are given the opportunity to work towards an education to better their post-release station, many will rise to the occasion through the motivated feeling that they are respected and valued as citizens who can return as redeemable members of society. Costello places special emphasis on citizen education, much like the *Positive Human Development and Social Change* program, which not only helps facilitate the acquisition of new knowledge and credentials, but also inculcates new sense of values and views on the self and world through critical thinking, reflection, and metacognition.

As evidence, past prisoner education research has charted how individuals have been able to reshape their identities and behaviors through education by feeling smarter, more self-efficacious, taking responsibility for their former actions, wanting to give back to society, and actual civic engagement (Behan, 2008; Behan 2014). These sentiments are echoed by a study conducted by Behan (2014) in Dublin, Ireland where 50 incarcerated men were interviewed using open-ended questions, allowing the participants the ability to explain their motivation/s for attending education while in prison or the reason/s for not doing so. She found that while the largest group of incarcerated participants (19 respondents) undertake an education in prison to



get a second chance at schooling and to prepare for post-release employment, 13 respondents reported being motivated to pursue education to escape the boredom of prison life, 7 utilized the education in prison as a way to pass the time, and 6 students viewed prisoner education as an opportunity for critical thinking and personal transformation. But surprisingly enough, as the curriculum plays out, perspectives and motivations shifted from getting past boredom to post-release employment readiness, and from employment readiness to personal transformation. The results indicate that as the incarcerated students move through the curriculum, their motivation for attending education while in prison changes in the direction of person transformation.

Much qualitative research has been conducted on the personal stories of ex-convicts that details reformed identities (Hughes 2009; Leibrich, 1993; Maruna, 1997, 2001; Meisenhelder, 1982). In a study conducted by Hughes (2009), looking at self-reported interviews, incarcerated students illustrated that before partaking in prisoner education, prisoners self identified with far less self-worth than during and after prisoner education where the incarcerated students self-reported higher esteem and higher estimation of personal abilities. Leibrich (1993) studied 48 men and women who were former offenders of various ethnic backgrounds in New Zealand. Going straight was defined as “not having offended since the last conviction.” 37 of the 48 were classified as going straight, and of those 37, 35 women gave reasons for why they were “going straight”. Participants were interviewed on what persuaded and dissuaded them from reoffending. The cost benefit analysis of “going straight” was analyzed. “Shame was the most commonly mentioned dissuader” having 19 of the participants mention it; shame was classified into three subcategories: public humiliation, personal disgrace, and private remorse. A commonly mentioned persuader was, “the development of self respect”, and was described by 10 of the participants. Self respect, and the establishment of this value was largely defined as an

overcoming of the shame listed previously. A cost-benefit analysis was administered on committing and going straight. On committing crime, 35 of the 37 mentioned at least one cost, shame being the most mentioned cost (17 participants). 21 mentioned at least one benefit, and those who didn't mention a single benefit were those convicted of drunk driving. On going straight: "33 of the 37, thought that there was at least one benefit to going straight" and 12 out of 37 mentioned at least one cost, the most popular was "loss of goods and income." "Looking at the 36 people going straight as a group, there was a perceived net loss in offending and perceived net gain in stopping." As Maruna (1997, 2001) notes, there seems to be almost a 'prototypical reform story' of 'redemption rituals' whereby former prisoners devise autobiographical scripts that describes a narrative that reconciles a delinquent history for a generative future of reformed living. Often, criminal pasts are attributed to external factors like an adverse family or financial situation, but then when given a forgiving and generous opportunity to make a serious reform effort, such as an educational program, they take it upon themselves to make an engaged commitment to a new life. "This framework is coherent with criminal desistance and explanatory style in that criminal persistence is associated with internal-negative attributions (i.e. "I" am a "bad" person), but internal-positive attributions are highly correlated with desistance" (Maruna, 2004). Rumgay (2004) points out that, "certain observations of desistance from crime closely resemble accounts of withdrawal from drug-using careers in identifying crucial alterations in individuals' sense of self." She details how the risks of the crime and penal consequences attach themselves to the lifestyle that entails it, and when complemented by a, "reevaluation of the attractiveness of conventional life" it aids desistance.

One particularly compelling report of a college education program at a New York maximum security women's prison (Fine, 2001) was a qualitative analysis conducted over the

course of three years to empirically gainsay the repeal of federal funding for prisoner education. The study determined that the program not only significantly saved taxpayer money by reducing recidivism and by increasing employability, but also induced a safer and more positive prisoner environment for inmates and correctional officers. The program had positive effects on their children by returning mothers to families with new knowledge, skills, and values. In the study, Fine (2001) found that in a population of 2,305 incarcerated women, 274 entered an educational program and 2,031 did not, recidivism rates were 22.7 percent lower for the former group. This statistically significant change was generated prior to the women's possession of a full degree. Those in the study who only acquired some college credit (N=161) were equally unlikely to return to prison after the program.

Broken down more, interviews with the women, their children, correction officers, faculty, and community members revealed how the collegiate educational opportunity engendered powerful personal transformations, affording the women agency to move on from their "old selves" toward a "whole new world" of permanent criminal desistance. Even after recognizing the harsh circumstances that many had to grow up in such as, poverty, failing school systems, and violent or abusive homes, many of the women found their college experiences successfully broadened their knowledge, critical thinking, reflection, and inspired in them a new sense of worth and an ethic for personal and social responsibility (Fine, 2001).

In this study, women were able to come to terms with the crimes they committed and the damages caused to their victims, the victims' families, their own families and their community. They were inspired to take responsible charge of their lives. After promising to tutor other students, the women were largely for the first time given opportunities to be 'engaged citizens' by being placed in positions where they were able to give back. Many of the women talked about

how surprised they found themselves to be that they could actually be valued mentors and that they had something to contribute to others. Seeing themselves in a larger, social context, there were examples of some of the students later teaching and mentoring at other prisons and schools. Many felt a great debt to repay to their families and were eager to return to be nurturing mothers and valued role models for their children, which has substantial impact on the social, emotional, behavioral, and educational development of youth.

Winterfield (2009) examined the effectiveness of post secondary education amongst a prison population of 814 across 3 state prison programs. Focus group methodology was utilized through interviews to determine the effect of the postsecondary education in correctional settings.”Information gained from the focus group and stakeholder interview transcripts was examined by comparing responses within and across all sites, including all participant categories. The research team used this method to identify common themes and findings between the different prison settings.” The results showed postsecondary education programs in this study to significantly strengthen participating prisoner’s self-esteem, reduce disciplinary infractions of those prisoners, improve the relationships between prisoners and correctional officers, and foster positive peer role models (Winterfield, Coggeshal, Burke-Storer, Correa, & Tidd, 2009). In addition, the quantitative decrease in reincarceration, as defined by “a new arrest (Massachusetts and New Mexico) or as a return to prison (as in Indiana)” (3.4% in Indiana, 14.19% in Massachusetts and 24.61% decrease in New Mexico), inmates stories’ reflected further changes. These programs fostered a sense of gratitude amongst participants, increasing the quality of the relationships between inmates and staff, and decreasing inappropriate behavior out of a desire to remain in the program. A heightened awareness of the value of education and its perks tangibly improved the prison environment in a myriad of ways; thus this program offer both short and

long term benefits for all parties involved. “However, the results of the quantitative study provide mixed results in terms of postsecondary education’s impact on postrelease recidivism. In two states, postsecondary education was associated with a decrease in recidivism, while in a third it was associated with an increase. However, only one of these effects—a decrease in recidivism—was statistically significant.” “Further research should be conducted to determine more clearly the relationship between prisoner’s post-secondary education and recidivism. In addition, little is known about the relationship between type of degree or coursework subject matter and successful post- release employment outcomes.” (Winterfield, Coggeshal, Burke-Storer, Correa, & Tidd, 2009)

### **Gender Differences**

Under correctional program models, prisoner education is considered a ‘risk-reduction’ strategy in regard to aiming to reduce recidivism; however there are also programs categorized as ‘enhancement models’, which strive to promote prisoner well-being in areas such as mental health, substance use, self-esteem, and life skills (Ward & Stewart, 2003). The Risk-Needs-Responsivity model (Bonta & Andrews, 2007) is the most widely used model utilizing, “risk principles”, that states, “offender recidivism can be reduced if the level of the treatment services provided to the offender is proportional to the offender’s risk to reoffend,” used with its evidence-based backing (Andrews, Zinger, et al, 1990; Lowenkamp, Latessa, & Holsinger, 2006).

Even though these programs have been shown to be effective with women (Dowden & Andrews, 1999), there is much criticism from scholars over how this model is not sensitive

enough to tap the true risks and needs of female inmates, who have been largely underrepresented in the construction of assessment models and instruments (Salisbury & Van Voorhis, 2009). What has surfaced through the understudy of female prisoners is that they have much more prevalent histories of childhood physical and sexual abuse, depression and post-traumatic stress, dysfunctional relationships, and substance abuse in comparison to male prisoners (Bloom, Owen, & Covington, 2003; Salisbury & Van Voorhis, 2009; Simpson, Yahner, & Dugan, 2008).

Bloom et. al (2003) expounds upon the prevalence of these problems further by stating that 70% of women in prisons had a child before they were 18, and only 25% lived with their father. Women go the prison sick call 13-15% more than men during their sentences, 23% of all women in prisons are receiving medication for a psychological disorder, 80% of women in prisons have a substance abuse disorder, and 48% of women were reportedly on a substance when committing a crime (Bloom, Owen, & Covington, 2003).

There are also disparities in the types of offenses women commit, which tend to be more non-violent, drug offenses rather than violent offenses (Block, Blokland, van der Werff, van Os & Nieuwbeerta, 2010; Reisig, Holtfreter, & Morash, 2006). Findings from rehabilitative program assessments reveal that women suffer more than men from emotional and internalizing difficulties (Drapalski, Youman, Stuewig, & Tangney, 2009; Zlotnick et al., 2008) and tend to respond better to treatments that emphasize positive interrelationships and work on women's mental health, self-worth, and empowerment (Belknap & Holsinger, 2006; Calhoun, Messina, Cartier, & Torres, 2010; Covington & Bloom, 2007).

Although women only make up slightly more than 7% of the total prison population, they are one of the fastest growing prison demographics and thus warrant more focused attention (Fine

et al, 2001; Van Voorhis, Wright, Salisbury, Emily, & Bauman, 2010). With most of our understanding of prisoner rehab assessment coming from studies with male prisoners, research on incarcerated women offers a chance to advance our knowledge of effective correctional programming in higher education (Salisbury and Van Voorhis, 2013). With the distinctive features of the female prison population consisting of more social-emotional issues, it is plausible that the mindfulness, compassion, and resiliency practice component may be more effective for women, as has been shown in prison populations (Samuelson, Camrody, Kabat-Zinn, & Bratt, 2007).

When Salisbury and Van Voorhis (2009) investigated the factors that contributed to recidivism reduction for specific to women, while they found that similar to men, educational and employment capital were important, intimate and social relationships, mental illness, trauma, and substance use were also significant factors. Bearing these social-psychological issues, a more holistic approach to correctional education to also address issues of psychological well-being, self-efficacy, and social connectedness seems warranted. Incarcerated persons come to feel stripped of dignity and agency when they view their prison purely as a punishment facility (Bloom, 2006; Contardo a Tolbert, 2008; Walters, 2003); however, when given opportunities to make significant changes in their lives, such as the opportunity of education, they can become re-inspired to carry on a productive life (Maruna, 2001; Maruna, Lebel, Mitchell, & Naples, 2006). Maruna (2001) found that by coding the narratives of women (N=55) for factors that reflected a stable and internalized perception of negative events, desistance from criminal activity increased. Positive stable responses were more prevalent (M=4.70; SD=.77) in the desisting group than the persisting one ( M= 4.04; SD=1.11). Similarly, statements that reflected internal responsibility occurred more frequently in the desisting group (M=4.50; SD= .93) than the persisting one

(M=4.06; SD= 1.06). The correlation between enhanced self perception and improved behavior highlights the value of programs that emphasize moral and personal growth as much as behavioral change, as both areas appear to work towards similar goals.

This is also evident in the ability of prisoner education programs to raise self-esteem and self-efficacy (Parker, 1990; Roundtree, ds1982; Winterfield et al, 2009). An entrepreneurial prisoner education program was found to make great gains in cultivating personal-growth mindsets in the prisoners to help transform identities to more “positive possible selves” (Patzelt, Williams, Shephard, 2014), all while other investigations have noted prisoners proclivities toward service-learning (Frank, Omstead, Pigg, 2012). These points reflect a sprouting restorative initiative in prisoner corrections and resettlement, one that is built on strength-based approaches rather than risk-based, which recognizes the capacity of prisoners to do good (Burnett & Maruna, 2006). Taken together, this educational approach could well be the investment opportunity prisoners need to truly desist from crime and become real change agents in their own lives, the lives of their family, and community.

### **Contemplative Practices in Prison**

Though the pool of high quality studies is still growing, there is a burgeoning movement within prisons to utilize contemplative and mindfulness-based programs to address mental health, emotion regulation, substance use, and recidivism needs (Dunn, 2010; Himmelstein, 2010; Shonin et al, 2013). There is suitable evidence that contemplative approaches have been effective for improving symptoms directly associated with criminogenic risks like anger (Novaco, 2007), hostility (Perelman et al., 2012), criminal thinking (Hawkins, 2003), post-traumatic stress (Simpson et al, 2007), and drug and alcohol addiction (Zgierska, 2009; Bowen, 2006; Shonin,



Van Gordon, & Griffiths, 2013). Compassion training has been found to boost positive affect (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008; Klimecki, Leiberg, Lamm, & Singer, 2012), self-compassion (Neff, 2011), which is considered to be more steadfast than self-esteem, thoughts combating shame and self-criticism (Gilbert & Procter, 2006), social connectedness (Hutcherson, Seppala, & Gross, 2008), and compassionate responding to the needs of others (Condon, Desbordes, Miller, DeSteno, 2014).

Turning to empirical evidence for prison contemplative programs, in a large study of a Mindfulness-Based Stress Reduction (MBSR) program in prisons, significant improvements were found in self-reported mood, hostility, and self-esteem. (Samuelson, Camrody, Kabat-Zinn, & Bratt, 2007) These effects were found to be more prominent in women, where women experienced a 10.1% larger decrease in distress from men, from 38.5% to 28.4% for the respective groups. In a study looking at the effects of Vipassana meditation on substance use, Bowen et al(2006) found significantly lower alcohol, marijuana, and crack cocaine use along with self-reported increases in optimism and psychiatric symptoms even at three-months follow-up. Also, in a study of a mindfulness-based program at a women's correctional facility, women who had undergone mindfulness training had better sleep quality, anger and frustration management, and hope for the future (Sumter, Monk-Turner, & Turner, 2009). In a study comparing Acceptance and Commitment Therapy (ACT), a mindfulness-based intervention that also emphasizes pursuing values necessary for a meaningful life, and Cognitive Behavioral Therapy (CBT) as treatments for substance use disorder with incarcerated women, it was found that ACT was more effective than CBT in the long-term for improving drug use and mental health (Lanza, Garcia, Lamelas, & González Menéndez, 2014).

## **Prison Environment**

In terms of the prison environment and prison education, studies show the important role that education plays in creating a more engaged and civil community inside the prison walls. Because we know from previous research that prison higher education positively affects the surrounding environment of the prison (Human Impact Partners, 2015), it is important to look at the relationships that create this prison environment. Valuable information about the environment can be extracted from the relationship and perceptions of the Correctional Officers and the Inmates. For instance, Correctional Officers' perception of inmates is correlated with Correctional Officers' job stress, which can ultimately affect the overall prison environment (Misis, 2013). Correctional officers act as intermediates between other prison officers and inmates. Correctional officers help solve issues that arise within the inmate's life inside the prison. But due to overcrowding and limited resources in the prisons, the Correctional officers become the face of blame for many of these problems (Shannon, 2015). As the overcrowding in prisons rises, the need for more correctional staff also increases, creating a gap between the needs of the prisons and the reality that there are not enough staff members on board. This overarching strain, burdens the current correctional staff and is negatively reflective in the prison environment (Shannon, 2015). To combat these detrimental issues facing the overall prison environment, higher education in prisons can be one of the solutions. Postsecondary education within the prison improves the relationships and decreases conflicts within the prison environment, resulting in a safer and healthier overall prison environment (Human Impact Partners, 2015). Through the Health Impact Assessment, it was found that college education boosts self-respect and self esteem, and improves judgment, factors that lend itself to a safer and healthier environment inside and outside the prison walls (Human Impact Partners, 2015).

Further research should be investigated on the effects of higher education for prisoners and its relationships to correctional officers work stress and overall job satisfaction. Similarly, it would be important to research the effects or relationship that prison education might have on the perceptions of inmates and correctional officers to one another.

---

#### References

- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? a clinically relevant and psychologically informed meta-analysis. *Criminology*, 28(3), 369-404.
- Batiuk, M. E., Lahm, K. F., McKeever, M., Wilcox, N., & Wilcox, P. (2005). Disentangling the effects of correctional education Are current policies misguided? An event history analysis. *Criminal Justice*, 5(1), 55-74.
- Bazos, A., & Hausman, J. (2004). *Correctional education as a crime control program*. UCLA School of Public Policy and Social Research, Department of Policy Studies.
- Behan, C. (2008). From Outside to Inside: Pedagogy Behind Prison Walls. In R. Wright (Ed.), *In the Borderlands: Learning to Teach in Prisons and Alternative Settings* (2nd ed.). San Bernardino: California State University.
- Behan, C. (2014). Learning to escape: Prison education, rehabilitation and the potential for transformation. *Journal of Prison Education and Reentry*, 1(1), 20-31.
- Behan, C. (2007). *Vigilance, imagination, courage: The role of the teacher in prison education*. European Prison Education Association Conference. Bulgaria 2005 Conference Report.
- Belknap, J., & Holsinger, K. (2006). The gendered nature of risk factors for delinquency. *Feminist Criminology*, 1, 48-71.

- Blanchette, K., & Brown, S. L. (2006). *The assessment and treatment of women offenders: An integrative perspective*. John Wiley & Sons.
- Block, C. R., Blokland, A. A., van der Werff, C., van Os, R., & Nieuwbeerta, P. (2010). Long-term patterns of offending in women. *Feminist Criminology*, 5(1), 73-107.
- Bloom, B., Owen, B., & Covington, S. (2003). Gender-responsive strategies. *Research, practice and guiding principles for women offenders*, 31-48.
- Bloom, D. (2006). Employment focused programs for ex-prisoners: What have we learned, what are we learning, and where should we go from here? New York: National Poverty Center.
- Bonta, J., & Andrews, D. A. (2007). Risk-need-responsivity model for offender assessment and rehabilitation. *Rehabilitation*, 6, 1-22.
- Borden, C., Richardson, P., & Meyer, S. J. (2012). Establishing Successful Postsecondary Academic Programs; A Practical Guide. *Journal of Correctional Education*, 63(2), 6.
- Bowen, S., Witkiewitz, K., Dillworth, T. M., Chawla, N., Simpson, T. L., Ostafin, B. D., ... & Marlatt, G. A. (2006). Mindfulness meditation and substance use in an incarcerated population. *Psychology of addictive behaviors*, 20(3), 343.
- Burnett, R., & Maruna, S. (2006). The kindness of prisoners Strengths-based resettlement in theory and in action. *Criminology and Criminal Justice*, 6(1), 83-106.
- Calhoun, S., Messina, N., Cartier, J., & Torres, S. 2010. *Implementing Gender-Responsive Treatment for Women in Prison: Client and Staff Perspectives*. Federal Probation. December 2010 Newsletter.
- Carson, E.A. (2014). *Prisoners in 2013*, U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, BJS Bulletin NCJ 247282, 2011, revised 2014.
- Chappell, C. A. (2004). Post-secondary correctional education and recidivism: A meta-analysis of research conducted 1990-1999. *Journal of Correctional Education*, 148-169.
- Condon, P., Desbordes, G., Miller, W. B., & DeSteno, D. (2013). Meditation increases compassionate responses to suffering. *Psychological science*, 24(10), 2125-2127.

Costelloe, A. (2014). Learning for Liberation, Teaching for Transformation: Can Education in Prison Prepare Prisoners for Active Citizenship?. *Irish Journal of Applied Social Studies*, 14(1), 4.

Costelloe, A. & Warner, K. (2008). Beyond 'offending behaviour': The Wider perspectives of adult education and the European Prison Rules. In R. Wright (Ed.), *In the borderlands: Learning to teach in prisons and alternative settings* (3rd ed.). San Bernardino: California State University.

Covington, S. S., & Bloom, B. E. (2007). Gender responsive treatment and services in correctional settings. *Women & Therapy*, 29(3-4), 9-33.

Davis, L. M. (2013). *Evaluating the effectiveness of correctional education: A meta-analysis of programs that provide education to incarcerated adults*. Rand Corporation.

Dowden, C., & Andrews, D. A. (1999). What works for female offenders: A meta-analytic review. *Crime & Delinquency*, 45(4), 438-452.

Drapalski, A. L., Youman, K., Stuewig, J., & Tangney, J. (2009). Gender differences in jail inmates' symptoms of mental illness, treatment history and treatment seeking. *Criminal Behaviour and Mental Health*, 19(3), 193-206.

Durose, M. R., Cooper, A. D., & Snyder, H. N. (2014). *Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010*. Washington, DC: Bureau of Justice Statistics.

Duwe, G., & Clark, V. (2014). The effects of prison-based educational programming on recidivism and employment. *The Prison Journal*, 94(4), 454-478.

Fine, M., Torre, M. E., Boudin, K., Bowen, I., Clark, J., Hylton, D., Martinez, M.; Missy; Roberts, R.; Smart, P.; Upegui, D. (2001). *Changing Minds: The Impact of College in a Maximum-Security Prison. Effects on Women in Prison, the Prison Environment, Reincarceration Rates and Post-Release Outcomes*.

Frank, J. B., Omstead, J. A., & Pigg, S. A. (2012). The missing link: Service-learning as an essential tool for correctional education. *Journal of Correctional Education*, 63(1), 24.

Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of personality and social psychology*, 95(5),

1045.

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology and Psychotherapy*, 13(6), 353.

Hall, L. L. (2015). Correctional Education and Recidivism: Toward a Tool for Reduction. *Journal of Correctional Education*, 66(2), 4.

Harper, G. & Chitty, C. (Eds.) (2005). *The impact of corrections on re-offending: A review of 'what works'*. London: UK Home Office Research, Development and Statistics Directorate.

Hawkins, M. A. (2003). Effectiveness of the “Transcendental Meditation” program in criminal rehabilitation and substance abuse recovery: A review of the research. *Journal of Offender Rehabilitation*, 36, 47–65.

Himmelstein, S. (2010). Mindfulness-based substance abuse treatment for incarcerated youth: A mixed method pilot study. *Transpersonal Studies*.

Hughes, E. (2009). Thinking inside the box: prisoner education, learning identities and the possibilities for change. In B. Veysey, J. Christian & D. Maritnez (Eds.), *How Offenders Transform Their Lives*. Cullompton: Willan.

Human Impact Partners. (2015). *Turning on the tap: how returning access to tuition assistance for incarcerated people improves the health of New Yorkers*.

Hutcherson, C. A., Seppala, E. M., & Gross, J. J. (2008). Loving-kindness meditation increases social connectedness. *Emotion*, 8(5), 720.

Irwin, J., & Owen, B. (2005). Harm and the contemporary prison. *The effects of imprisonment*, 94-117.

King, R. S., Mauer, M., & Young, M. C. (2005). *Incarceration and crime: A complex relationship*. Sentencing Project.

Klimecki, O. M., Leiberg, S., Lamm, C., & Singer, T. (2012). Functional neural plasticity and associated changes in positive affect after compassion training. *Cerebral Cortex*, bhs142.

Lanza, P. V., Garcia, P. F., Lamelas, F. R., & González Menéndez, A. (2014). Acceptance and commitment therapy versus cognitive behavioral therapy in the treatment of substance use disorder with incarcerated women. *Journal of clinical psychology*, 70(7), 644-657.

Leibrich, J. (1996) 'The role of shame in going straight: a study of former offenders', in: B. Galaway and J. Hudson (Eds.), *Restorative Justice: International Perspectives*, Monsey, NY.: Criminal Justice Press.

Lowenkamp, C. T., Latessa, E. J., & Holsinger, A. M. (2006). The risk principle in action: What have we learned from 13,676 offenders and 97 correctional programs?. *Crime & Delinquency*, 52(1), 77-93.

Lynch, S. M., Heath, N. M., Mathews, K. C., & Cepeda, G. J. (2012). Seeking safety: An intervention for trauma-exposed incarcerated women? *Journal of Trauma & Dissociation*, 13, 88-101.

Maschi, T., Viola, D., & Koskinen, L. (2015). *Trauma, Stress, and Coping Among Older Adults in Prison: Towards a Human Rights and Intergenerational Family Justice Action Agenda*.

Maruna, S. (1997) 'Going Straight: Desistance from Crime and Self-Narratives of Reform', *Narrative Study of Lives*, Vol. 5, 59-93.

Maruna, S. (2001). *Making good: How ex-convicts reform and rebuild their lives*. American Psychological Association.

Maruna, S. (2004). Desistance from Crime and Explanatory Style A New Direction in the Psychology of Reform. *Journal of Contemporary Criminal Justice*, 20(2), 184-200.

Maruna, S., Lebel, T. P., Mitchell, N., & Naples, M. (2004). Pygmalion in the reintegration process: Desistance from crime through the looking glass. *Psychology, Crime & Law*, 10(3), 271-281.

Meisenhelder, T. (1982) 'Becoming Normal: Certification as a Stage in Exiting from Crime', *Deviant Behaviour: An Interdisciplinary Journal*, Vol. 3, 137-53.

Neff, K. D. (2011). Self-compassion, self-esteem, and well-being. *Social and personality psychology compass*, 5(1), 1-12.

- Novaco, R. W. (2007). Anger dysregulation. In T. A. Cavell, & K. T. Malcolm (Eds.), *Anger, aggression, and interventions for interpersonal violence* (pp. 3–54). Mahwah, NJ: Erlbaum.
- Parker, E. A. (1990). The social-psychological impact of a college education on the prison inmate. *Journal of Correctional Education*, 140-146.
- Patzelt, H., Williams, T. A., & Shepherd, D. A. (2014). Overcoming the walls that constrain us: The role of entrepreneurship education programs in prison. *Academy of Management Learning & Education*, 13(4), 587-620.
- Petersilia, J. 2003. *When prisoners come home: Parole and prisoner reentry*. New York, NY: Oxford University Press
- Perelman, A. M., Miller, S. L., Clements, C. B., Rodriguez, A., Allen, K., & Cavanaugh, R. (2012). Meditation in a deep south prison: A longitudinal study of the effects of vipassana. *Journal of Offender Rehabilitation*, 51, 176–198.
- Roundtree, G. A. (1982). The Effects of Education on Self-Esteem of Male Prison Inmates. *Journal of Correctional Education*, 32(4), 12-18.
- Reisig, M. D., Holtfreter, K., & Morash, M. (2006). Assessing recidivism risk across female pathways to crime. *Justice Quarterly*, 23(3), 384-405.
- Salisbury, E. J., & Van Voorhis, P. (2009). Gendered Pathways A Quantitative Investigation of Women Probationers' Paths to Incarceration. *Criminal justice and behavior*, 36(6), 541-566.
- Samuelson, M., Carmody, J., Kabat-Zinn, J., & Bratt, M. A. (2007). Mindfulness-based stress reduction in Massachusetts correctional facilities. *The Prison Journal*, 87(2), 254-268.
- Shonin, E., Van Gordon, W., & Griffiths, M. D. (2013). Mindfulness-based interventions: towards mindful clinical integration. *Frontiers in psychology*, 4.
- Simpson, S. S., Yahner, J. L., & Dugan, L. (2008). Understanding women's pathways to jail: Analysing the lives of incarcerated women. *Australian & New Zealand Journal of Criminology*, 41(1), 84-108.
- Simpson, T. I., Kaysen, D., Bowen, S., MacPherson, L. M., Chawla, N., Blume, A., et al. (2007). PTSD symptoms, substance use, and vipassana meditation among incarcerated individuals. *Journal of Traumatic Stress*, 20, 239–249.



- Steurer, S., Linton, J., Nally, J., & Lockwood, S. (2010). The top-nine reasons to increase correctional education programs. *Corrections Today*, 40–43.
- Steurer, S., Smith, L., & Tracy, A. (2001). OCE/CEA three state recidivism study. Correctional Education Association, 1–65.
- Stevens, D. J., & Ward, C. S. (1997). College education and recidivism: Educating criminals is meritorious. *Journal of correctional education*, 106-111.
- Sumter, M. T., Monk-Turner, E., & Turner, C. (2009). The benefits of meditation practice in the correctional setting. *Journal of Correctional Health Care*, 15(1), 47-57.
- Vacca, J. S. (2004). Educated prisoners are less likely to return to prison. *Journal of Correctional Education*, 297-305.
- Van Voorhis, P., & Salisbury, E. (2013). *Correctional counseling and rehabilitation*. Routledge.
- Van Voorhis, P., Wright, E. M., Salisbury, E., & Bauman, A. (2010). Women's Risk Factors and Their Contributions to Existing Risk/Needs Assessment The Current Status of a Gender-Responsive Supplement. *Criminal Justice and Behavior*, 37(3), 261-288.
- Walters, C. D. (2003). Changes in criminal thinking and identity in novice and experienced inmates. *Criminal Justice and Behavior*, 30(4), 399-4
- Ward, T., & Stewart, C. (2003). *Criminogenic needs and human needs: A theoretical model*. *Psychology, Crime, and Law*, 9, 125-143.
- Winterfield, L., Coggeshall, M., Burke-Storer, M., Correa, V., & Tidd, S. (2009). The effects of postsecondary correctional education: Final report. Washington, DC: The Urban Institute, Justice Policy Center
- Zgierska, A., Rabago, D., Chawla, N., Kushner, K., Koehler, R., & Marlatt, A. (2009). Mindfulness meditation for substance use disorders: A systematic review. *Substance Abuse*, 30(4), 266-294.
- Zlotnick, C., Clarke, J. G., Friedmann, P. D., Roberts, M. B., Sacks, S., & Melnick, G. (2008). Gender differences in comorbid disorders among offenders in prison substance abuse treatment programs. *Behavioral sciences & the law*, 26(4), 403-412.

DRAFT