MAKING GOOD USE OF DEAD TIME: EMOTIONAL LEARNING PROGRAMS FOR PRISONERS IN SOLITARY CONFINEMENT

Ann Marie Rocheleau & Shannon Curran Stonehill College, Massachusetts

Abstract

Emotional learning (EL) programs have been adopted by correctional facilities due to their positive impacts on social and emotional intelligence in schools. This paper focuses on the promise of the EL program, Houses of Healing (HOH), which California prisoners residing in solitary confinement completed. Survey data from 200 male participants was analyzed. Participant responses reveal prisoners experienced an 83 percent or greater improvement in hopefulness, identifying triggers, handling anger, and ability to remain in control and cope when upset. Frequency of meditation practice and perceived helpfulness of physical exercise correlated with improvement in hopeful feelings and coping abilities.

Introduction

In the past decade there has been a great deal of research and policy discussions on the use of solitary confinement in supermax types of units and facilities.¹ These facilities are variously named special housing units (SHU) or special management units (SMU), control units, administrative segregation, and more recently dubbed 'restrictive housing' by the federal government in the USA. A recent census (2022) by the Federal Bureau of Prisons (BOP) determined that 9825 prisoners (seven percent of the U.S. Federal Bureau of Prisons population) were residing in their SHU units and another 873 were in other types of restrictive housing. As for U.S. state prisons, a report on a national survey of state prison systems published by the Yale Law School (2020) estimated that in 2019 55,000 to 62,500 prisoners were being held in isolation for over 22 hours per day for at least 15 days. Of these, about half spent under three months in solitary confinement, but 3000 (11 percent) had resided in solitary for over three years.

The focus of the last decade's research and discussions have been on why prisoners have been put in solitary confinement, the rationale for it, the conditions of solitary confinement, and the myriad harms, especially psychological, it produces for people who have resided in it. Though all of these are important issues, little attention has been directed at what prisoners do while in solitary confinement. Research has shown that prisoners in solitary confinement often liken it to 'being buried in segregation' and that boredom is one of the most difficult aspects of living in these units (Rocheleau, 2014). This paper advocates that if prison administrators determine that prisoners must be placed in solitary confinement for punitive purposes, then they should at least ensure that this usually 'dead time' in segregation might also offer rehabilitation. Studies of prisoners in solitary confinement have found that they are more likely to be mentally ill (Arrigo & Bullock, 2008); angry and depressed (Rocheleau, 2011); and devoid of healthy and positive ways of coping with stress (Rocheleau, 2013). There has been some introduction of rehabilitative programs into a few restrictive housing units. These include cognitive behavioral therapy, anger management, education, and emotional learning programs. This paper explores previous research on emotional learning programs and presents survey data from a pilot emotional learning program carried out in restrictive housing units in California. Since rehabilitation programs in solitary confinement are very limited or non-existent in most prisons, it is not surprising that little research has been available on such programs. In addition, this evaluation involves prisoners' responses to a survey about the program—which in and of itself is novel in that it gives voice to these prisoners who are mostly hidden. Finally, this is the first examination of an emotional learning program for those housed in long-term supermax-like confinement.

REVIEW OF THE LITERATURE

What is Emotional Learning?

Emotional learning (EL), also referred to as social and emotional learning, is made up of evidencebased policies and programs that help individuals obtain knowledge and skills to understand

During the "get tough" era of the 1990s, prison systems across the United States developed supermaximum prisons following the lead of the Bureau of Prisons FCI-Marion, which locked down prisoners in response to violence. Depending on the state, some supermaxes are individual units within a prison, but other whole prisons were built as a supermax. Though they vary by state, most supermax units involve 23-hour a day solitary confinement with little access to visits, phone calls, property, recreation, rehabilitation, and human interaction. For a brief summary, see Frost and Monteiro (2016) executive summary on Administrative Segregation in U.S. Prisons.

and manage emotions. Emotional learning assists people in establishing and fostering positive relationships with others, feeling and expressing empathy, and making responsible decisions (Weissberg, 2019). Through EL, individuals acquire emotional intelligence. Emotional intelligence, or emotional literacy, can be divided into four dimensions: "...the ability to (a) perceive emotion, (b) use emotion to facilitate thought, (c) understand emotions, and (d) manage emotion" (Mayer, Slovey, & Caruso, 2004, p. 199). Emotional learning programs strive to improve three personal goals: empathy, mindfulness, and self-regulation. Empathy is the ability to comprehend and resonate with others' emotions. Mindfulness is the capacity to develop resilience towards negative stimuli, and self-regulation is the individual's ability to control their emotions (Petrosino, et al., 2021). Although researchers vary in the number and aspects of emotional intelligence, overall they are very similar from one researcher to another. Chart 1 outlines the examples of competencies strived for in emotional learning that would result in five emotional intelligence domains.

Emotional Learning Programs and Initiatives -teach the competencies that enable "learners to effectively understand, process, manage and express the social and emotional aspects of their lives" * Social and Emotional Learning Competencies** Self-Awareness Self-Social Awareness Relationship Responsible Management Skills **Decision-Making** Examples: Examples: Examples: Examples: Examples: Demonstrating Identifying one's Managing one's Taking others' Communicating curiosity & openemotions emotions perspectives effectively mindedness Integrating **Identifying &** Identifying Developing Learning how to personal & social using stress diverse social positive make a reasoned identities management norms, including relationships judgment after strategies unjust ones analyzing info, data, & facts Linking feelings, Exhibiting self-Demonstrating Resolving Anticipating & values, & discipline & selfempathy & conflicts evaluating the motivation thoughts compassion constructively consequences of one's actions **Emotional Intelligence Domains*** Self-Awareness Self-Motivation Mood Empathy Managing Management Relationships

^{*} Basu & Mermillod, 2011, p. 182.

** CASEL (n.d.)

Chart 1: Emotional Learning and Emotional Intelligence

Emotional learning has received an increasing amount of attention, especially in schools, because it teaches individuals how to be more aware and respectful of themselves and others. The idea of EL in schools began in 1987 when a group of youth-development experts announced an outline for integrating EL into the school curriculum (Beaty, 2018; Weissberg, 2019). The outline described skills needed for emotional intelligence, such as being able to express, identify, label, and manage emotions, control impulses, delay gratification, and analyze the intensity of feelings. After several years of working on this set of learning goals, the Collaborative for Academic, Social, and Emotional Learning (CASEL) was established, becoming the leading organization for promoting social and emotional learning in the United States. In 1997, the Association for Supervision and Curriculum Development (ASCD) partnered with CASEL and presented a comprehensive list of strategies in the book, Social and Emotional Learning: Guidelines for Educators. This book provided a framework for EL and CASEL's resources have allowed the creation of EL programs in schools and school systems in every state and at least 186 countries (Weissberg, 2019). Research has found these programs are successful at all education levels in improving academic, social, and personal accomplishments (Durlak, et al., 2011). Studies have linked dimensions of emotional intelligence, such as interpersonal skills, adaptability, and stress management with academic success (Parker et al., 2004a; Parker et al., 2004b). These results are not surprising when considering that students who do better academically have self-discipline, motivate themselves, manage their stress, use problem-solving skills to overcome obstacles, and make responsible decisions about studying (Durlak, et al., 2011)—all components in social and emotional learning programs. Social and emotional learning programs have also been found to help decrease violence, hostility, aggression, and misconduct amongst students (Durlak, et al., 2011; Waleed, 2017).

Rationale for Emotional Learning in Prison

Emotional learning programs have been implemented in both American and European correctional institutions due to their success in school programs and the need to address the social and emotional deficits of prisoners. Emotional learning programs are beneficial because prisoners must navigate prison environments that often involve isolation, inadequate living spaces, deprivations, violence, and exposure to physical, mental, emotional, and sexual exploitation (Petrosino, et al., 2021). These aspects can both heighten preexisting psychological distress and trauma, as well as provoke new issues, such as anxiety, fear, aggressive behaviors, and stress-related medical problems (Petrosino, et al., 2021; Wolff & Caravaca Sánchez, 2019). Additionally, overcrowding in prison often causes overstimulation among prisoners, which heightens arousal levels and reactive behaviors. This causes individuals to be more likely to act aggressively and violently (Petrosino, et al., 2021). In a study of 500 Nigerian prisoners by Animasahun (2010), it was discovered that emotional intelligence was the most potent predictor of prison adjustment when comparing emotional intelligence, spiritual intelligence, and an intelligence quotient. Thus, prisoners who were able to perceive and understand their own and others' emotions and who could manage their own emotions scored higher on a 21-item prison adjustment scale compared to those who were involved in spiritual or religious pursuits and much higher than those that scored high on an intelligence scale. From a policy perspective, prisoners that are offered emotional learning programs might not only adjust better in prisons, but possibly might also adjust better to living on the outside once released.

Emotional learning programs are particularly important for the incarcerated population because several studies have found that offenders have lower than normal average emotional intelligence

scores (Cornell, 2003; Megreya, 2015; Moore, 2005; Waleed, 2017). For example, in Megreya's (2015) comparison of 100 Egyptian offenders (for theft, drug-dealing, and murder) to 100 non-offenders, he discovered that the offenders had lower emotional intelligence scores overall. But emotional intelligence levels also declined with crime severity; offenders charged with murder had lower levels of emotional intelligence than those charged with stealing and dealing drugs. Offender populations also exhibit lower levels of flexibility, higher rates of impulsivity, and adopt aggressive problemsolving strategies compared to the general population (Rocheleau, 2013; Waleed, 2017). Prisoners who engaged in prison violence were more likely to cope with stressful events by taking direct negative actions, compared to prisoners not engaged in prison violence (Rocheleau, 2013). The latter were more likely to cope by eliciting emotional and instrumental support from others, delaying action, and thinking through their responses. Those who commit violent crimes often justify their actions because they tend to believe others are belittling or attacking them. Since emotional intelligence includes being able to perceive emotions in oneself and others, violent prisoners with lower emotional intelligence can interpret others as threatening, even when they are not challenging them (Cornell, 2003). In addition, many crimes, such as burglary, robbery, and assault, occur because of a lack of selfcontrol and impulsive decision-making (Waleed, 2017).

The primary objective of EL correctional programs is to present prisoners with self-awareness training to address emotional and cognitive blind spots. The focus of these programs is to impact capacities for self-regulation, mindfulness, and empathy. When a prisoner has higher levels of selfregulation they are less likely to engage in antisocial behavior and be impulsive, fearful, aggressive, and hostile (Petrosino, et al., 2021). Komarovskaya and colleagues (2007) found that prisoners with less ability to manage impulsive tendencies engaged in higher rates of violence compared to other prisoners who exercised greater self-discipline. Mindfulness training includes exercises that allow individuals to be more aware of their emotions and behavior, which improves the chances of being able to choose appropriate behaviors (Petrosino, et al., 2021). Mindfulness practices focus on nonjudgmental awareness and acceptance of the present moment (Himelstein, 2011). Studies of mindfulness training in prison have shown that it helped prisoners regulate their emotions and significantly reduced hostility and impulsiveness (Himelstein, 2011; Leonard et al., 2013; Silva & Hartney, 2012). There was also increased self-esteem and empathy amongst prisoners (Himelstein, 2011; Petrosino, et al., 2021). The overall goal of EL programs is to prepare prisoners to be better adjusted to the stressors of society and be productive members once they are released (Animasahun, 2010; Petrosino, et al., 2021; Woessner & Schwedler, 2014). Finally, a recent meta-analysis of 15 prison EL programs found that overall, they were likely to reduce stress and anxiety among prisoners, as well as violence. In particular, the researchers found that "EL programs can increase understanding of anger and hostility among prisoners and decrease the level of hypermasculinity and exhibition of 'toughness'" (Petrosino, et al., 2021, p. 22). They noted that EL programs have the potential to decrease recidivism rates, as well as the use of solitary confinement if prisoners are able to understand their emotions, empathize, and behave in a more pro-social manner.

RESEARCH METHODS

One of the 15 EL programs that was included in the meta-analysis described above is the Houses of Healing (HOH) program (Petrosino, et al., 2021). This program was initially introduced in prisons in the Northeast region of the United States as a 12-week EL program where a facilitator meets with a

small group of prisoners and guides them through various exercises that focus on producing greater self-awareness, managing stress, and having more self-control over one's emotions and behavior (Casarjian, 1995; Casarjian, Phillips, & Wolman, 2007). In addition, they are taught "cognitive behavioral reframing techniques" and are "encouraged to acknowledge and increase their awareness of grief, loss, and childhood trauma and to explore and discuss the impact that each of these had on their present lives" (Casarjian, Phillips, & Wolman, 2007, p. 2). Program components include a great deal of self-reflection through readings, journaling, quizzes, and worksheets, as well as meditation, yoga, exercise, and relaxation techniques (Casarjian, 1995).

More recently, the Lionheart Foundation, the creator of Houses of Healing, undertook an initiative to provide the lessons of Houses of Healing's EL program to prisoners residing in solitary confinement in the California Department of Correction and Rehabilitation (CDCR). Prisoners in solitary confinement in the Special Housing Units (SHU) at Pelican Bay, CSP-Corcoran, and CA Correctional Institution (CCI) were given the opportunity to register for the 14-week Houses of Healing Self-Study Program. Each prisoner received a letter explaining the Houses of Healing program and that the course was a voluntary self-study program. The letter also included the requirements for participation: 1) expect to be in solitary confinement for at least 10 weeks (after that packets would be sent to wherever they were in general population); 2) be able to receive a paperback book; 3) have a 5th grade English reading level (Spanish-speakers without a 5th grade English reading level were offered the Houses of Healing book in Spanish, though there would be no associated self-study packets); 4) have a pencil or pen; and 5) be willing to spend 30 minutes a day on self-work.

The male prisoners who applied to participate in the program received weekly packets from the Lionheart Foundation and were asked to progress on their own, doing the exercises, readings, activities, and writing. They were told that the receipt of a certificate of program completion involved sending in four specific writings at the end of their self-study and were asked to fill out and return a questionnaire with the other materials. CDCR staff did not keep track of how many prisoners who received the initial letter chose to participate. However, the Lionheart Foundation delivered packets to 464 prisoners in the first round and received 160 questionnaires back, which was a 34.5 percent response rate. It is unknown whether the 304 prisoners worked on the self-study program in their cells. Packets were sent again to a new round of prisoners the following year and the decision was made to add the first 40 participant questionnaires that came in to the original 160 so that 200 questionnaires could be analyzed.²

As mentioned, over 200 male prisoners living in these SHUs in California completed the 14-week self-study AND filled out and returned a questionnaire. The quantitative and qualitative data from these 200 completers was entered into a database. The questionnaire gauged feelings of hopefulness, as well as coping mechanisms in response to stress before and after participation in the Houses of Healing Self-Study. Coping mechanisms included insightfulness, awareness of triggers, physical activity including exercise and yoga, meditation, among others. In addition, prisoners were asked a number of questions about what they liked best about the program, which aspects helped them the most, what impact it had on them, and whether they would recommend the self-study program to

² The researcher who created the questionnaire and oversaw its administration is different from the current researcher who is analyzing the data and thus, motivations about previous decisions are unknown.

others.³

QUESTIONNAIRE RESULTS

Of the 200 participants in the sample, 60 percent were housed at Pelican Bay, 26 percent at CSP-Corcoran, and 14 percent at the CCI. The number of months spent in solitary confinement in these Secure Housing Units (SHU) at program completion ranged widely from five months to over 30 years. The average stay so far in the SHU was four years; the median stay was two years. Just about a third (30.5 percent) of the participants had been in the SHU for less than a year, but almost another third (31.8 percent) had been in more than three years. The age of the EL participants in the California SHUs ranged from 20 to 66 years old; the average age was 34. Just over one third (34 percent) were under 30 years old and 20 percent were 40 or older.

Participation

SHU prisoners who participated in this emotional learning program received the book *Houses of Healing* and 14 weekly packets with an explanation of various concepts (e.g. forgiveness, mindfulness), tips on how to develop skills associated with the concept, stories on the topic, and even a section that was geared to those in solitary confinement (e.g. how to exercise in a segregation cell). In each packet participants were asked to reflect, take quizzes, make lists, answer questions, practice techniques, and/or write letters. In the questionnaire, participants were asked to rate their level of involvement in the Houses of Healing program from not involved at all to extremely involved. Most reported being 'very involved' (53.8 percent) or 'extremely involved' (32.2 percent). Only one percent said they were 'somewhat involved.'

An integral part of the HOH program is meditation, which helps people to 'be in the moment,' to still the mind in order to think clearly, and to relax and let go of stress. Meditation was a new experience to almost all of the HOH participants. Forty-two percent reported that once they started the program, they meditated every day and a little over a third (36.2 percent) said they meditated at least three times per week. About a fifth of the participants only meditated a few times during the entire course or not at all. Being a novel activity in prison, it took many participants a while to get used to it, as one Corcoran participant opined. He said, "At first it felt ridiculous, but once I was able to actually separate my thoughts from my breathing, opening my eyes after a meditation brought me a perspective and peace I'd never found." In addition to the clarity and peacefulness, many discussed how meditation was 'soothing' and helped 'relax the mind.' A Pelican Bay participant explained, "[M]editating helped me steer away from giving into [stressful or negative] thoughts, helped me find my center and happy positive place..."

The HOH program also recommends that participants engage in increased physical exercise. Exercise contributes to one's level of positive activity, helps release frustration and anger, and increases physical health and well-being. Nearly two-thirds (63.3 percent) of the HOH participants reported increasing their physical exercise, 35.7 percent reported exercising the same amount and only one percent decreased this activity. The majority of respondents (88.8 percent) believed that the physical

³ Quantitative analysis was carried out using SPSS, including frequencies, chi square statistics, and the Wilcoxon sign test (Penn State, n.d.). The latter is a statistical comparison of the average of two dependent samples. It is appropriate for ranked/ordinal data and is generally the non-parametric alternative to the dependent samples t-test.

exercise component was helpful to them. A Corcoran SHU prisoner said, "It really helps you feel better about yourself. And it helps you pass the time." Given that these prisoners spend an inordinate amount of time alone in a cell, engaging in physical exercise is a practice that helps prisoners fill up their day with a pro-social activity. Many of the prisoners discussed how increased physical exercise relieved their stress.

The recommended yoga component of HOH was not adopted by about half of the SHU participants. Of those who did not adopt it, many thought it was too challenging, some were not able to do it, and many reported just not liking it. However, the other half reported doing yoga daily (21.4 percent) or at least three times a week (28.1 percent). About the same percentage of participants who did yoga daily also reported that yoga was helpful to them (20.2 percent) with relaxation and easing tension being its two most frequently perceived benefits. One Corcoran HOH participant relayed that it helped him to be spiritually grounded. Another found it helpful, especially in segregation settings. He explained, "I think it's a healthy creative way to exercise 'specially in a small cell. It's helpful when feeling tense stress. Puts you in the zone and [you can] forget what is going on around you."

Outcomes Reported Before and After Participation

HOH participants were asked to reflect on hopeful feelings and coping mechanisms before and after their participation in the program. The possible responses to these Likert scale questions were: almost never, sometimes, about half the time, most of the time, and almost always. Since the before and after responses were so divergent from each other, the percentages reported below were of just those who chose 'most of the time' or 'almost always.' Table 1 summarizes those responses for before and after participation, and then the percentages of participants who reported no improvement and those that reported at least some improvement from the before timeframe to the after timeframe.

Outcome	% Before	vs. After	% Improvement Reported		
Reported 'Most of the time' or 'Almost always'	Before	After	None	Improvement	
Was hopeful about life	29.7	95.5	16.1	83.9	
Took responsibility for one's actions	29.6	95.4	14.1	85.9	
Remained in control when upset	18.1	93.5	8.5	91.5	
Was aware of one's triggers	15	92	8.5	91.5	
Handled anger in a positive way	13.1	86.5	6.5	93.5	
Used healthy ways to feel better when upset	12.5	91.4	8.5	91.5	

Table 1: Reported Before and After Outcomes and Improvement

A perusal of Table 1 indicates that prisoners were more likely to respond overall to feeling hopeful and using positive coping mechanisms after participation in the Houses of Healing program compared to before taking part in it. Though almost one-third reported feeling hopeful 'most of the time' or 'almost always' prior to participation, nearly all felt hopeful upon completion of the program (95.5 percent). Similar percentages of respondents said they took responsibility for their actions 'most of the time' or 'almost always' before vs. after participation. Less than a fifth of participants reported being able to remain in control when they were upset before their participation; however, a full 93.5 percent were able to remain in control 'most of the time' or 'almost always' once they completed the emotional learning program. Fifteen percent of participants said they were aware of the events and circumstances that triggered their anger and inappropriate behavior before. That percentage rose to 92 percent after program participation. A similar small percentage (13.1 percent) of the SHU prisoners in California reported handling their anger in a positive way before program participation. Though the percentage who could handle their anger in a positive way increased greatly (86.5 percent), it appears that overall fewer participants were able to achieve this outcome either 'most of the time' or 'almost always' compared to the other outcomes. Only a small percentage of prisoners reported using healthy ways to feel better when upset prior to participation (12.5 percent). Many participants discussed how grateful they were for the various positive tips and practices they learned through HOH, which helped them cope using healthier ways.

The second part of Table 1 reports on the chi square analysis comparing the before and after responses. As one can see, there was an 83 percent or greater improvement in the before and after responses for each outcome. Interestingly, while many participants still struggled with handling their anger in a positive way, still 93.5 percent reported some improvement in that coping skill. On average, participants' improvements went up two levels in the Likert scale. That is, participants who reported 'almost never' using a positive coping skill before, were likely to report using one 'about half the time' after participation. Similarly, those who had reported doing something 'about half the time' before, were likely to report using that skill 'almost always' upon program completion. Of the five coping skills, participants reported the most improvement in learning about their triggers.

Association of Improvement in Outcomes with Possible Predictors

The next set of analyses examined the level of improvement in the before and after scores of the reported program outcomes with six possible predictors.⁴ These results, shown in Table 2, reveal that the improvements in hopeful feelings and the coping skills outcomes have little to do with most of the possible predictors. There was no association between reported improvement in outcomes and the prison in which the participants resided. That is, it did not matter whether participants were in Corcoran, CCI, or Pelican Bay—there was no association between improvements in outcomes and the prison. Though age is often a predictor of prison violence, it was not a factor in prisoners' perceived improvements in coping skills. There was no statistical association between age and the improvement in outcomes. However, those who were younger (between 23 and 37) were slightly more likely to report 'almost always' feeling hopeful about their life after participanting in the course. Similarly, there was no association between the number of months a participant had resided in the

⁴ Since all of the outcomes are ordinal variables, the Wilcoxon sign non-parametric alternative was used (Penn State, n.d.). It tests the null hypothesis that the average signed rank of two dependent samples is zero. A p value of .05 or greater would indicate a statistically significant relationship between the relevant possible predictor and improvement in reported outcomes before and after the course.

Outcome Reported 'Most of the time' or 'Almost always'	Prison	Age	Mos. In SHU	How Often Meditate	How Often Do Yoga	Physical Exercise Helpful
Was hopeful about life	*	*	*	.024	*	*
Took responsibility for one's actions	*	*	*	*	*	*
Remained in control when upset	*	*	*	*	*	*
Was aware of one's triggers	*	*	*	<.001	*	.011
Handled anger in a positive way	*	*	*	<.001	*	*
Used healthy ways to feel better when upset	*	*	*	*	*	<.001

Table 2: Non-Parametric Test of Improvement in Outcomes and Other Possible Predictors

* No significant association between the improvement of the outcome and the predictor at the .05 level or greater.

SHU and the perception of improved outcomes. However, those who had spent less time in the SHU (between 9 and 36 months) were slightly more likely to report being able to remain in control and to handle their anger 'most of the time' or 'almost always' after participating in the course. It is likely that younger prisoners, who would also have spent less time residing in solitary confinement, are more hopeful because they would not have had been incarcerated long enough to have been sent to solitary multiple times or for long periods of time. Prisoners who spend long stretches in solitary confinement often experience frustration and hopelessness about their chances of getting back to general population (Rocheleau, 2014).

The next set of possible predictors were the reported frequency of meditation and of yoga, as well as the perceived helpfulness of physical exercise. However, unlike the first set of predictors, there were significant associations between two of the program components and perceived improvements in outcomes. As can be seen in Table 2, prisoners who meditated more frequently were more likely to also report improvements in being hopeful about life, being aware of one's triggers, and being able to handle anger in a positive way. However, there was no such association between frequency of yoga participation and the six perceived outcomes. There was a statistically significant association between the perception of physical exercise as helpful and two outcomes—awareness of one's triggers and using healthy ways to feel better when upset. Thus, unlike the prison, age, and months in SHU, which had no associations with the perceptions of improved outcomes, two of the program components—frequency of meditation practice and the helpfulness of physical exercise—did correlate with some of the perceived improvements in hopeful feelings and coping abilities.

DISCUSSION

The Houses of Healing emotional learning program was specifically designed for utilization in a prison setting. The self-help book, *Houses of Healing: A Prisoner's Guide to Inner Power and Freedom*, describes how to apply the principles of emotional intelligence to prison and describes how to confront thinking that is central to criminal behavior. The 14 weeks of pamphlets have since been converted into a companion book, *Making Time Count: A Self-Study Program.* It includes the readings, tips, exercises, quizzes, and lists for prisoners to learn on their own. Prisoners who have participated in HOH have increased confidence with tackling future difficulties, feel better able to maintain family relationships, and are able to create more positive outcomes inside prison and upon their release.

Emotional learning is a concept that continues to show positive results in various domains. Although it is gaining popularity within correctional institutions, more prison systems should adopt these evidence-based approaches, especially in solitary confinement settings. There are few, if any, drawbacks to emotional learning programs—they are cost-effective since many programs are discussion-based or are even offered as self-study programs.

This research study had five limitations. First, because of the way the questionnaire was administered, it is unclear how many of the 464 prisoners who received the materials actually completed the program. As a self-study program, neither correctional staff or program staff were able to monitor actual participation. It is quite possible that many more completed the program, but did not bother to send in the final writings and questionnaire. This raises the issue of generalizability. Certainly those who completed the program and sent in the questionnaire were more motivated than those who did not. It could be argued that prisoners who are not motivated to participate in the program probably would not benefit from it. Thus, the findings are probably generalizable only to those prisoners in solitary confinement who want to improve their social emotional skills and are willing to be engaged with their rehabilitation. If even one-third of prisoners in every restrictive housing unit were motivated to be involved in emotional learning, that might result in overall decreased prison violence and the use of solitary confinement.

Another limitation is that the study measured prisoners' perceptions of impact on themselves, but not actual impacts on behavior (disciplinary reports, etc.) The study also lacked two essential components of even quasi-experiments—control and experimental groups and a true before and after participation comparison. Future research should include these rigorous research components, as well as strive to identify best EL program practices. The final limitation is that race/ethnicity data were not collected. The race/ethnicity of participants should be included in future research, as well as the impact of a facilitator, the type of setting, and gender.

Although additional research is needed to fully grasp the program implications, it is clear from the results of this study that HOH's emotional learning program can be used to help motivated male prisoners in solitary confinement identify and control their emotions in healthy ways. Gaining these skills are essential to lessen the chances of future disciplinary infractions by prisoners once released from the SHU, and ultimately, to reduce recidivism once released from incarceration. Prisons and prison administrators have little to lose by making use of the 'dead time' experienced by prisoners in solitary confinement, especially for those prisoners who are motivated and ready to improve their lives and circumstances.

LIST OF REFERENCES

- Animasahun, R. A. (2010). Intelligent quotient, emotional intelligence and spiritual intelligence as correlates of prison adjustment among inmates in Nigeria prisons. Journal of Social Sciences, 22(2), 121–128. https://doi.org/10.1080/09718923.2010.11892792
- Arrigo, B. A., & Bullock, J. L. (2008). The psychological effects of solitary confinement on prisoners in supermax units: Reviewing what we know and recommending what should change. International Journal of Offender Therapy and Comparative Criminology, 52(6), 622-640.
- Basu, A., & Mermillod, M. (2011). Emotional intelligence and social-emotional learning: An overview. Psychology Research, 1(3), 182-185.
- Beaty, J. (2018). History of social and emotional learning. International Arab Journal of English for Specific Purposes, 1(2), 67–72.
- Casarjian, R. (1995). Houses of Healing : A prisoner's guide to inner power and freedom. Lionheart Foundation.
- Casarjian, R., Phillips, J., & Wolman, R. (2007). An emotional literacy intervention with incarcerated individuals. The Lionheart Foundation. https://lionheart.org/wp-content/uploads/2021/04/AN-EMOTIONAL-LITERACY-INTERVENTION.pdf
- CASEL. What is the CASEL framework. Available at: https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/ (retrieved on September 3, 2022).
- Cornell, J. S. H. (2003). Relationships between emotional intelligence and demographic variables within Florida's inmate population [Doctoral dissertation, University of Florida]. https://ufdcimages.uflib. ufl.edu/AA/00/03/15/91/00001/ relationshipsbet00corn.pdf
- Correctional Leaders Association & The Arthur Liman Center for Public Interest Law at Yale Law School. (2020) Time-in-cell 2019: A snapshot of restrictive housing based on a nationwide survey of U.S. prison systems. Yale Law School. https://law.yale.edu/sites/default/files/area/center/ liman/document/time-in-cell_2019.pdf
- Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Weissberg, R. P., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82(1), 405–432.
- Federal Bureau of Prisons. (2022) Restricted Housing. United States Department of Justice. https:// www.bop.gov/about/statistics/statistics_inmate_shu.jsp
- Frost, N., & Monteiro, C. (2016) Administrative segregation in the United States: Executive Summary. National Institute of Justice. Available at: https://www.ojp.gov/ncjrs/virtual-library/abstracts/ administrative-segregation-us-prisons-executive-summary (retrieved on 8/25/2022).
- Himelstein, S. (2011). Mindfulness-based substance abuse treatment for incarcerated youth: A mixed method pilot study. International Journal of Transpersonal Studies, 30(1). https://doi.org/10.24972/ijts.2011.30.1-2.1
- Komarovskaya, I., Loper, A. B., & Warren, J. (2007). The role of impulsivity in antisocial and violent behavior and personality disorders among incarcerated women. Criminal Justice and Behavior, 34(11), 1499–1515. https://doi.org/10.1177/0093854807306354
- Leonard, N. R., Jha, A. P., Casarjian, B., Goolsarran, M., Garcia, C., Cleland, C. M., Gwadz, M. V., & Massey, Z. (2013). Mindfulness training improves attentional task performance in incarcerated youth: A group randomized controlled intervention trial. Frontiers in Psychology, 4(792). https://doi. org/10.3389/fpsyg.2013.00792
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and

implications. Psychological Inquiry, 15(3), 197–215.

- Megreya, A. M. (2015). Emotional intelligence and criminal behavior. Journal of Forensic Sciences, 60(1), 84–88. https://doi.org/10.1111/1556-4029.12625
- Moore, H. (2005). Effects of emotional intelligence training on incarcerated adult males involved in pre-release programming [Doctoral dissertation, Duquesne University]. https://dsc.duq.edu/cgi/viewcontent.cgi?article=1959&context=etd
- Parker, J. D. A., Creque Sr., R. E., Barnhart, D. L., Harris, J. I., Majeski, S. A., Wood, L. M., Bond, B. J., & Hogan, M. J. (2004a). Academic achievement in high school: Does emotional intelligence matter? Personality and Individual Differences, 37(7), 1321–1330. https://doi.org/10.1016/j.paid.2004.01.002
- Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004b). Emotional intelligence and academic success: Examining the transition from high school to university. Personality and Individual Differences, 36(1), 163–172. https://doi.org/10.1016/S0191-8869(03)00076-X
- Penn State Eberly College of Science. (n.d.). Stat 415 Introduction to Mathematical statistics. https:// online.stat.psu.edu/stat415/lesson/20/20.2.
- Petrosino, C., Choi, K.-S., Choi, S., Back, S., & Park, S.-M. (2021). The effects of emotional literacy programs on inmates' empathy, mindfulness, and self-regulation: A random-effect meta-analysis. The Prison Journal, 101(3), 262–285. https://doi.org/10.1177/00328855211010407
- Rocheleau, A. M. (2011). Prisoners' coping skills and involvement in serious prison misconduct and violence (Unpublished doctoral dissertation). Northeastern University, Boston, MA.
- Rocheleau, A. M. (2013). Ways of coping and involvement in prison violence. International Journal of Offender Therapy and Comparative Criminology, 59(4), 359-383.
- Rocheleau, A. M. (2014). An exploratory examination of a prison disciplinary process: Assessing staff and prisoners' perceptions of fairness. Journal of Qualitative Criminal Justice and Criminology, 2(1), 95-118.
- Silva, F., & Hartney, C. (2012). Evaluation of the insight prison project. National Council on Crime and Delinquency. https://www.evidentchange.org/sites/default/ files/ publication_pdf/insight-prison-project.pdf
- Waleed, C. A. (2017). What aspects of emotional intelligence help former prisoners make decisions to desist crime? [Doctoral dissertation, St. John Fisher College]. https://fisherpub.sjfc.edu/ education_etd/333/
- Weissberg, R. P. (2019). Promoting the social and emotional learning of millions of school children. Perspectives on Psychological Science, 14(1), 65–69. https://doi.org/10.1177/1745691618817756
- Woessner, G., & Schwedler, A. (2014). Correctional treatment of sexual and violent offenders: Therapeutic change, prison climate, and recidivism. Criminal Justice and Behavior, 41(7), 862–879. https://doi.org/10.1177/0093854813520544
- Wolff, N., & Caravaca Sánchez, F. (2019). Associations among psychological distress, adverse childhood experiences, social support, and resilience in incarcerate men. Criminal Justice and Behavior, 46(11), 1630–1649. https://doi.org/10.1177/0093854819876008

About the Authors

Dr. Ann Marie Rocheleau is a Professor in the Sociology & Criminology Department at Stonehill College in Massachusetts. She has written several articles on prison violence and the correctional response to it. Along with her co-authors Robert Johnson and Alison B. Martin, she helped write *Hard Time: A Fresh Look at Understanding and Reforming the Prison*, published in 2017.

This book examines the history, evolution and culture of maximum security prisons and those who live and work in them. Previously, Rocheleau served as Program Coordinator for the nationwide Council of Juvenile Correctional Administrators, working to raise the conditions of confinement in juvenile correctional facilities. She started her career at the Massachusetts Department of Correction (DOC), where she evaluated substance abuse and other prison programs. She was also the first Director of Treatment at Old Colony Correctional Center in Bridgewater, MA, and the first Substance Abuse Coordinator for the entire DOC. Professor, Sociology & Criminology, Stonehill College, 320 Washington Street, Easton, MA 02357, Phone: 508-740-2406; Email: arocheleau@stonehill.edu

Shannon Curran graduated from Stonehill College in 2022 with a double major in Criminology and Psychology. Shannon currently works at the Massachusetts Department of Correction as a counselor, where she facilitates group programs on interpersonal skills acquisition and substance use disorder treatment. Shannon also conducts individual counseling sessions and works to establish relapse prevention plans prior to release.