**Former Inmates’ Perceptions of Prison Yoga Project Impacts**

Miranda Viorst

Department of Sociology

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Thesis Advisor: Dr. Lori Hunter, Department of Sociology

Committee: Dr. Lori Hunter, Department of Sociology,

Dr. Sona Dimidjian, Department of Psychology and Neuroscience,

Dr. Glenda Walden, Department of Sociology

**INTRODUCTION**

While mindfulness and yoga practices are increasingly prevalent as rehabilitative interventions for prisoners and vulnerable populations, there remains a dearth of studies conducted on the effects of these practices on incarcerated individuals. The research presented here is a case study of the Prison Yoga Project (http://prisonyoga.org/), a prison-based yoga intervention program which originated in San Quentin Prison in Marin County, California, and which offers classes to inmates in prisons and jails across the country. The primary objective of this study is to examine perceived impacts of this prison-based yoga intervention among released inmates. This research is evaluative in nature, seeking to determine what, if any, effect the Prison Yoga Project has on its participants. The substantive value of this study is in its unique perception-based insight from participants of a prison yoga intervention, and its findings which are offered to the body of literature on mindfulness interventions among prisoners and the potential effects of such interventions. Given the dearth of information on the effects of such interventions, this research offers important insight.

This is a small-scale, qualitative investigation involving interviews with former prisoners who participated in a prison yoga intervention for at least 18 months prior to their release, with their last participation within three months of their release. PYP was officially founded as a non-profit in 2010, though founder James Fox had been teaching his curriculum in San Quentin Prison under the Insight Prison Project since 2002. Given the short time that PYP has been running, the sample was limited to former inmates who were interviewed 1-4 years after their release.

The Prison Yoga Project (PYP) has created a trauma-informed yoga therapy intervention program designed to be a tool that assists inmates in behavioral rehabilitation and healing. The Prison Yoga Project was founded by James Fox at San Quentin Prison, which sets the model for a weekly 75-minute class. Prison Yoga Project classes are taught in select institutions nationwide by volunteer yoga teachers trained in the PYP Teacher Training. The 75-minute classes are held once weekly for a dedicated group of regularly-attending students. The program includes breath-focused meditation practice, an Indian yoga postural sequence, and centering movement from the Qi-Gong practice of Chinese medicine. In San Quentin Prison, the original site for the program and the focus site for this study, PYP participants are male prisoners, 35-55 years of age, and of a variety of ethnicities including African American, Asian, Caucasian and Latino.

This research is relevant due to the unique perception-based lens through which it examines yoga intervention. It adds this distinct approach to an existing body of literature which offers the potential for yoga as a low-cost alternative to current rehabilitative services within prisons. Research has outlined the risk factors for offenders that, when reduced, can decrease the likelihood of criminal conduct and reoffending (e.g., substance abuse; Andrews & Bonta, 2010). Unfortunately, due to funding and other constraints (e.g., volunteer staff resourcing), only offenders considered to be at highest risk of reoffending are usually offered psychiatric and other sanctioned rehabilitation services, often leaving those in medium- or low-risk groups untreated. Mental health challenges (e.g., depression, anxiety) represent additional issues for many offenders, and mental health is another aspect of prisons typically under-resourced (Fazel & Danesh, 2002). There is currently a need within correctional facilities for an inexpensive means to improve both physical and mental health and that could be offered to a wide range of offenders. Such programs might fill gaps in our current rehabilitative practices; although research is required to ensure that the alternatives are performing as desired (Muirhead & Fortune, 2016).

Though not a comprehensive nor longitudinal study, the research presented here offers important insight through examination of narratives reflecting personal experiences of participants in the Prison Yoga Project. This study is a stepping stone for further research into the long-term and larger societal effects of yoga and mindfulness interventions in prison settings.

**LITERATURE REVIEW**

The United States currently has more individuals incarcerated than any other nation with 2.2 million people in the nation's prisons and jails. This represents 25 percent of the world’s prison population, although the U.S. is home to only 5 percent of the world’s total population (American Psychological Association, 2014). And recidivism is high -- among state prisoners released in 2005, 67.8 percent of former inmates were arrested for a new crime within three years, and 76.6 percent were arrested within five years. Many prisoners (36.8 percent) who were arrested during the five-year period were arrested within the first six months, and 56.7 percent were arrested by the end of the first year (Hunt & Dumville, 2016).

A variety of interventions in prisons and jails have been developed to improve prison management and reduce recidivism. Mindfulness programs, including yoga-based therapy, represent one category of interventions. Such programs include a range of activities from specific physical yoga practices taught to inmates over long periods of time (Landau, 2008) to short, but intensive, meditation workshops (Parks, 2003).

The studies that have been undertaken on the impacts of yoga as an intervention for incarcerated populations have explored interventions ranging from yoga to other mindfulness-based physical practices such Tai Chi and Qi Gong.

*Psychological Impacts*

Preliminary research with a focus on women in maximum security, minimum security and paroled in community settings suggests that even a single yoga session yielded reductions in self-reported stress levels (Lundstrum & Erikson 2015). Also on stress, the practice of yoga has been shown to reduce levels of salivary cortisol in both healthy military men, and in Indian women undergoing breast cancer treatment (Rocha et al., 2012; Vadiraja et al., 2009), using measurements of levels of salivary cortisol which can be used as objective measures of stress, with reductions indicative of lower stress levels. Additionally, further research on the effects of yoga on emotional regulation has shown that the right dorsolateral prefrontal cortex (RDLPFC) has been shown to activate when individuals exert cognitive control over their emotions (Froeliger et al., 2012). There has been preliminary evidence showing that the practice of yoga can lead to reductions in RDLPFC activation in response to negative emotional stimuli while completing a Stroop task (Froeliger et al., 2012;Muirhead & Fortune, 2016).

Improvements have also been found in stress-response control which is important for preparing oneself for fight-flight responses. This 2013 New Zealand study compared expert yoga practitioners with a metabolically matched group and a group with comparatively higher cardiovascular fitness to investigate autonomic effects of yoga compared with physical exercise (Friis & Sollers, 2013). The authors found yoga to contribute to an increased ability to prepare for, as well as recover from, stressful experiences (Friis & Sollers, 2013). Additionally, an increase in γ- aminobutyric acid (GABA) activity in the thalamus has been shown, as the result of yoga practice compared to a walking group, using brain scanning techniques (i.e., magnetic resonance spectroscopy; Streeter et al., 2010), which has been related to improvements in mood and anxiety (Brambilla et al., 2003). Physiological improvements in stress, mood, and emotional control would be especially beneficial for an incarcerated population, who typically suffer from an overrepresentation of difficulties in these domains (Mansoor et al., 2015); especially when considering the fact that difficulties in areas such as emotional control may increase the likelihood of offending (Andrews & Bonta, 2010; Muirhead & Fortune, 2016). Additionally, a study on female inmatesfound that a 5-week yoga asana (posture) program from the Iyengar yoga tradition reduced depression (Woolery et al., 2004), and research in yogic breath practices found a statistically significant increase in the confidence and self-security of battered women (another trauma-affected population) after multiple intensive sessions of practice (Franzblau et al., 2006).

*Yoga and Recidivism*

Mindfulness interventions have also been linked to reduced recidivism. For example, a study at Seattle’s North Rehabilitation Facility found that the recidivism rate for inmates who took a 10-day meditation retreat was 56 percent, a 25 percent improvement over recidivism rates in the general inmate population. A follow-up study by the Addictive Behaviors Research Center at the University of Washington found that drug use, drug and alcohol-related consequences, and self-reported levels of depression and hostility were significantly lower among those who took the course, compared to those who did not (Parks et al., 2003). And a five-year study of 190 inmates found that those who were taught Ananda Marga Yoga were significantly less likely to be reincarcerated upon release (Landau et al., 2008).

Another issue linked to inmate behavioral issues and recidivism is verbal aggression. The literature cites aggression as one of the key variables related to offending (Deshpande et al., 2008). One study showed an eight-week intervention of an integrated yoga module effective in decreasing verbal aggressiveness in a yoga group (in males and those below 25 years of age), with a nonsignificant increase in a gym group. The baseline score of the two groups did not differ significantly (p = 0.66). There was a significant decrease in verbal aggressiveness in the yoga group (p =<0.01 paired samples t-test) with a nonsignificant increase in the gym group (Deshpande et al., 2008).

*Yoga and Addiction*

Further, since substance abuse is considered to be an important target for prison interventions and is moderately related to an increased risk of reoffending (Andrews & Bonta, 2010), it is relevant to note that yoga has been reported as an effective first-line treatment for substance abuse by many yoga teachers (e.g., Saraswati, 1981) although empirical support for this claim is limited (Muirhead & Fortune, 2016). One study evaluated a 90-day residential Kundalini yoga program in India to see if participants' levels of addiction would decrease (Khalsa et al., 2008). Kundalini yoga classes were offered three times per day (session length unspecified) for 45 days, with an additional class added after 45 days. Participants were also instructed on how to teach other students yoga after 45 days, in an attempt to improve the participants' sense of mastery. This study only had a small sample (N = 10) and there was no comparison group, but the results suggested significant improvements on scales related to addiction recovery from baseline to follow-up, identifying the need for further research on yoga's benefit for addiction. It has been posited by Kissen and Kissen-Kohn (2009) that the self-soothing effect of yoga could reduce addictive cravings, through removing participants' stress and anxiety surrounding addiction (Muirhead & Fortune, 2016).

*Yoga and Health Care Costs*

Additionally, in regard to the potential effects of yoga on health care spending in prisons, research suggests that yoga for prisoners may reduce overall prison health care costs. Health care costs represent a large portion of prison budgets. An October 2013 Pew report, titled "Managing Prison Health Care Spending," found that, after analyzing data from 44 states and adjusting for inflation, prisons spent a total of $6.5 billion on prisoner health care in 2008, up from $4.2 billion in 2001. Per-prisoner health care spending grew in 35 of those states—led by New Hampshire (305 percent increase), Oregon (245 percent) and North Carolina (203 percent)—with a median increase of 32 percent. In 39 states, prison health care costs represented a larger share of total corrections budgets, increasing on average from 10 percent in fiscal year 2001 to 15 percent in fiscal year 2008. These increases in prison health care costs are due to a series of factors, including the prevalent issue of aging inmate populations which require more care due to greater health complications (PEW, 2014).

The aging inmate population is among the most relevant of these issues with regard to increasing health care costs. According to Federal Bureau of Prisons (BOP) data, inmates age 50 and older were the fastest growing segment of inmate population, increasing 25 percent from 24,857 in fiscal year (FY) 2009 to 30,962 in FY 2013 (Department of Justice 2015). By contrast, during the same period, the population of inmates 49 and younger decreased approximately 1 percent, including an even larger decrease of 16 percent in the youngest inmates (age 29 and younger). Based on BOP cost data, researchers estimate that the agency spent approximately $881 million, or 19 percent of its total budget, on incarceration of older inmates, including those aging in place as of fiscal year 2013 (Department of Justice 2015).

The same study also found that older inmates on average cost 8 percent more per inmate to incarcerate than inmates age 49 and younger (younger inmates). In fiscal year 2013, the average older inmate cost $24,538, whereas the average younger inmate cost $22,676. It was also emphasized in this study that this cost differential is driven by greater medical needs, including the cost of medication, for older inmates. Of a sample of 119 BOP facilities, BOP institutions with the highest percentages of older inmates in their population spent five times more per inmate on medical care ($10,114) than institutions with the lowest percentage of aging inmates ($1,916). BOP institutions with the highest percentages of aging inmates also spent 14 times more per inmate on medication ($684) than institutions with the lowest percentage ($49) (Department of Justice 2015).

And while these older inmates present higher medical needs, and therefore cost, many of their conditions are largely preventable. A 2011-2012 study of medical problems of state and federal prisoners and jail inmates showed that in 2012, nearly a quarter (24 percent) of both prisoners and jail inmates reported ever having multiple chronic conditions. About 7 percent of prisoners and 4 percent of jail inmates reported high blood pressure and diabetes—two chronic conditions which are highly preventable through lifestyle measures, and which are risk factors for cardiovascular disease (Maruschak, 2016).

Research suggests that yoga benefits many of the medical conditions exhibited by inmates. For example, a study outside the prison setting presented findings on the effects of yoga on hypertension shows that yoga effectively reduces blood pressure. Thirty-four hypertensive patients were assigned to 6 weeks’ treatment by yoga meditation relaxation methods with biofeedback twice a week, and showed a significant reduction in blood pressure (from 168/100 to 141/84 mm Hg) (Patel & North, 1979). Further studies on the effects of yoga on diabetes have shown that yoga practices provoke improvements in weight, blood pressure, insulin, triglycerides and exercise self-efficacy. The indication is that a yoga program would be a possible risk reduction option for adults at high risk for type 2 diabetes. In addition, a study of a 3-month yoga program yields that yoga holds promise as an approach to reducing cardiometabolic risk factors and increasing exercise self-efficacy for this group (Yang et al., 2011).

Also outside the prison setting, research conducted through the Benson-Henry Institute for Mind Body Medicine at Massachusetts General Hospital, part of Harvard Medical School, examined the effects of a mind-body relaxation program that included yoga poses, meditation, positive psychology, and mindfulness training. The study followed 4,452 patients who participated in the program and practiced at home (and 12,149 control group with no practice for a median of 4.2 years. Through examination of all “billable encounters” in the health care system, they found that total utilization of health care services over the period of the study decreased by 43 percent, clinical encounters decreased by 41.9 percent, imaging by 50.3 percent, lab encounters by 43.5 percent, and procedures by 21.4 percent. Costly emergency room visits decreased from 3.6 to 1.7 per person per year. Program participants also substantially reduced utilization relative to the control group by 24.7 percent across all site categories and 25.3 percent across all clinical categories. In concluding, the authors wrote, "the cost savings from reduced emergency room visits alone in the treatment group relative to the control group, is on the order of $2360/patient/year” (McCall, 201l Stahl et al. 2015;).

Since studies on health care costs conducted inside the prison setting are presently unavailable, data from outside the prison setting provides important insight. These health care cost savings calculated outside the prison setting can then be used to estimate potential prison costs savings. Applied to the prison setting, Stahl et al. (2015) indicate a possible decrease in health care spending per prisoner of up to 43 percent.

*Cost Effectiveness of Mindfulness Interventions*

One aspect mentioned in the limited literature on yoga in prisons is the relatively low cost of running yoga programs in prisons compared to therapist-run programs (Bilderbeck et al., 2013; Duncombe et al., 2005; Harner et al., 2010). Program cost is indeed an important consideration, as resource scarcity is often a reason for not offering treatment programs to lower risk offenders (Andrews & Bonta, 2010). Although no current studies have evaluated the cost–benefits of implementing yoga in prisons, Magill (2003) conducted a cost–benefit analysis of Transcendental Meditation (TM), an Indian meditative technique for promoting a state of relaxed awareness, as implemented in US prisons. After taking into account the cost of running the programs, costs associated with ongoing criminal conduct, decreases in necessary staffing if inmates become less aggressive, and reductions in recidivism, it was posited that TM courses could have a cost–benefit ratio of 1:8.5; that is, for every $1 spent on TM courses in prisons, it was calculated that $8.50 would be saved. In all, the need for treatments within prisons far outweighs current availability, so any advancements, especially low-cost ones, could be of great value in correctional settings (Harner et al., 2010; Muirhead & Fortune, 2016).

In their literature review of the research on yoga in prisons, Muirhead & Fortune conclude that rehabilitative resources are not abundant enough to offer highly intensive, clinician- administered rehabilitation programs to every offender, nor is it appropriate to do so (Andrews & Bonta, 2010), so we are in need of a more obtainable and less intensive procedure to aid rehabilitative efforts. They state that the potential relevance of yoga is that it is relatively affordable to implement within prison settings and could be offered to a large number of inmates (Muirhead & Fortune, 2016).

*Contribution of this study*

The primary contribution of this study is in the unique perception-based lens through which it examines yoga intervention. The in-depth interviews with participants elicited insights on the Prison Yoga Project which could only come from individuals who had dedicated themselves to participating in the process of the program, and from no other outside source. Further, before undertaking this research project, I completed the Prison Yoga Project Teacher Training, where I was trained in the methodology of teaching yoga inside a prison setting, to vulnerable and trauma-affected populations. In this research, I served as an outside researcher without the bias of belonging to the organization, and yet with some context and connection to the purpose of PYP and its execution. This, in addition to my depth of contact with the interview material, produced a study which intimately details the experience of former inmates within a yoga intervention project.

Additionally, the authors of the studies mentioned above make it clear that more insight is needed on the impact of offerings designed to reduce health care costs, stress in incarceration settings, as well as reducing recidivism. This study adds to the evidence base regarding the impacts of interventions – and, importantly, the study is novel in that it focuses on perceptions of impacts among former prisoners, both perceived personal impacts and more general perceived impacts on the prison population as a whole.

This study investigates the effects of the Prison Yoga Project, which represents a specific organization in the broader category of yoga and mindfulness interventions. The PYP fills a particular niche in that it offers teacher trainings specifically for working with incarcerated populations and the program only allows PYP-trained teachers to work in the 160 nationwide prisons and jails which currently utilize its program. The Prison Yoga Project offers trauma-sensitive teacher trainings, assuming that prison life is inherently traumatic to some degree. Southern Illinois Law Journal references in its review of 100 correctional interventions the relevance of a qualified staff (Latessa, 1999) in order to produce the desired outcome of lower recidivism.

A preliminary study done by the Insight Prison Project cites interviews with 31 San Quentin prisoners and PYP participants and reports a reduction of stress and anxiety, a calmer temperament, emotional control and anger management, improved decision making, and reduction of chronic physical pain (Silva and Hartney, 2012). The project undertaken here expands upon this earlier work through qualitative interviews which add to a greater depth of understanding of perceived impacts of this program and others like it.

Although research is in its infancy, the studies discussed here have outlined possible benefits from yoga programs in prisons. This study aims to contribute to a body of further research, with which we may be able to outline which aspects of yoga are the most important to the correctional field. This could lead to an effective and inexpensive way of rehabilitating lower risk offenders who may not be offered regular rehabilitation, as well as augmenting standard programs for higher risk offenders and improving responsivity with potentially enhanced outcomes.

**METHODS**

This study is based on interviews with eight former inmates who have participated in the Prison Yoga Project. The small number of former prisoners who have experienced the PYP necessitates a small sample size and, indeed, of the twelve former prisoners whose names were forwarded by PYP, 66 percent agreed to an interview. Further, even with the small sample, given the dearth of research on the effects of prison-based yoga programs, I believe the insights garnered from this preliminary study offer important foundational understanding.

Questions were focused on former prisoners’ perceptions of the ability of prison yoga and meditation interventions more broadly’ to shift reactive behavioral patterns, reduce violence, increase emotional awareness and literacy, and reduce the likelihood of recidivism. The interviews explored PYP alumni perceptions of these impacts both as related to themselves and their more general perception of programmatic influence on prisoners. They were also asked about other mindfulness programs in the prison and their perception of the effects of these programs.

In order to ensure that this project met the requirements of the Institutional Review Board, a project proposal application was submitted to IRB. The project was revised according to IRB feedback and approval was received.

To recruit interviewees, I drafted a message inviting interested parties to contact me to schedule an interview, and had the message sent by James Fox, the founder of PYP and primary teacher of the San Quentin PYP program. Fox sent the message to a group of twelve potential interviewees, eight of whom responded and were subsequently interviewed. The recruitment process was limited by a small available sample size: Fox sent the message to all candidates who had participated in the program and then been released, a group which totaled only the twelve mentioned above. The research done by the Insight Prison Project, mentioned in the literature review, was able to interview a greater number of subjects as it dealt with presently incarcerated individuals, while this study dealt only with released former inmates. I then interviewed each former inmate over the phone, and with their permission, recorded each interview, which lasted approximately 60-75 minutes. I then transcribed each recorded interview.

I chose to inductively approach the interview data, since I did not want to make any assumptions about what the data would yield. Through an inductive approach, I could begin with neutral observations of my data which would then form findings. I wanted themes to arise based on the experiences reported to me based on the interviewees’ perceptions and experiences. I read through the transcriptions to identify recurring themes, of which I identified six, as follows: Effects of Non-physical Practices, Impact on Aggression, Physical Health/Medical Impact, Social and Community Impact, Psychological Impact, and Lifestyle/Continued Effects.

I then manually color-coded substantive groups of text that directly reflected a given theme. I then identified the quotes from interviews which best illustrated each theme, and compiled a chart of themes and illustrative quotes. Using my notes on patterns in the interviews, I created a “Results” section, emphasized by the quote chosen for each theme.

Participants also completed five short questionnaires designed to reflect aggression, depression, anxiety and self-control. The tools used to measure these tendencies are: Beck’s Depression Inventory, Beck’s Anxiety Inventory, the Verbal Aggressiveness Scale, a self-control scale, and an emotional intelligence questionnaire.

The Beck Depression Inventory (BDI) is a widely-used 21-item, self-report rating inventory that measures characteristic attitudes and symptoms of depression (Beck, et al., 1961; Beck 1996). It is a brief, criteria-referenced assessment for measuring depression severity that includes questions on self-esteem and levels of discouragement. A BDI score of 1-10 indicates normal ups and downs, a BDI score of 11-16 states a mild mood disturbance, a BDI score of 17-20 indicates borderline clinical depression, a BDI score of 21-30 indicates moderate depression, a BDI score of 31-40 indicates severe depression, and a BDI score of over 40 indicates extreme depression.

To detect anxiety, I used the Beck Anxiety Inventory (BAI) which includes questions on both emotional and physical manifestations of anxiety (Kreutzer et al., 2011). A BAI Score of 0 – 21 indicates low anxiety, a score of 22 – 35 indicates moderate anxiety, and a score of 36 and above indicates potentially concerning levels of anxiety.

Infante and Wigley's (1986) Verbal Aggressiveness Scale (VAS) is a widely accepted and frequently used measure of trait verbal aggression that includes questions on the level of care taken to others’ feelings during communications. Scores from 20-46 suggest low verbal aggressiveness, 47-73 suggest moderate verbal aggressiveness, and 74-100 suggest high verbal aggressiveness (Infante & Wigley, 1986; Levine et al., 2004).

In addition, I used Tangney, Baumeister, and Boone’s 2004 Self-Control Scale which is a peer-reviewed self-reporting 10-item Self-Control scale, designed to assesses self-control in both research and diagnostic settings (Tangney et al., 2004) and includes questions on ease of breaking bad habits and resisting temptation. The maximum score on this scale is 5 (extremely self-controlled), and the lowest scale on this scale is 1 (not at all self-controlled).

Finally, the Emotional Intelligence Questionnaire is based on Daniel Goleman’s “Emotional Intelligence: Why it can matter more than IQ” 1995 research, and was modified by Suzanne Farmer at UT Southwestern’s Office of Development and Training (Farmer, 2013) and includes questions on one’s capacity to manage emotion. The Emotional Intelligence Questionnaire contains four types of questions: self-awareness (with scores 0-35 where 35 indicates high self-awareness), self-management (with scores 0-40 where 40 indicates high self-management), social awareness (with scores 0-40 where 40 indicates high social awareness), and relationship management (scores 0-35 where 35 indicates high skill at relationship management).

Each took about five minutes to complete, which in addition to the investigative interview questions, amounted to interviews of approximately 75 minutes.

**RESULTS**

Below, results are presented for each measured impact below, in combination with overarching findings illustrated by select quotes.

**Effects of Non-physical Practices**

Though the physical asana practice of yoga intervention is a potent tool, it was found that the non-physical practices of breath control and meditation were especially effective in rehabilitative efforts. It was stated by interviewees that breath practice and meditation offered the opportunity to practice being focused and fully present with the self in moments of turmoil and tension. Interviewees explained that while physical practices help to warm up the body, and increase a sense of presence and awareness, they found that one of the primary functions of the physical practice was to set up for the stillness required in meditation. They explained that during this stillness, they found that the most powerful emotional and psychological transformation could occur, as meditation and breath practices offered the opportunity to cultivate calm and ease, a potent antidote to the tension of prison life. The following results are each impacted profoundly by these practices. One former inmate stated:

*The meditation process especially was beneficial to me because it allowed a lot of things to leave my mind that had been in the forefront. Anger, anxiety, just a basic overall uncomfortableness of being in crowds subsided a lot. Especially when I walked out of my class, it was the feeling of being renewed. Refreshed. To be able to see the world through a different lens, which I think helped me transcend back into society. I think that right there needs to be spoken to.*

*When I got out, I went to the VA clinic, and of course I was diagnosed with PTSD, but having the tools now that I can use by sitting back and meditating during my time outside, it allowed me to meld back into society without being so filled with turmoil.( 60-70 years of age, four years in PYP, released for three years).*

**Impact on Aggression**

Each former inmate described lowered aggressive tendencies, both unprompted within the interviews and also when prompted by questions on verbal aggression. There was an overall pattern of interviewees describing PYP’s influence on their ability to stay centered in the face of an intense situation. Four former inmates used the term “responsive” instead of “reactive,” and explained that they had learned through PYP to pause in the face of conflict or intensity, notice the sensations in their body, and be at peace in the moment. One of the questionnaires given to participants was the Verbal Aggressiveness scale, which showed all interviewees to have a low degree of verbal aggressiveness. Interviewees emphasized the learned skills of nonjudgment and acknowledgement of another person’s own internal challenges, enabling them to not take an attack personally, and let it go. PYP’s training in attention to the breath in times of stress or difficulty was highly significant and emphasized in each of the interviews. The breath is described as being a powerful tool, with the exhale breath as a release valve for stress and intensity.

The value of service to others was also emphasized in the interviews, which was coupled with a learned desire through PYP to do no harm. PYP was also described as being more impactful than other prison programs on aggression, including San Quentin’s “Victim-Offender Education” (VOE) program, and “Guiding Rage into Power” (GRIP), a program specifically built to prevent aggression. Each of the inmates who made comparisons between programs had participated in the programs he described. All interviewees described PYP as impactful in regard to reducing aggression, and all but one interviewee described PYP as being more impactful than these other programs. One former inmate stated:

*I’ve been to a lot of anger management things, and it’s just talk. You can know that you’re clenching up or clenching your fists, but unless you have a physical tool to slow things down…and those classes will teach breathing, but unless you’ve done the reps of inhaling and exhaling fully while doing asanas…it’s not something that I think comes easily to most people if it’s not something you practice while doing something difficult. Like if you could move with your breath and not lose your breath under the stress of the movement or getting fatigued, then if you’re getting hit with that kind of stressful situation and you can remember the breath, you’ve practiced it so much that it’s easier to do” (50-60 years of age, ten years in PYP, released for three years).*

**Physical Health/Medical Impact**

It was found that former inmates have had powerful transformations in their medical needs due to psychological and physical impacts of the Prison Yoga Project. It was reported that back pain, stress, tension, and muscle tightness (exacerbated by confinement) have been mitigated through PYP’s physical yoga practice which is stated to improve strength and flexibility, and that the practice has become an essential tool in healing and maintaining general health. Of eight interviews, three participants reported incidents in which they were able to stop taking medications or undergoing medical treatment for psychological or physical ailments, through PYP’s psychological and physical wellness practices. Additionally, two participants reported a cessation of addictive behaviors (smoking) due to the self-control tools they attained through PYP’s body awareness practices. One former inmate stated:

*People doing yoga first won’t self medicate. And self medication eventually leads to guys having to go seek medical help. It reduces injuries from normal life and from sports they do in there, guys with chronic back pain might be able to ameliorate it and not have to get on pain meds and chronic care. There’s a shortage of low bunks for people with bad backs and other health issues. So if you have an aging population that doesn’t need lower bunks, it makes housing guys easier. (50-60 years of age, ten years in PYP, released for three years)*

**Social and Community Impact**

Of eight interviewees, five emphasized that PYP has taught them to prioritize community service. Though these men are either currently on parole or recently off parole and working long hours to make a living wage in the Bay Area, these five former inmates each take at least ten hours per week to volunteer in their community. The interviewees emphasized the community building that occurred within the Prison Yoga Project by way of the relationship skills implicitly taught in classes: the phrase used to conclude a class session is the Indian Sanskrit word “Namaste,” which was explained to refer to the inherent equality of all individuals. Additionally, the PYP teachers include yoga philosophy on Karma Yoga: the practice of service to others in the name of the inherent equality mentioned above. The former inmates explained that they carry these teachings with them into their community in the form of community service. One former inmate stated:

*I think it was a character transformation, that allowed me, when I got out of prison, to embrace humanity. It really is quite evident in the job that I have today. And in the different volunteer programs that I got involved in, before I started getting permanent work. And I don't know if I would've done that I hadn't gone through the yoga program. It would have been all about me. I make sure that I have all my needs met and everything, but now it's this embracing of humanity, The desire to create amends for the life that I took, I could never replace it. But they kind of go hand-in-hand. And it allows me to fulfill my potential, to do whatever I can to help humanity” (60-70 years of age, four years in PYP, released for three years)*

**Psychological Impact**

Former inmates reported changes in psychological disposition over time which they attributed to their experience in the Prison Yoga Project.

In the interviews, each former inmate noted to some degree experiencing greater emotional intelligence and awareness, as a result of PYP’s body-centered mindfulness practices, which allow the recognition and acceptance of emotions. It was emphasized by four interviewees that having unacknowledged emotion leads to apathy and depression, and that the Prison Yoga Project is unique among prison programming in that it offers a route to uncover and process those previously unacknowledged emotions. One former inmate stated:

*When emotions are confusing and hard to resolve, they end up through emptiness and apathy causing depression. Having a yoga practice where the core philosophy is to put the practitioner back in touch with their emotions, stillness, breath, through a real expression of amends, gratitude, and service, you know…not only did I recognize what was causing the depression, it’s environmental, and I have tools to deal with it” (40-50 years of age, two years in PYP, released for three years).*

Further, each participant filled out the set of five questionnaires (detailed in “Methods”) set to measure aspects of their personalities, which may have been influenced by the Prison Yoga Project. Indications of psychological impact were also found in the results of the five questionnaires. Results of each questionnaire are listed here. On the Beck Depression Inventory, scores from 1-10 are considered normal, and to indicate low depression. All participants scored below 8, with a mean of 2 and a standard deviation of 2.78. According to this scale, all interviewees have a low degree of depression.

On the Beck Anxiety Inventory, a grand sum between 0 – 21 indicates very low anxiety. All participants scored below a 10, with a mean of 2.87 and a standard deviation of 3.68. According to this scale, all interviewees have very low anxiety.

On the Verbal Aggressiveness Scale, scores can range from 20 to 100. Scores from 20-46 suggest low verbal aggressiveness. All participants scored below a 46, with a mean of 34.25 and a standard deviation of 8.45. According to this scale, all interviewees have a low degree of verbal aggressiveness.

On the 10-Item Self-Report Self-Control Scale, all participants scored above a 3.2, with a mean of 3.66 and a standard deviation of .26 on a scale of 1-5, 5 indicating extremely self-controlled, and 1 indicating not at all self-controlled. According to this scale, all interviewees have a high degree of self-control.

The Emotional Intelligence Questionnaire is divided into four sub-categories of emotional intelligence: self-awareness (with scores 0-35 where 35 indicates high self-awareness), self-management (with scores 0-40 where 40 indicates high self-management), social awareness (with scores 0-40 where 40 indicates high social awareness), and relationship management (scores 0-35 where 35 indicates high skill at relationship management). All participants scored above a 29/35 for self-awareness, with a mean of 30.75 (87.8 percent), and a standard deviation of 1.58. All participants scored above a 29/40 for self-management, with a mean of 34.25 ( 85.63 percent), and a standard deviation of 3.58. All participants scored above a 23/40 for social awareness, with a mean of 32.88 (82.2 percent), and a standard deviation of 5.37. All participants scored above a 29/35 for relationship management, with a mean of 31.125 (88.92 percent), and a standard deviation of 2.10. According to this scale, all interviewees have a high degree of emotional intelligence with regard to self-awareness, self-management, social awareness, and relationship management.

**Lifestyle/Continued Effects**

Lastly, it was found that post-release, interviewees continue their commitment to the practice of yoga, since they have found it to be so impactful to their rehabilitation and personal development. It was emphasized in interviews that the tools offered by PYP were essential in the self-work needed to transition from prison back to society. Interviewees explained that the personal growth learned in PYP offers them the opportunity to continue to transform into better men, through the practice of yoga. One former inmate stated:

*Being in the prison yoga project has been so rewarding because in order for me to actually get my day going, I like to get my practice in in the morning. I’m so dedicated to the practice sometimes I might have to compromise my sleep. If I can get a good 45 minutes or an hour, it’s so peaceful and mindful, and my day is just so wonderful. That’s one of the cores of my exercise regimen. Without that practice, I wouldn’t be as agile, mindful and just relaxed.” (40-50 years of age, three years in PYP, released for one year)*

**DISCUSSION**

In summary, former prisoners indicated that the Prison Yoga Project facilitated the following outcomes: positive psychological impact resulting in reduced depression and anxiety, a reduction of aggressive tendencies, a reduction of physical ailments including addictive behaviors, and an increase in social participation and dedication to community. No negative impacts of the Prison Yoga Project were reported, despite repeated prompting. Questionnaire responses also indicate that all interviewees have a low degree of verbal aggressiveness, a high degree of self-control, and a high degree of emotional intelligence with regard to self-awareness, self-management, social awareness, and relationship management, a low degree of depression, and very low anxiety. The eight former inmates who were interviewed range in age from 30-70, participated in PYP for two-ten years, and have been released for two to four years.

The literature points toward the relevance of the positive psychological impacts listed above, noting that reduction of anxiety and improvement in mood are beneficial for an incarcerated population, who typically suffer from an overrepresentation of difficulties in these domains (Mansoor et al., 2015). This is especially relevant when considering the fact that difficulties in areas such as emotional control may increase the likelihood of offending (Andrews & Bonta, 2010, Muirhead & Fortune, 2016).

It was found that former inmates cited PYP’s substantial impact on reducing aggressive tendencies through shifting “reactive” behavioral patterns to “responsive” behavioral patterns. Reduction of aggressive tendencies also contributes to a decreased likelihood of reoffending, as the literature cites aggression as one of the key variables related to offending (Deshpande et al., 2008). Further, participants in this study cite reduction of aggressive tendencies as a key feature of their eased reintegration into society.

Additionally, the literature shows per-prisoner health care costs to be an increasing challenge for prisons. This research indicates that yoga for prisoners contributes to a reduction in healthcare costs, by reducing addictive behaviors through the self-awareness and emotional intelligence practices which beget increased self-control, and by improving physical well-being through practices which decrease stress and improve strength and flexibility.

Lastly, it was found that PYP contributes to participants’ community engagement and community service. This value is instilled in PYP participants by promoting nonjudgment, and the traditionally yogic values of the inherent equality of all individuals as well as Karma Yoga, the practice of service to others in the name of the inherent equality mentioned above. This finding has important social implications, and may result in increased public safety for receiving communities and higher civic participation among former inmates, leading to an ease of reentry into society.

Overall, the literature cites a lack of inmate access to rehabilitative resources while in prison (Andrews & Bonta, 2010), and yoga for prisoners presents a more obtainable and less intensive practice to aid rehabilitative efforts. Yoga is comparatively affordable to implement within prison settings and could be offered to a large number of inmates.

More research is required before it can be said with certainty that yoga for prisoners has a positive effect on the outcomes listed above. Useful future research may include longitudinal studies of those outcomes, including studies featuring objective indicators of psychological and physical outcomes (i.e. measurements of cortisol levels, blood pressure, etc.), as well as other outcomes such as compliance with parole requirements. Randomized control trials would also be a useful tool in this research.

Important limitations of this study included a short time frame (eight months from inception to presentation), a small sample size due to a lack of eligible candidates for interview, and lack of longitudinal data over a period of time, including before during and after yoga intervention. It may have been useful to use research assistants in the coding process, who were more removed from the interview content and therefore would increase reliability.

Additional limitations include the use of Beck’s Depression Inventory or BDI (1961), instead of BDI II (1996), the second and updated version of the same questionnaire. Nova Southeastern University addresses some of the differences between the old and new versions: one of the main objectives of this new version of the BDI was to have it conform more closely to the diagnostic criteria for depression, and items were added, eliminated and reworded to specifically assess the symptoms of depression listed in the DSM-IV and thus increase the content validity of the measure (Sellers 2016).

Additional limitations also include fact that the interviewees were somewhat self-selected, as the only potential interview participants were those who had chosen to enroll in PYP and stay in the program for a long period of time, and who were then released. These potential interview participants had to have also maintained enough of a relationship with James Fox, the founder of the program, for him to have confidence in sharing their contact information. Due to all this, there is a lack of information about potential adverse experiences of participants in PYP. There is a certain inability here to fully address impact or effects of PYP without experimental design or more objective measures in the data collection process.

Even so, the percentage of former prisoners who elected to be interviewed out of the available twelve was a high 66 percent. This high percentage speaks to the high degree of enthusiasm for PYP among those who have participated in the program. The perceptions of those who elected to be interviewed shed important light on the experience of yoga intervention from the inside. This study uses those perceptions to highlight the potential benefits of yoga for prisoners and for society at-large through cost-effective mindfulness interventions in incarceration settings.

Appendix: Interview Guide

**Prison Yoga Project Experience**

How long did you participate in the Prison Yoga Project?

How long has it been since you participated in the PYP?

Can you describe the project and your experience with it?

How often did you participate in it? For how long? What types of activities were involved?

What activities were of most interest to you? Least? Why?

Can you describe the overall sense of PYP among the prison population?

Is participation desired? Questioned? Any interactions with other inmates that reflect this overall perception?

What other kinds of mindfulness and/or physical programs were offered during your time in prison and how did inmate perception of PYP compare to these?

**Perceptions of PYP Impacts**

Do you believe PYP influenced you as an individual? If so, how? If not, why not?

If impactful,

Do you believe these impacts mostly influenced you during your time in prison – or do you think the impacts are longer-term? Please explain.

Were there particular elements of PYP that you believe offered most impact?

What was not impactful? are there particular elements of PYP that you believe reduce the potential for impact? Do you believe there are elements of PYP that hold the potential to be impactful with adjustment? Please explain.

What about PYP’s impacts (or not) on others?

How do you think PYP’s potential impacts compare to the impacts of other prison-based mindfulness or physical programs?

We’d like to focus now on five specific aspects of your personality and will reference the questionnaires to ask about these.

**With regard to verbal aggressiveness scale:**

As you were responding to the questions in the scale, did you think about the effects of PYP on these behaviors? Do you think PYP was influential? Do you believe that PYP might influence others with regard to these behaviors? Do you believe any effects of PYP are long-term or only impactful in the short-term? Please explain.

Are there other prison programs that you believe might influence these behaviors?

**With regard to anxiety inventory:**

As you were responding to the questions in the scale, did you think about the effects of PYP on these feelings? Do you think PYP was influential? Do you believe that PYP might influence others with regard to these feelings? Do you believe any effects of PYP are long-term or only impactful in the short-term? Please explain.

Are there other prison programs that you believe might influence these feelings?

**With regard to self control scale:**

As you were responding to the questions in the scale, did you think about the effects of PYP on these feelings and behaviors? Do you think PYP was influential? Do you believe that PYP might influence others with regard to these feelings and behaviors? Do you believe any effects of PYP are long-term or only impactful in the short-term?

Are there other prison programs that you believe might influence these feelings and behaviors?

**With regard to depression scale:**

As you were responding to the questions in the scale, did you think about the effects of PYP on these behaviors? Do you think PYP was influential? Do you believe that PYP might influence others with regard to these behaviors? Do you believe any effects of PYP are long-term or only impactful in the short-term?

Are there other prison programs that you believe might influence these behaviors?

In all, do you think that PYP might reduce the likelihood of re-offending? Why or why not?

Do you believe other prison-based programs might influence the likelihood of re-offending? Please explain.

Do you currently engage in any mindfulness practice? Any type of regular physical activity? Do you think you would be doing these if not for the influence of PYP?

What advice would you like to offer the PYP as the organization moves forward? What about prison organizations in general, with regard to mindfulness and other prison-based programs?

**Personal Background**

What is your age?

How many years of schooling have you completed?

Are you currently working or seeking work? If so, what kind?

Are you married or in partnership?

Appendix: Themes and Illustrative Quotes

**Psychological Impacts**

“And when emotions are confusing and hard to resolve, they end up through emptiness and apathy causing depression. Having a yoga practice where the core philosophy is to put the practitioner back in touch with their emotions, stillness, breath, through a real expression of amends, gratitude, and service, you know…not only did I recognize what was causing the depression, it’s environmental, and I have tools to deal with it. From one practice to the next, you have something to look forward to and it really does help emotion.”

(40-50 years of age, two years in PYP, released for three years)

“The most interesting thing was that it worked immediately. From the first time I practiced, my body felt light. I felt peace.”

(50-60 years of age, ten years in PYP, released for three years)

“And I was dealing with a lot of anger, and also guilt and shame, so I punished myself by pushing my body way past acceptable pain thresholds, and beyond what’s nurturing to the body. Yoga helped me keep that balance. And it helped me to just be calm.”

(60-70 years of age, four years in PYP, released for three years)

“It helped me to really engage with my emotions. In the beginning, James would ask ‘do you find yourself distracted with thoughts? Focus on your breath, what kind of feelings are there, are coming up for you? And breathe into those feelings, allow those feelings to be brought to the surface.”

(40-50 years of age, three years in PYP, released for one year)

“[PYP] facilitators came at me with love, compassion, which was something that I’d never experienced before. It got me to the point where I believed in myself, like maybe I can be loved for who I am. And by having these new tapes replace the old tapes of feeling unloved, really brought my stress and anxiety down. So it was a transformation.”

(60-70 years of age, four years in PYP, released for three years)

“I notice that, throughout the day, well before I started going to yoga, I didn’t know how tense I was until I started going into the practice. And I noticed that afterwards, a lot of my anxieties and stress are released through the practice of holding poses. And the breath, the meditation. Meditating on where am I in my body, like ‘what hurts?’ ‘where is this coming from?’

Recognizing and releasing those energies, and that helps release a lot of my anxiety. So a lot of guys look forward to the next session of yoga, to release any anxiety they might be carrying.”

(40-50 years of age, three years in PYP, released for one year)

“When I was going to the parole boards is the last time I can remember anxiety, and you know, one of the gifts and tools that he gave us was pranayama breathing. So I applied that a lot, especially getting ready for my parole board responsibilities. I would use the word cathartic, when you’re really on your breath and just in the moment…Just being able to take a breath and use my ujai breathing, and focus and just be in the moment and know that no matter what happens, everything is gonna be okay.”

(40-50 years of age, ten years in PYP, released for three years)

“I think PYP was an anchor to my true self. I was in an institution and deprived of all my dignity, and I could still be happy joyous and free.”

(40-50 years of age, ten years in PYP, released for three years)

“PYP really helped me shift my mindset. I don’t look at things the same. Problems seem more like opportunities to learn something or to grow.”

(40-50 years of age, four years in PYP, released for four years)

“PYP allowed me to take my mind off of what was bothering me at that time and let everything go. At the end of the session I felt like I had accomplished something.”

(40-50 years of age, four years in PYP, released for four years)

“Anxiety was something that I dealt with, and I believe that the ability to slow things down, which is the practice, alleviates the worry that things are going to happen again or continue to go wrong, so I do believe that PYP really helped me curb anxiety, in the short term and the long term.”

(40-50 years of age, four years in PYP, released for four years)

“Even though I went to traditional therapy and took medications, I had to deal with that and power through that. I learned through yoga and meditation that I was affected by the slowing down, the concentration, the being in the moment. That in turn has a direct effect on my emotional regulation.”

(40-50 years of age, two years in PYP, released for three years)

“There’s no [other] prison program that focuses on anxiety. They might have something that deals with stress and relaxation, but it doesn’t address it. Just the whole way James taught us to use yoga to relax; that’s the antidote to anxiety. I never got depressed in there once I started yoga. Prior, I got real down in there. Out here, I try to go back to being grateful. I still get that from yoga. It keeps me from being depressed.”

(50-60 years of age, ten years in PYP, released for three years)

*“*[PYP] helps you connect bodily sensations to emotions in a way that there’s a physical part. I’ve seen these other classes on ‘how do you feel?’ But I don’t think you’re open enough to feel into your body deeply without cultivating a yoga practice. So I think the yoga with that curriculum part of emotional intelligence, that’s the best way to teach it.”

(50-60 years of age, ten years in PYP, released for three years)

“There was times when I was having little anxiety moments, especially after being in prison for 31 years. Doing my preparation for the parole board, talk about anxiety. I was having anxiety attacks. To relax myself I would do my daily practice”

(40-50 years of age, three years in PYP, released for one year)

“When I got into yoga, yoga was more dealing with anxiety. I had the anxiety of walking the yard, the anxiety of getting prepared to go to the board, and then after the board waiting for the governor’s decision. And these are anxious moments. Your whole life hung in the balance. And so it kept me very grounded.”

(60-70 years of age, four years in PYP, released for three years)

*“*Yoga has taught me to challenge myself and come out on the other side. Once upon a time I could not do a certain pose, I was too muscle bound. I challenge myself. Through all these yoga trainings I learned not to be like ‘oh I can’t do it I’m scared,’ but like ‘why not me?’ It’s so good for fighting depression.”

(50-60 years of age, six years in PYP, released for seven years)

“What touched me the most was that after every session, after going to a full hour, I actually had a sense of feeling loved and appreciated, and that sense of accomplishment, that I’d worked a little bit through an issue. It really just helps me to start validating myself based on the accomplishment of understanding myself a little better…finishing a practice, following through with something.”

(40-50 years of age, four years in PYP, released for four years)

**Physical/Medical Impacts**

“People doing yoga first won’t self medicate. And self medication eventually leads to guys having to go seek medical help. It reduces injuries from normal life and from sports they do in there, guys with chronic back pain might be able to ameliorate it and not have to get on pain meds and chronic care. There’s a shortage of low bunks for people with bad backs and other health issues. So if you have an aging population that doesn’t need lower bunks, it makes housing guys easier.*”*

(50-60 years of age, ten years in PYP, released for three years)

“I was diagnosed Bipolar 1 in 1988 and just lived with it. But anxiety because my propensity towards mania is just part of it, rather than depression. I was taking medication, specifically Benzodiazepine, which I don’t want to take even if I need it. It’s an addictive substance and it has side effects. For my own anxiety, generalized anxiety which is the potential for panic, I don’t have anymore.”

(40-50 years of age, two years in PYP, released for three years)

“The first benefit I got was a restful night’s sleep, which is something that just doesn’t happen in prison. And people want to know how to do that. That’s a real practical application, just to be able to go back to your bunk and do breathing exercises where you’re exhaling all of that tension and conflict and aggression to the point where you fall asleep. It’s kind of like magic.”

(40-50 years of age, two years in PYP, released for three years)

“I was physically active before I went in. I used to be a sponsored skateboarder. I’ve been able to let a lot of that go since a lot of it is physically harmful as you get older, and I’ve replaced it with yoga. Yeah I’m fit, but in a much more mindful way. The type of mindful stillness and emphasis on breathing through really basic moves in yoga and James’ philosophy does keep me fit. And it would keep anybody fit.”

(40-50 years of age, two years in PYP, released for three years)

“Everything was an opportunity for learning and for growth. Just sometimes you get challenged… Yoga is different because you’re integrating the body, your mind, your spirit, getting in touch with yourself more and how hard can I push myself. I can be sweating super bad like ‘oh my god I can’t do this any longer,’ and somehow, we’re able to.”

(40-50 years of age, ten years in PYP, released for three years)

“I have a friend of mine from PYP who was taking medication for depression. After doing yoga for awhile he decided to quit taking it. He felt like he’d been using a crutch, and now he had this gift and this tool to be able to use yoga.”

(40-50 years of age, ten years in PYP, released for three years)

“I put my body through a lot of abuse, I’m hard on myself and I’m hard on my body. Yoga was healing.”

(50-60 years of age, ten years in PYP, released for three years)

“I don’t like sitting meditation. For me, it’s one thing to sit and breathe and maybe negative thoughts settle, but it’s different when your body has that exhilaration. In a vinyasa practice, just the cells, the way the bones are constructed, a lot of peoples’ bodies are so stiff and so tight, a lot of guys have back pain…you know, yoga helps. Yoga helps your body feel better. It’s better than the medical care you get there. James always de-emphasizes the physical part, but a lot of guys went there because they had back problems and they found that yoga could help their backs.”

(50-60 years of age, ten years in PYP, released for three years)

“And I noticed that doing the exercises, my muscles started to develop a little bit differently than they had before. It helped me get on my feet much quicker than had I not gotten into yoga. I look at it from a physical aspect; it was very beneficial, and then even more importantly, from a mental aspect, it was a real good experience for me to identify some traumas and learn how to deal with them.”

(60-70 years of age, four years in PYP, released for three years)

“The guys who I would see come to every scheduled practice, those people continued to come, and it became like a positive drug antidote that you need, and it’s something that you need and something that has no borders and no after-effects.”

(50-60 years of age, six years in PYP, released for seven years)

“Oh yeah PYP definitely helped with my anxiety. I’d been a nail biter for five decades and I don’t have that problem no more. I smoked cigarettes for 43 years, I don’t have that problem no more.”

(60-70 years of age, four years in PYP, released for three years)

**Social/Community Impacts**

“I think it was a character transformation, that allowed me, when I got out of prison, to embrace humanity. It really is quite evident in the job that I have today. And in the different volunteer programs that I got involved in, before I started getting permanent work. And I don't know if I would've done that I hadn't gone through the yoga program. It would have been all about me. I make sure that I have all my needs met and everything, but now it's this embracing of humanity, The desire to create amends for the life that I took, I could never replace it. But they kind of go hand-in-hand. And it allows me to fulfill my potential, to do whatever I can to help humanity.”

(60-70 years of age, four years in PYP, released for three years)

“I work for Community Housing Partnership, it’s a nonprofit organization that provides affordable housing to the homeless in San Francisco. We currently have fourteen sites. Any one of them will house 20-120 tenets, and then 66 units out on Treasure Island. I’m the maintenance operations manager for all of them. My job is to ensure that our tenets have decent living conditions. We do all the repairs and turnovers. It’s part of giving back to the community. Of living amends. I couldn’t have landed in a better position.”

(60-70 years of age, four years in PYP, released for three years)

“I work here in San Francisco now and I see a lot of guys who have paroled recently. We’ve developed that brotherhood. It’s just like when you go to war. You’re side to side, back to back with your buddy. When you see another brother who’s done the yoga program, it’s the same way. You smile because of the poses, because of the energy released. When you leave you’re exhausted so much you’re smiling because it’s a pleasure to see each other once again.

(50-60 years of age, six years in PYP, released for seven years)

“It’s contagious, what James taught me and the other guys. We can’t help but to help another person.”

(40-50 years of age, three years in PYP, released for one year)

“I feel there was a sense of community. A sense of belonging with everyone else. Even though some guys could hold certain poses, we encourage each other. We encourage each other to push forward. And it was okay that some guys were more flexible than others; we didn’t judge each other, we didn’t insult each other. So I think that was really great. And I think depression is also low self-esteem. And that program encouraged community, and that’s one thing I really love about the program.”

(40-50 years of age, three years in PYP, released for one year)

“When we build that community sometimes things come up and we have an opportunity to process some of that stuff, talk about it, take the energy out of it. It was only through building this community of ourselves that gave us the permission to be vulnerable and talk about some of that stuff. In prison, it’s all about being tough and hypermasculinity, so being able to talk about the hurt, the fear, those are less so taboo. Not so when you’re doing this practice.”

(40-50 years of age, ten years in PYP, released for three years)

“It teaches people to be kind to themselves and others. There’s an attitude shift in wanting to hurt themselves or others. We learned not to through PYP.”

(40-50 years of age, four years in PYP, released for four years)

“Despite the fact that I don’t live in a mansion, and could make more if I committed more hours to the paralegal work, I make sure that I only work about 30 hours a week so that I can have 10-15 hours per week of service to the community, whether that be at the soup kitchen or working in the botanical gardens or free art therapy at a wellness center that doesn’t have the budget.”

(40-50 years of age, two years in PYP, released for three years)

“The main thing is being of service. Combining yoga therapy for karma yoga for the purpose of emotional and physical release of pain and suffering in general. So it’s not just institutions or people who’ve been subject to institutions who need this, it’s everybody.”

(40-50 years of age, two years in PYP, released for three years)

“One thing that James teaches is that there is no big ‘I’ and little ‘you’. Everybody is equal. Namaste puts everybody on the same plateau. It’s saying the divine within you sees the divine within me. It’s the light in you sees the light in me. It was so beautiful how he (James) simplified that.”

(40-50 years of age, three years in PYP, released for one year)

“Yoga brought me to a level of being very mindful, and a deeper sense of empathy, and a real big sense of being grateful for where I’m at and connectedness to all humanity.”

(60-70 years of age, four years in PYP, released for three years)

**Impact on Aggression**

“I’ve been to a lot of anger management things, and it’s just talk. You can know that you’re clenching up or clenching your fists, but unless you have a physical tool to slow things down…and those classes will teach breathing, but unless you’ve done the reps of inhaling and exhaling fully while doing asanas…it’s not something that I think comes easily to most people if it’s not something you practice while doing something difficult. Like if you could move with your breath and not lose your breath under the stress of the movement or getting fatigued, then if you’re getting hit with that kind of stressful situation and you can remember the breath, you’ve practiced it so much that it’s easier to do.”

(50-60 years of age, ten years in PYP, released for three years)

“Instead of being reactive to the situation, PYP guys would be responsive to the situation. So they thought more about what they was gonna do before they actually did it, versus before when they would just do something before considering the impact that action would have on them. Their family, the other person, themself.”

(40-50 years of age, three years in PYP, released for one year)

“[In PYP] we always talk about the difference between reacting and responding. I was a very reactionary person for a lot of my life, so to be able to respond and take that breath…like ‘what’s going on for me right here and right now in this moment?’ and ‘what is my attachment to this emotion?’ These are things I got to cultivate and learn how to do. It’s just been something I learned to do, and I learned to do that with James, and it serves me even today.”

(40-50 years of age, ten years in PYP, released for three years)

“[PYP] gives us a tool to deal with stress. And from the people I did this program with, which was mostly guys doing a lot of time for violence, this gave us a way to deal with stress, to feel our emotions, and it taught us compassion for ourselves and other people. So it would be hard for me to even imagine someone who was in this program at least for a few months to commit violence. Like I could imagine someone in desperation maybe going back to using drugs, but it’s much less likely they would hurt somebody.”

(50-60 years of age, ten years in PYP, released for three years)

“There’s been times where I’ve wanted to say something very negative and condescending and judgmental, and James taught us mantras for when things come up. Like just say this mantra: ‘I’m practicing loving kindness’. I’ll just go to that ‘I’m practicing loving kindness’ or ‘love to all beings’ and I can just employ that tactic and that tool. A lot of times the energy that I was holding is able to dissipate.”

(40-50 years of age, ten years in PYP, released for three years)

“I think incorporating that breath in the beginning allows people to be present into the room, and without that, I don’t think the program is effective without the breath or the meditation.”

(40-50 years of age, three years in PYP, released for one year)

“In prison, you can’t avoid verbal aggression…And with a peer group surrounding you, you do have to be aggressive. And that changes over time, with yoga. You learn to be diplomatic, to walk away, to avoid that energy. And it’s carried over in my life. That’s one of the focuses of PYP is to let go of judgment, and just be at peace in the moment. And eventually you do that long enough, and it extends to the next moment, the next hour, the next week.”

(40-50 years of age, two years in PYP, released for three years)

“A few years before getting out, I was in James’ program and I learned to be on board with not only do I have feelings but others have feelings, and you have to be mindful of what you say because what you say can hurt others. With that, it’s very important not to overread people, but to read people because there could be something going on. Just a ‘hello’ or a ‘how you doin’?’ Can neutralize or stop something going on.”

(40-50 years of age, three years in PYP, released for one year)

“A lot of people go into prison sober and are unable to make sober judgments when they’re in conflict. Yoga does help with that immensely, probably of all the programs, yoga is the most effective.”

(40-50 years of age, two years in PYP, released for three years)

“With verbal attacks…it leads to violence. But what yoga does, or did for me, it helps diffuse those things because I wasn’t reactive. I always had that breath at the inhale and exhale. I had that pause in that breath, which could be an eternity. What yoga did is helped me not react, but to respond.”

(50-60 years of age, ten years in PYP, released for three years)

“In the end, yoga helped me to answer in a peaceful range in my voice, and body language. When you’re agitated, you’re fidgeting in the chair. I could just sit there. Some poses and some situations are going to be very difficult to handle. But once you meditate and make that your center, you’re good.”

(50-60 years of age, six years in PYP, released for seven years)

**“**I’ve been in some situations where I’ve had people just go off on me, and I’ve been able to be mindful of it. Just notice it and let it go. And I think that’s the big key, just notice it and let it go. Not take it personal…All around the yoga program and dialing down what you’re feeling in the moment, and that practice right there, has been totally beneficial to helping me keep my cool.”

(60-70 years of age, four years in PYP, released for three years)

“I’m in a transitional residence, with 40 other individuals. And everyone is not on the same page. I have to be very mindful of others’ feelings because the slightest thing can trigger someone, so you have to be mindful of that. What you say can hurt you and can hurt others.”

(40-50 years of age, three years in PYP, released for one year)

“It’s all predicated upon what you learn and what you feel as a person after going through that class [PYP]. I never want to harm anybody. I never ever want to harm anybody ever again. If anything, I want to do good for people.”

(60-70 years of age, four years in PYP, released for three years)

“[PYP is] another cornerstone that will ensure that we live up to our potential to where we’re not going to harm people. I think that if one had gone through the program and continued practicing, he wouldn’t be reoffending.”

(60-70 years of age, four years in PYP, released for three years)

“I think in general the tendency to use verbal insults on others really decreased since my practice. It goes back to what I learned about going back to the breath. How can I focus my breath…my breath helped me focus back on my conscious emotions. Being able to identify my emotions and what’s coming up for me. Like ‘Why are these thoughts coming up? Where is this thinking coming from? Why do I feel this way and what’s being triggered? What kind of memory or what kind of hurt is being triggered?’ And being able to identify my own stuff, I’m able to really focus on the other person. What’s going on with that other person?”

(40-50 years of age, three years in PYP, released for one year)

**Effects of Non-Physical Practices**

“And the meditation process especially was beneficial to me because it allowed a lot of things to leave my mind that had been in the forefront. Anger, anxiety, just a basic overall uncomfortableness of being in crowds subsided a lot. Especially when I walked out of my class, it was the feeling of being renewed. Refreshed. To be able to see the world through a different lens, whichI think helped me transcend back into society. I think that right there needs to be spoken to. When I got out, I went to the VA clinic, and of course I was diagnosed with PTSD, but having the tools now that I can use by sitting back and meditating during my time outside, it allowed me to meld back into society without being so filled with turmoil.”

(60-70 years of age, four years in PYP, released for three years)

“Once I began to understand the dynamics of yoga itself, just the practice and the mindfulness and breathing techniques and different postures…it was an eye opener. The class was just not enough time. That was the sad part for me. But once I left, I felt like I could levitate.”

(40-50 years of age, three years in PYP, released for one year)

“Guys get into a situation where they tense up. And then once they breathe, they are able to release that tension. For instance, I’ve noticed guys clench their fists when they’re angry. And once they start breathing, they release their fists. So they open up their palms. And it helps de-escalate what’s going on because now the other person is seeing that this person is loose, is not taking anything personally, is really relaxed, and it helps a lot of the time with the communication factor. It helps.”

(40-50 years of age, three years in PYP, released for one year)

“Each class was very impactful, but if you really want to be technical, I would say that the closing practice [was the most impactful]…it was times where we would close, it would take 15-20 minutes and we’d take a closing practice and just meditate. That was very impactful because after you would go through the different asanas and whatnot…there were strenuous pulls. I’m an athlete and it was still very strenuous, but at the end of the day when you go into the meditation practice it’s so rejuvenating it was all the way mindful awareness. I was just totally at peace and didn’t want to come out of that stage.”

(40-50 years of age, three years in PYP, released for one year)

“It [breath] allowed me to really stay calm in a situation where, in high risk situations, I normally would be really upset, but now I’m able to focus on my breath and it allows me to relax and regain my focus.

I use it almost every day even though I don’t actually practice yoga as often as I would like, but I practice meditation and the breath.”

(40-50 years of age, three years in PYP, released for one year)

“Staying in an uncomfortable position, and not letting your mind tell a story, but just focusing on the breath, it helps you build your muscle for dealing with uncomfortable situations in life. I felt like when I was doing it, I felt like I was building a reservoir of calm for stress out here.”

(50-60 years of age, ten years in PYP, released for three years)

“I’m always coming back to the breath out here. I had a second interview with the public defender’s office, and I just used that breath to calm myself like in a lot of situations…For me it’s happening. If I lose my breath, if I come to that awareness, I fix it. If I’m feeling stressed, I come to a seven count inhale and exhale. Then I maybe start doubling the exhale.”

(50-60 years of age, ten years in PYP, released for three years)

“In situations that are high intensity…I had a few situations where guys got into my face, and were really upset about something. One of the things that I did was to breathe into my whole self. Just taking my breath to the center of my core, and that allowed me to have some empathy and understanding of where they come from. And realizing that something they’re coming from is not something I’ve done necessarily, so I didn’t take it personally. One of the things that was great about it was I learned to ask them in a calm way: ‘where are you, what’s going on, what did I do?’ I was able to de-escalate the whole situation.”

(40-50 years of age, three years in PYP, released for one year)

“I think that practicing yoga helps to develop impulse control, helps a person to not be so reactant, but to take a moment to breathe and talk rather than being reactive to impulses.”

(40-50 years of age, four years in PYP, released for four years)

“And I think that by staying connected to the breath, my likelihood to reoffend is low. It helps me to disengage from a lot of old behaviors and a lot of old thoughts.”

(40-50 years of age, three years in PYP, released for one year)

“I think there’s an intellectual part to learning emotional intelligence, but I think it works well in conjunction with yoga because the breath and that awareness, it helps you feel.”

(50-60 years of age, ten years in PYP, released for three years)

“When I got into yoga, now I could focus on my mind, my spirit, and my body, which took me to a different level of self help.”

(60-70 years of age, four years in PYP, released for three years)

**Lifestyle/Continued Effects**

“Being in the prison yoga project has been so rewarding because in order for me to actually get my day going, I like to get my practice in in the morning. I’m so dedicated to the practice sometimes I might have to compromise my sleep. If I can get a good 45 minutes or an hour, it’s so peaceful and mindful, and my day is just so wonderful. That’s one of the cores of my exercise regimen. Without that practice, I wouldn’t be as agile, mindful and just relaxed.”

(40-50 years of age, three years in PYP, released for one year)

**“**I teach meditation now. I use the same form that he introduced to me with the groups that I’m teaching or facilitating. And then I noticed that it was really helpful for a lot of guys. And it was new for a lot of guys; they were uncomfortable with it. But after awhile, when they went to other groups that didn’t have it, they told me it was not as comfortable.”

(40-50 years of age, three years in PYP, released for one year)

“The one person that I’ve had continual contact with, he was on his first year out and still doing crime, while trying to implement yoga in the inpatient setting he was in, and that was five years ago. Now he’s getting his educational administrative masters degree and a full time job continues to practice yoga. And I think it’s because of the yoga.”

(40-50 years of age, two years in PYP, released for three years)

“I’ve been going to therapy for over a year. When I came out, my sister said ‘this will help us with our relationship’ which is going through some struggles. So I’m using yoga. If I didn’t have yoga, I don’t think I would have been open for therapy where I’m really using it to be vulnerable. Yoga is my life. It’s being able to get back to renew the practice, keep that beginner’s mind.”

(50-60 years of age, ten years in PYP, released for three years)

“You have to live this stuff. You can go to the class just to get the paper, but are you really applying this to your life? After doing all these classes, the Prison Yoga Project has everything. You can incorporate everything that you learn in the practice. It illustrates all that.”

(40-50 years of age, three years in PYP, released for one year)

“Yoga helped me survive. I have a lot more learning to do here but I’m learning not to be so hard on myself. Like ‘ahimsa’, do no harm.”

(50-60 years of age, ten years in PYP, released for three years)

“The yoga program is about life. It’s not about harming anything. And some of the tenets that stem from it are all about being kind, being compassionate, being mindful of others.”

(60-70 years of age, four years in PYP, released for three years)

“This practice is something that you have to live. You have to live it. You have all these unique dynamics of this practice. For me personally, it is very important for me to stay connected to the things that made me, that had the most impact on me. It was an excellent thing for me, participating, and spending my last two and a half years in prison in James’ program. James has shown me so much in this particular practice.

Like with the breathing, when I find myself in a compromising situation, I just go back to my breathing. It’s just been an overwhelming experience that I continue to embrace, and that I humbly embrace. I stay connected to people in my life, and the practice does that for me tremendously.”

(40-50 years of age, three years in PYP, released for one year)

“I’m actually running a breathing class right now, the name of this program is called ‘inner-pharma’. It’s just teaching people how to breathe.”

(40-50 years of age, three years in PYP, released for one year)

References

Alexander, C. N., Walton, K. G., & Goodman, R. S. (2003). Walpole Study of the Transcendental Meditation Program in Maximum Security Prisoners I. Journal of Offender Rehabilitation, 36(1-4), 97-125. doi:10.1300/j076v36n01\_06

Andrews, D. A., & Bonta, J. (2010). The psychology of criminal conduct. New Providence: LexusNexus/Anderson Publishing.

Auty, K. M., Cope, A., & Liebling, A. (2015). A Systematic Review and Meta-Analysis of Yoga and Mindfulness Meditation in Prison: Effects on Psychological Well-Being and Behavioural Functioning. International Journal of Offender Therapy and Comparative Criminology. doi:10.1177/0306624x15602514.

Beck, A.T., Steer, R.A., & Brown, G.K. (1996). Manual for the Beck Depression Inventory-II. San Antonio, TX: Psychological Corporation.

Birdee, G. S., Legedza, A. T., Saper, R. B., Bertisch, S. M., Eisenberg, D. M., & Phillips, R. S. (2008). Characteristics of yoga users: Results of a national survey. Journal of General Internal Medicine, 23, 1653–1658.

Bilderbeck, A. C., Farias, M., Brazil, I. A., Jakobowitz, S., & Wikholm, C. (2013). Participation in a 10-week course of yoga improves behavioural control and decreases psychological distress in a prison population. Journal of Psychiatric Research, 47(10), 1438-1445. doi:10.1016/j.jpsychires.2013.06.014

Brambilla, P., Perez, J., Barale, F., Schettini, G., & Soares, J. C. (2003). GABAergic dysfunction in mood disorders. Molecular Psychiatry, 8(8), 721–737. http://dx.doi.org/10.1038/sj. mp.4001362.

By taking a practical approach to criminal justice reform, we can decrease crime, enhance public safety, and make more responsible use of our resources. (2015). Criminal Justice Facts. Retrieved January 05, 2017, from http://www.sentencingproject.org/criminal-justice-facts/

Collier, L. (2014, October). Incarceration nation. American Psychological Association, 45(9). doi:10.1037/e577942014-010

Deshpande S, Nagendra H R, Raghuram N. A randomized control trial of the effect of yoga on verbal aggressiveness in normal healthy volunteers. International Journal of Yoga 2008;1:76-82)

Duncombe, E., Komorosky, D., Wong-Kim, E., & Turner, W. (2005). Free inside: A program to help inmates cope with life in prison at Maui Community Correctional Center. Californian Journal of Health Promotion, 3(4), 48–58.

Farmer, Suzanne et al. (c.2013). Emotional Intelligence Questionnaire. Based on: Daniel Goleman’s Emotional Intelligence: Why it can matter more than IQ (1995). UT Southwestern Office of Development and Training. Retrieved September 27, 2016, from http://www.utsouthwestern.edu/edumedia/edufiles/about\_us/Diversity/emotional-intelligence-assessment.pdf

Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23 000 prisoners: A systematic review of 62 surveys. The Lancet, 359(9306), 545–550. http://dx.doi.org/10.1016/ S0140-6736(02)07740-1.

Franzblau, S. H., Echevarria, S., Smith, M., & Cantfort, T. E. (2008). A Preliminary Investigation of the Effects of Giving Testimony and Learning Yogic Breathing Techniques on Battered Women's Feelings of Depression. Journal of Interpersonal Violence, 23(12), 1800-1808. doi:10.1177/0886260508314329

Friis, A. M., & Sollers, J. J. (2013). Yoga improves autonomic control in males: A preliminary study into the heart of an ancient practice. Journal of Evidence-Based Com- plementary & Alternative Medicine, 18(3), 176–182. http://dx.doi.org/10.1177/ 2156587212470454.

Froeliger, B. E., Garland, E. L., Modlin, L. A., & McClernon, F. J. (2012). Neurocognitive cor- relates of the effects of yoga meditation practice on emotion and cognition: a pilot study. Frontiers in Integrative Neuroscience, 6, 48. http://dx.doi.org/10.3389/fnint. 2012.00048.

Graham, R. E., Ahn, A. C., Davis, R. B., O'Connor, B. B., Eisenberg, D. M., & Phillips, R. S. (2005, April). Use of Complementary and Alternative Medical Therapies among Racial and Ethnic Minority Adults: Results from the 2002 National Health Interview Survey. Complimentary and Alternative Medicine Therapies, 97(4), 535-545. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2568705/pdf/jnma00185-0093.pdf

Half of the world's prison population of about nine million is held in the US, China or Russia. (2005). BBC News In Depth. Retrieved September 11, 2016, from http://news.bbc.co.uk/2/shared/spl/hi/uk/06/prisons/html/nn2page1.stm

Harner, H., Hanlon, A. L., & Garfinkel, M. (2010). Effect of Iyengar Yoga on Mental Health of Incarcerated Women. Nursing Research, 59(6), 389-399. doi:10.1097/nnr.0b013e3181f2e6ff

Hunt, K. S., & Dumville, R. (2016). Recidivism among federal offenders: A comprehensive overview. Washington, DC: United States Sentencing Commission.

Infante, D. A., & Wigley, C. J., III. (1986). Verbal aggressiveness: An interpersonal model and measure. Communication Monographs, 53, 61-69.

Kissen, M., & Kissen-Kohn, D. A. (2009). Reducing addictions via the self-soothing effects of yoga. Bulletin of the Menninger Clinic, 73(1), 34–43.

Khalsa, S. B. S., Khalsa, G. S., Khalsa, H. K., & Khalsa, M. K. (2008). Evaluation of a residential Kundalini yoga lifestyle pilot program for addiction in India. Journal of Ethnicity in Substance Abuse, 7(1), 67–79.

Kreutzer, J. S., DeLuca, J., & Caplan, B. (2011). Beck Anxiety Inventory. Encyclopedia of Clinical Neuropsychology. pp 359-36. doi: 10.1007/978-0-387-79948-3\_1972.

Latessa, E. J. (1999). What Works In Correctional Intervention. Southern Illinois University Law Journal, 23, 415-425. Retrieved October, 2016, from http://www.oregon.gov/doc/cc/docs/pdf/what\_works\_in\_correctional\_intervention

Landau, P. S., & Gross, J. (2008). Low Reincarceration Rate Associated with Ananda Marga Yoga and Meditation. International Journal of Yoga Therapy. 18, 43-48.

Lundstrom, T., & Erikson, C. A. (n.d.). (2015). Yoga Decreases Stress Levels in Incarcerated Women. PDF. Denver: Metropolitan State Universtiy.

Magill, D. L. (2003). Cost savings from teaching the transcendental meditation program in prisons. Journal of Offender Rehabilitation, 36(1–4), 319–331. http://dx.doi.org/10. 1300/J076v36n01\_15.

Managing Prison Health Care Spending. (2014, May 15). PEW Charitable Trusts. Retrieved from Managing Prison Health Care Spending.

Mansoor, M., Perwez, S. K., & Ramaseshan, H. (2015). A critical review on role of prison environment on stress and psychiatric problems among prisoners. Mediterranean Journal of Social Sciences, 6(1S1), 218–223. http://dx.doi.org/10.5901/mjss.2015. v6n1s1p218.

Maruschak, L. M. (2016, October 4). Medical Problems of Jail Inmates. PsycEXTRA Dataset, 1-23. doi:10.1037/e500022007-001

McCall, T., MD. (2015). Landmark Study: Yoga Lowers Health Care Costs.

Muirhead, J., & Fortune, C. (2016). Yoga in prisons: A review of the literature. Aggression and Violent Behavior, 28, 57-63. doi:10.1016/j.avb.2016.03.013

Oh, B., Choi, S. M., Inamori, A., Rosenthal, D., & Yeung, A. (2013). Effects of Qigong on Depression: A Systemic Review. Evidence-Based Complementary and Alternative Medicine, 2013, 1-8.

Park, C. L., Braun, T., & Siegel, T. (2015). Who practices yoga? A systematic review of demographic, health-related, and psychosocial factors associated with yoga practice. J Behav Med Journal of Behavioral Medicine, 38(3), 460-471. doi:10.1007/s10865-015-9618-5

Parks, G. A. (2003, July). The University of Washington Vipassana Meditation Research Project at the North Rehabilitation Facility. PDF. American Jails Magazine. Retrieved August 26, 2016, from www.prison.dhamma.org/amjarticle.pdf.

Patel, C., & North, W. R. (1979). Randomized Controlled Trial of Yoga and Biofeedback in Management of Hypertension. Mind/Body Integration, 535-540. doi:10.1007/978-1-4613-2898-8\_46

Raghuram, N., Deshpande, S., & Nagendra, H. (2008). A randomized control trial of the effect of yoga on verbal aggressiveness in normal healthy volunteers. International Journal of Yoga, 1(2), 76-82. doi:10.4103/0973-6131.41034

Ramadoss, R., & Bose, B. (2010). Transformative Life Skills: Pilot Studies of a Yoga Model for Reducing Perceived Stress and Improving Self-Control in Vulnerable Youth. International Journal of Yoga Therapy, 20, 75-80. Retrieved September 11, 2016, from http://www.niroga.org/education/research/ijyt-tls\_reduces\_stress.pdf

Recidivism. (2014, June 17). Retrieved September 08, 2016, from <http://www.nij.gov/topics/corrections/recidivism/Pages/welcome.aspx>

Rocha, K. K., Ribeiro, A. M., Rocha, K. C., Sousa, M. B., Albuquerque, F. S., Ribeiro, S., & Silva, R. H. (2012). Improvement in physiological and psychological parameters after 6 months of yoga practice. Consciousness and Cognition, 21(2), 843–850. http://dx. doi.org/10.1016/j.concog.2012.01.014.

Ross, A., Friedmann, E., Bevans, M., & Thomas, S. (2013). National survey of yoga practitioners: Mental and physical health benefits. Complementary Therapies in Medicine, 21, 313–323.

Saraswati, S. (1981). Teachings of Swami Satyananda. Vol. 1, Australia: Satyananda Ashram. Shapiro, D., & Cline, K. (2004). Mood changes associated with Iyengar yoga practices: A pilot study. International Journal of Yoga Therapy, 14(1), 35–44.

The Sentencing Project. Retrieved September 08, 2016, from http://www.sentencingproject.org/criminal-justice-facts/

Silva, F., & Hartney, C. (2012, June). Evaluation of the Insight Prison Project. National Council on Crime and Delinquency, 2-11. Retrieved August 24, 2016, from http://www.nccdglobal.org/sites/default/files/publication\_pdf/insight-prison-project.pdf

Stahl, J. E., Dossett, M. L., Lajoie, A. S., Denninger, J. W., Mehta, D. H., Goldman, R., . . . Benson, H. (2015). Relaxation Response and Resiliency Training and Its Effect on Healthcare Resource Utilization. Plos One, 10(10). doi:10.1371/journal.pone.0140212

Statistic Brain (2015). Yoga Statistics. Retrieved September 23, 2016, from http://www.statisticbrain.com/yoga-statistics/

Streeter, C. C., Whitfield, T. H., Owen, L., Rein, T., Karri, S. K., Yakhkind, A., ... Jensen, J. E. (2010). Effects of yoga versus walking on mood, anxiety, and brain GABA levels: a randomized controlled MRS study. Journal of Alternative & Complementary Medicine, 16(11), 1145–1152. http://dx.doi.org/10.1089/acm.2010.0007.

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success. Journal of Personality, 72(2), 271-324. doi:10.1111/j.0022-3506.2004.00263.x

U.S. Department of Justice (2015, May). The Impact of an Aging Inmate Population on the Federal Bureau of Prisons. Evaluation and Inspections Division. Retrieved from https://oig.justice.gov/reports/2015/e1505.pdf.

Vadiraja, H. S., Raghavendra, R. M., Nagarathna, R., Nagendra, H. R., Rekha, M., Vanitha, N., ... Kumar, V. (2009). Effects of a yoga program on cortisol rhythm and mood states in early breast cancer patients undergoing adjuvant radiother- apy: a randomized controlled trial. Integrative Cancer Therapies, 8(1), 37–46. http://dx.doi.org/10.1177/1534735409331456.

Woolery, A., Meyers, H., Sternlieb, B., & Zeltzer, L. (2004). Yoga Intervention for Young Adults with Elevated Symptoms of Depression. Alternative Therapies, 10(Mar/Apr), 60-63.

Yang, K., Bernardo, L. M., Sereika, S. M., Conroy, M. B., Balk, J., & Burke, L. E. (2011). Utilization of 3-Month Yoga Program for Adults at High Risk for Type 2 Diabetes: A Pilot Study. Evidence-Based Complementary and Alternative Medicine, 2011, 1-6. doi:10.1093/ecam/nep117