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# Mindfulness Meditation: A Practical Intervention in Addressing Stress and Anxiety in Inmates

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Stress and Anxiety in Inmates  
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**Abstract**

This research study explores the history of meditation, and the evolution and use of mindfulness and mindfulness-based interventions to address certain physical, emotional and mental health conditions. It also reviews scholarly literatures regarding the use of mindfulness meditation as a rehabilitation intervention in various correctional settings. More specifically, this research studies the overall impact and practical implications of using mindfulness meditation as an intervention to address stress and anxiety among inmates in the New York Monroe County Sheriff's, Monroe Correctional Facility (MCF). The results from this study revealed that inmates who practiced mindfulness meditation at MCF showed a substantial reduction in their levels of stress and anxiety.

*Keywords:* meditation, mindfulness, prison, jail, correctional, inmates, stress, anxiety

## Mindfulness Meditation: A Practical Intervention in Addressing Stress and Anxiety in Inmates

### **Introduction**

Being incarcerated, in and of itself can evoke tremendous levels of stress and anxiety, while many other internal and external influences can further adversely contribute to an inmate's already difficult state of being. The use of medication, individual and group counseling, segregation and even physical restrains have all been used in an attempt to remedy and/or alleviate an inmate's stress and anxiety, each of which have had varying and at times, quite unsuccessful results. In this, there becomes a need to explore other, more practical, alternative interventions in order to alleviate such adverse states of being. One such alternative is mindfulness meditation.

A growing amount of empirical research has revealed that there are multiple spiritual, emotional, mental and physical health benefits that can be gained by individuals who participate in meditation practices (Sumter, Monk-Turner & Turner, 2009). Such empirical research has shown promise in the use of mindfulness meditation as an effective intervention in reducing chronic pain, in conditions such as, rheumatoid arthritis, fibromyalgia, cancer, hypertension and psoriasis. It has also been shown to enhance an individual's ability to cope with stress and anxiety, as well as reduce other adverse mood states and behaviors. In short, more and more research is revealing that mindfulness meditation can have a significant beneficial impact on individuals who practice it, ultimately leading to an overall improvement in their mental, emotional and spiritual well-being and quality of life (Edenfield & Saeed, 2012, p.133). As a result, meditation is being used more and more across the United States and abroad to help inmates cope with stress and anxiety and certain other maladaptive behaviors while incarcerated. This has led to today's increasing literature that favorably supports the idea that using

meditation-based programs in corrections settings can be rehabilitative (Himmelstein, 2011; Dafoe & Stermac, 2013).

Although meditation has ancient roots outside of the United States, mindfulness meditation has become a growing phenomenon in Western culture. Mindfulness entails focusing one's attention to their internal and external experiences on a moment-to-moment basis without having to judge or evaluate such experiences (Schreiner & Malcolm, 2008). In short, mindfulness is the process of recognizing one's thoughts and feelings and not immediately or habitually reacting to them. Meditation is where one sits still and witnesses their inner dialogue without reacting to it. It is an intentional self-regulation process. Meditation's basic aim is to clear away inner turmoil through radical simplicity (Sumter, Monk-Turner & Turner 2007). Given the growing recognized attributes of meditation, its specific impact on stress and anxiety within corrections settings is worthy of further study and exploration. Subsequently, this research project will further explore and study the impact that mindfulness meditation has on stress and anxiety in inmates. It is hypothesized that practicing mindfulness meditation will reduce the level of stress and anxiety in inmates.

### **Literature Review**

This literature review will briefly examine the origins and concepts of meditation and mindfulness. It will also explore the application and results of a few mindfulness-based interventions that have been used in correctional settings as a tool in addressing various inmate rehabilitation concerns, particularly as it relates to stress and anxiety. Finally, the neurobiological connection between mindfulness meditation and general well-being will be examined.

### **Meditation**

Meditation, for many, is believed to have originated in certain Eastern Asian (Chinese, Japanese, Korean and Tibetan) cultures. However, its actual origins are rooted in India, and the philosophical and spiritual tradition known as Buddhism, dating back to sometime around five hundred and sixty BCE (Wanda & Park, 2009). Siddhartha Gautama, an Indian prince who renounced his throne, went on a spiritual quest to better understand human suffering. While on his quest, he realized that all suffering had a cause, which was ignorance; a dimming of awareness. He also came to the understanding that life is in flux (impermanent) and that our thoughts and emotions, particularly our craving, clinging and attachment to things, cause us suffering (Pistono, 2011).

After six years of fasting and sitting in various yogic postures, while in a deep meditative state, Siddhartha Gautama experienced the ultimate degree of, what some call, God-consciousness (self-realization and enlightenment), which in Buddhism is known as nirvana. Nirvana is a state that transcends suffering, negative thought and emotion. It is the ultimate liberation; an “extinction of ignorance and craving and awakening to inner peace and freedom” (Kapleau, 2000, p.413). Siddhartha Gautama is the symbolic Buddha; he represents each human being’s ability to become enlightened and transcend human suffering, negative thought and emotion. Today, Buddhism and many of its traditions, contemplative meditation spiritual practices and philosophies, have been embraced by Western culture. In doing so, parts of such Buddhist practices have been utilized and adjusted to further accommodate all religious and secular groups within the United States. In this, the original fundamental Buddhist practice of mindfulness (contemplative/attentional) meditation has increasingly become, what researchers have referred to as, a Western phenomenon (Dunn, 2010).

Meditation is an intentional process of self-regulation of one's attention. Such attention is placed on moment to moment experiences in order to calm, quiet and relax the body and mind (Edenfield & Saeed, 2012). It has been shown that the intentional practice of continued self-regulated attention by the meditator, can free them from suffering, negative thoughts and emotion, as they learn to release future worries past regrets, and experience living life in the immediate moment (Sumter, Monk & Turner, 2009). This may be done by sitting and focusing on the breath or an activity like walking, cleaning, eating, looking at a candle or chanting.

### **Mindfulness**

Mindfulness is an awareness that occurs by “purposefully paying nonjudgmental attention to present moment experiences” (Bergen, Possemato & Cheon, p. 349, 2013). Mindfulness emphasis is on nonreactivity. Its focus is not to react to one's thoughts, emotions and bodily sensations, but rather to intentionally experience them in a nonjudgmental manner, as they are temporal and in a constant state of flux. It is encouraged that this be done with an open, curious and accepting attitude in order to avoid clinging and attaching to such impermanent internal and external experiences. By doing so, the individual develops the ability to let go of their habit of trying to alter their painful experiences. It is through the regular practice of meditation that this level of improved mindfulness can be achieved and deep acceptance and relief found. Such continued repetitive practice could be seen as a form of mental training (reconditioning and exercise). It is Buddhist's belief, that it is the untrained mind that contributes to human suffering (Cicero, 2013; Dunn, 2010; Edenfield & Saeed, 2012).

### **Meditation in Incarcerated Populations**

The literature indicates that volunteer-led meditation classes have been springing up in prisons throughout the United States since the 1970's and 1980's. Throughout this period,

empirical research regarding the impact that meditation has had on incarcerated populations was non-existent. Although formal research was unavailable during this time, the experiences that occurred in various meditation retreats were eventually recorded via film. It was not until 2008 that the first North American maximum prison meditation retreat documentary film was produced, entitled, “The Dhamma Brothers.” It chronicles the use of Zazen (sitting meditation) in a ten-day retreat at Donaldson Correctional Facility; a maximum-security prison in Bessemer, Alabama (Dunn, 2010; McBride, 2010). Inmates that participated in this retreat expressed an inner peace, freedom, compassion and respect for others that they found through their meditation experience. Various scholar-activists like Foucault (1977) and McBride (2010) believe that confinement robs inmates of their freedom, dignity and personal agency. Research reveals that it is through meditation practice that such agency, dignity and freedom can be reclaimed (McBride, 2010).

### **Mindfulness-based Interventions in Correctional Settings**

Given the mental, emotional, spiritual and physical benefits of mindfulness meditation, a deeper look at its potential usefulness as a tool for addressing stress and anxiety in correctional settings becomes worthy of further investigation. Before exploring the research in this area, some relevant statistics and other related concerns, regarding the incarcerated population, are worth mentioning. In 1980 there were approximately 330,000 people incarcerated in the United States (Beck & Gilliard, 1995; Suarez et al., 2014). By 2010, there were more than 1.6 million people incarcerated in both state and federal prisons. Each year approximately 700,000 prisoners are released and re-enter society (Guerino, Harrison, & Sabol, 2011; Suarez et al., 2014). Within three years of their release approximately two thirds of them are rearrested on new charges and half of them are convicted and sentenced to serve more time (Urban Institute, 2009; Suarez et al.,

2014). Such statistics suggests that current rehabilitation program efforts in correctional settings need to be reviewed for their efficacy.

Due to overcrowding and the high rate of recidivism in correctional facilities, there has been an increased interest in exploring alternative, innovative and non-conventional approaches to treatment, in order to help augment the rehabilitation programs in these settings (Shonin, Gordon & Griffiths, 20014). This is being done in an effort to improve program efficacy and greater inmate re-integration success. Research has revealed that criminal thinking and criminal activity are maladaptive ways to escape negative emotions like anxiety, depression and guilt (Dafoe & Stermac, 2013; Perelman et al., 2012; & Shonin, Gordon & Griffiths, 20014). Growing research evidence demonstrates that the process of mindfulness is a healthy adaptive intervention tool which encourages the participants to objectify their self-defeating mental and emotional states by viewing them as a phenomenon that will eventually pass (Shonin, Gordon & Griffiths, 20014).

Although mindfulness meditation is still in its infancy within the United States, over the past two decades, there has been a growing amount of documented empirical research that suggests that mindfulness meditation in correctional settings can improve psychological and emotional functioning and reduce criminal behavior and recidivism (Chandiramani, Verma, & Dhar, 1995; Sameulson, Camody, Kabat-Zinn & Bratt, 2007; Himelstein, 2011). Samuelson et al. (2007) reported that the experience of being incarcerated alone can further exacerbate stress, anxiety and other intense mental and emotional conditions. Meditation and other mindfulness-based interventions (MBI) have been used in correctional settings in order to assist inmates to better cope with incarceration by becoming less reactive to intense emotional states (Samuelson, et al., 2007)

The most researched meditative styles within prison populations are Vispassana meditation (VM), Transcendental meditation (TM) and Mindfulness-Based Stress Reduction (MBSR); each of which has its roots in Buddhist meditative practice (Cullen, 2011). Moreover, these mindfulness meditative practice styles show significant promise in being utilized as effective coping resources in decreasing chronic pain, stress, anxiety, substance use, aggressiveness, hostility and recidivism (Himmelstein, 2011; Samuelson, et al., 2007 ).

Jon Kabat-Zinn's work regarding Mindfulness-Based Stress Reduction (MBSR) is one of the most empirically researched mindfulness intervention practices. Jon Kabat-Zinn was a yoga, zen and vipassana student who developed this intervention practice in 1979, while working at the University of Massachusetts Medical Center, in order to assist his patients who suffered with chronic pain (Cicero. 2013; Cullen, 2011). His creation of MBSR made ancient Buddhist techniques more accessible to Western culture and to individuals who were not interested in meditation for religious or spiritual purposes. Although originally developed to address chronic pain, MBSR has evolved and found to be useful in addressing sleep, anxiety and panic disorders and other mental conditions (Perelman et al., 2012).

There have been several mindfulness-based interventions (MBIs) that developed out of MBSR, such as Mindfulness-based Cognitive Therapy (MBCT), Acceptance and Commitment Therapy, Dialectical Behavioral Therapy (DBT) (Dafoe & Stermac, 2013; Dunn, 2010; Himmelstein, 2011). These psychotherapeutic, clinical application, intervention techniques have been effectively developed and used to address cognitive, emotional and behavioral concerns with a more modern conceptualization of mindfulness; where meditation is partially incorporated. (Dunn, 2010; Cullen, 2011; Edenfield & Saeed, 2012).

MBSR generally operates as an 8-week mindfulness based program that focuses on three specific techniques: being aware of the breath while in sitting meditation, the body scan while lying down and Hatha yoga postures. Upon completion of the 8-week program, the MBSR program has the ability to be further molded in order to accommodate individual needs (Kabat-Zinn, 1990; Himelstein, 2011).

MBSR has been researched in several correctional facilities. From 1992 to 1996, MBSR was studied in six Massachusetts prisons (1 women's prison and 5 men's prisons), where inmates' level of hostility, self-esteem and mood disturbances were studied (Samuelson et al., 2007). This program was offered for a 6-8 week period to 12-20 inmates in the drug rehabilitation units at these facilities, for approximately 1-1.5 hours 1-2 sessions per week. The program's aim was for participants to learn to engage in non-destructive outlets such as mindfulness meditation practice in the hope of enhancing their lives while incarcerated, as well as after their release. Several optional classes on smoking cessation, literacy training, walking and exercise were also offered (Samuelson, et al., 2007).

This specially tailored MBSR program showed an overall reduction in hostility and increased self-esteem of its male and female participants, with the greatest results occurring in women. The most substantial findings were displayed in the dramatic reduction of participants' adverse mood states (Samuelson, et al., 2007). These findings and other studies' (Himelstein, 2011; Himelstein, Hastings, Shapiro & Heery, 2011; Perelman, Miller, Clements, Rodriguez, Allen & Cavanaugh, 2012) suggest that MBSR programs and various other mindfulness-based meditation interventions (i.e. TM and VM) may assist incarcerated populations in developing healthier psychological functioning that could actually contribute to and enhance rehabilitative environments in correctional settings. This would allow for greater treatment engagement and

less institutional infractions due to behavioral outbursts and unstable mood states. The same tools that these inmates learned during their programs are also resources that could be continually used and carried with them throughout their incarceration and after their release.

Sumter, Monk-Turner & Turner (2009) conducted a study of a meditation course in a correctional setting that was also modeled after the MBSR design. This study took place at Tidewater Detention Center, a detention center for women in Chesapeake, Virginia. The course occurred for two -and-one half hours per week over a period of 7 weeks, which included meditation practice and instruction. This specific method of meditation was based on The Relaxation Response, presented by Herbert Benson (Sumter, et al., 2009). This silent meditation course, which occurred in a highly structured and supervised paramilitary setting, showed promising results. Female participants reported experiencing a reduction in their stress and anxiety levels, improved anger management skills and less sleep problems (Sumter, Monk-Turner & Turner 2007). This study also demonstrated that its participants showed an overall decrease in other adverse emotional states surrounding feelings of hopelessness and guilt. This study's findings revealed that participants' overall hope for the future had increased (Dunn, 2010; Shonin, Gordon, & Griffiths, 2014; Sumter, Monk-Turner & Turner 2007).

Another study tested the efficacy of a 10-week MBSR program as a treatment intervention for incarcerated adolescents at a juvenile hall in San Francisco, California. This study measured the program's effect on these adolescents' degree of mindfulness, self-regulation and stress. The results showed an overall reduction in participants' stress, and an increase in mindfulness, with regard to interpersonal communication, thought process and emotional and physical states. The results also showed an increase in healthy self-regulation. In short, these

results validate the effectiveness of mindfulness-based interventions in treating special and diverse incarcerated populations (Himmelstein, Hastings, Shapiro & Heery, 2011).

Transcendental meditation (TM) is a concentrated-based meditation style where the participant engages in a condition of wakeful alertness via focusing their attention on a specific object, sound, word or set of words (a mantra) (Himmelstein, 2011). This style of meditation became popular in the Western hemisphere during the 1960s and 1970s by Maharishi Mahesh Yogi. Research indicates that since the 1970s, TM has been the greatest researched and meditation technique used within correctional facilities (Himmelstein, 2011; Perelman et al., 2012). TM has been shown to be valuable in increasing self-esteem, emotional stability and maturity, and decreasing psychological symptoms like depression, tension, anxiety and neuroticism (Perelman et al., 2012; Ramirez, 1989).

Vipassana meditation (VM) is not a concentration -based practice but rather, an insight-based (open monitoring) practice. It emphasizes that the participant place an observational, non-judgmental attention and acceptance on present moment internal and external stimuli; such as physical sensations, thoughts and emotions (Perelman et al., 2012). The direct observation of the transient nature of such stimuli is reported to promote the psychological freedom of the participant. The overall goal of Vipassana is to gain freedom from psychological attachment. The Vipassana style taught by S. N. Goenka is generally conducted via a retreat over a several day period, where noble silence (no speaking to other participants), awareness of breath and abstaining from lying, stealing, violence, sexual misconduct and the use of intoxicants (known as the five precepts) are employed (Himmelstein, 2011; Modak, 1995).

In 1994, in the Tihar jail in India, a ten day massive Vipassana meditation retreat was offered to hundreds of prison inmates. The literature and a documented film entitled, "Doing

Time, Doing Vipassana” shows that this retreat resulted in a dramatic improvement in the attitudes and behaviors of not only its inmates but also its jailers. As a result of the retreat’s huge success, Vipassana retreats are now regularly offered in prisons throughout India (Ariel, 1997; Dunn, 2010).

Another documentary entitled “Changing from Inside,” conducted under the direction of the Vipassana Research Institute in 1998, chronicles a ten hour, ten day, totally silent retreat, pilot meditation program, at a women’s minimum security jail near Seattle, Washington. It was revealed that the ancient Buddhist insight meditation technique used during this retreat, known as Vipassana, allowed these women to learn how to begin to master the nature of their compulsions and behaviors by going on an inward journey. Personal interviews of these female inmates and prison staff revealed that their experience was both inspirational and transformative (Donnenfield, 2006). Although the use of Vipassana meditation in correctional settings have been positive, well designed researched studies have been limited (Dunn, 2010).

### **Mindfulness Meditation and Neurobiology**

Research (Bergen-Cico, Possemato & Cheon, 2013; Samuelson, Carmody, Kabat-Zinn & Bratt, 2007; Dafoe & Stermac, 2013; Dunn, 2010; Sumter, Monk-Turner & Turner, 2007) demonstrates that the use of mindfulness meditation helps to significantly reduce psychological distress, such as symptoms of stress and anxiety, as the participant becomes aware that their thoughts have the potential to be inaccurate, are time-limited and impermanent. Coming to such awareness helps participants enhance their ability to regulate their mental, physical and emotional responses. In short, the participant avoids reacting in habitual compulsive ways and begins to tolerate and accept their experiences, as opposed to ruminating on, catastrophizing, fearing or avoiding them, as they come to recognize that such thoughts, feelings and urges are

transient phenomena (Dafoe & Stermac 2013; Edenfield & Saeed, 2012; Perelman et al., 2012; Ramirez, 1989; Shonin, Gordon & Griffiths, 20014).

Although still in its infancy, Contemplative Neuroscience is greatly contributing to our knowledge of how the brain is impacted by mindfulness (Cicero, 2013). The research reveals that mindfulness meditation has a neurobiological impact on the brain's structure and regions (i.e. the hippocampus, limbic system and prefrontal cortex) which are known to impact depression , chronic stress and anxiety in individuals (Edenfield & Saeed, 2012). The brain is known to have two distinct parts; the neocortex, which is the rational part of the brain and the prefrontal cortex, which is the emotional part of the brain within the limbic system. The cognitive part of the brain is responsible for the outer world, language, attention, problem solving, planning and awareness. The emotional part of the brain is not reliant on thoughts (the cognitive side) in order to function. It has the ability to take control of the body via emotional and survival instincts (Cicero, 2013; Hamiel, 2005;). It is this duality of the mind, particularly the emotional aspect that can contribute to one's increased stress and anxiety as they engage in habitual reactionary responses, causing them further distress.

Neuroplasticity is a concept within the field of neurobiology which postulates that the human brain has the ability to create new neurons and neural connections even throughout one's late senior development (Dunn, 2010). Such development is impacted by experience, which can cause trait changes. Such traits are characterized by the practitioner's propensity to engage in and display a nonreactive and non-judgmental awareness of their experiences, thoughts and emotions. These trait (or disposition) changes are developed over a period of time through continuously practicing a state of mindfulness (Dunn, 2010; Davidson & Lutz, 2007; Garland, 2013). Moreover, continuous mindfulness practice has been shown to more specifically increase

grey density within the brain of the practitioner, which impacts the practitioner's emotional regulation, memory, learning and ability to shift their perspective (Garland, 2013; Holzel et al., 2011). It is this level of brain alteration that impacts the nervous system and contributes to a state of calm, relaxation and less emotional reactivity (Edenfield & Saeed, 2012).

A groundbreaking study conducted by Farb et al. (2007) showed the distinct difference between the circuitry within the brain of an individual trained in mindfulness and the brain of an individual who had no mindfulness training; known as a novice. The research results revealed that research participants who were trained in mindfulness had the ability to accept and process new information from a 'bottom up' learned perspective. This is done where the individual is not being affected by their history, emotional patterns or habits. This study further showed that the research participants who were novices had difficulty focusing on their breath and body sensations without triggering the section of the brain that draws on past experiences and emotional patterns and habits; which directly incorporates judgements from the past, known as a 'top down' learned perspective (Cicero, 2013; Siegel, 2007).

Additional research revealed that the untrained mind's level of self-awareness is myopic in nature; where things are viewed from one level of awareness. Contrarily, a mind trained in mindfulness has the ability to operate from multiple streams of awareness, the awareness of self across time and the awareness of self within the present moment (Cicero, 2013; Farb et al., 2007; Raffone, Tagini, & Srivinasan; 2010; Siegel, 2007) . This mental training process opens up a pathway that enables mindfulness practitioners to have the ability to clearly see their mind from different streams of awareness. This gives practitioners the ability to free themselves from previously learned and established patterns of functioning (Cicero, 2013; Siegel, 2007). Moreover, mindfulness practice can aid in relieving pathologies (such as anxiety and stress

disorders), which were generally seen as resulting from a reaction to past events, by training the brain and altering its circuitry and developing new levels of awareness (Cicero, 2013).

Stress can be observed through both cognitive and physiological states of being, ranging from muscle tension and fatigue to irritability, increased worry and hyper arousal (Schreiner & Malcolm, 2008). Those who suffer with anxiety often experience hyper arousal and tend to misinterpret environmental conditions as threatening. As mindfulness meditation is used cognitive change occurs and adaptive self-management skills are learned. This happens via metacognitive insight as the practitioner trains to nonjudgmentally observe their moment-to-moment thoughts and bodily sensations, reducing habitual mental and physical reactivity (Schreiner & Malcolm, 2008).

Over the past few decades, meditation and its mindfulness practice is a growing phenomena within the United States. Given the empirical research, the mental, emotional, physical and spiritual benefits of mindfulness meditation have been shown to be substantial in improving the overall wellbeing of those who practice it. Moreover, per the literature, the use of mindfulness meditation as an emerging innovative and non-conventional approach to rehabilitation treatment in correctional settings has also been shown to be promising as an effective coping, transformative and healing resource for an array of maladaptive behaviors and mental health conditions (Doefoe & Stermac; Edenfield & Saeed, 2012; Perelman et al., 2012). The neurobiological impact that mindfulness meditation has on the brain in reducing psychological distress, becomes even more promising and worthy of further investigation when examining stress and anxiety levels in incarcerated populations. Subsequently, this paper is guided by the following research question is: Is mindfulness meditation practice effective in reducing stress and anxiety in inmates in a county correctional facility? It is this researcher's

hypothesis that mindfulness meditation practice will reduce levels of stress and anxiety in inmates in a county correctional facility.

### **Methods**

This study utilized quantitative methods to examine the impact of mindfulness meditation on stress and anxiety in inmates in a county correctional facility. The approval to conduct this research study on human subjects was obtained from the Institutional Review Board (IRB) at The College at Brockport, State University of New York. The researcher obtained consent to conduct this research from the New York Monroe County Sheriff and the Monroe Correctional Facility's Drug and Alcohol Re-entry Program. The study's results were based on a pre and posttest that was given to participants within New York State's Monroe County Sheriff's, Monroe Correctional Facility's Drug and Alcohol Re-entry Program. Consent from each of the study's participants was also obtained. Each of these consenting study participants were tested via two questionnaire test instruments, the *Perceived Stress Scale (PSS)* and *Beck Anxiety Inventory (BAI)*. Each of these questionnaire test instruments was selected as a result of its widespread use and ability to adequately assess stress and anxiety in sample populations. The entire mindfulness meditation program and data collection for this study were conducted between June 2015 and September 2015.

### **Study Site**

Monroe County Sheriff's Office (MCSO), Monroe Correctional Facility (MCF), located in Rochester, New York, is a medium security level county jail that houses sentenced and non-sentenced male and female inmates who have been charged and/or convicted of misdemeanors and/or low-level felonies. Inmates serve anywhere from one day to a maximum of eighteen months' time on all convicted charges. The mindfulness meditation program is currently being

implemented at Monroe Correctional Facility (MCF) as a part of its ongoing services within their separately housed male and female Drug and Alcohol Re-entry Program. As a result, conducting a mindfulness meditation research study as it relates to stress and anxiety in inmates made MCF a very appropriate research site. The researcher became aware of this site location due to her working relationship with the MCSO as a Drug and Alcohol Counselor at the facility.

### **Participants**

A total of 6 female participants, 4 Caucasian, 1 African American and 1 Latina, ranging from ages 23 to 55, fully participated in and completed this study. There were 12 female participants that initially began this study. Among these 12, a total of 6 female participants, 2 African American and 4 Caucasians, ranging from age 27 to 48 dropped out of the study, for various reasons, prior to the study's completion. These females reported dropping out of the group for several reasons: 1) difficulty sitting still, particularly for long periods; 2) religious conflicts, specifically these participants believed that mindfulness meditation practice might be sinful and demonic; 3) boredom; 4) and participants' desire to participate in the facility's work program. Males were also expected to participate, but as a result of this study's time window, the male meditation facilitators' and participants' inconsistent attendance, program and facility constraints, males were unable to be included in this study. Subsequently, the initially anticipated 30- targeted participants were not obtained.

### **Study**

This study utilized survey research as its method because it allowed the researcher to measure the levels of stress and anxiety numerically which can provide concrete comparisons of participants by showing quantifiable data. Survey research can also be a reliable data-gathering

and quick coding tool while providing anonymity. Although there are a number of advantages of conducting survey research, there are also some limitations. Survey research can be labor intensive and time consuming, while the ease in production and distribution can result in obtaining more data than may be needed.

Program study participants attended a total of eight, 2-hour, meditation group sessions one time per week, each of which were solely conducted by Rochester Zen Center meditation practitioners. Each session consisted of a 30 minute instructional and/or philosophical talk, 2 -20 minute silent mindfulness sitting meditation rounds, 15 minutes of silent mindfulness walking meditation, 15 minutes of yoga postures and a 20 minute wrap-up discussion in order to process the session and make closing remarks. A 2-3 day meditation retreat was proposed to culminate the 8 week mindfulness meditation group study, but was abandoned due to facility restraints that would not permit less than 15-20 inmates to be separately housed in a special unit, due to the costs of having to create an additional security post.

### **Recruitment Process**

Participants were recruited by this study's principal investigator. Recruitment was conducted individually and/or by making a group recruitment announcement to female clients, ages 18 and older that were already participating in Monroe Correctional Facility's Drug and Alcohol Re-entry Program. This announcement was made at the beginning of the mindfulness meditation group with permission from its facilitator. A prospective participant recruitment letter was handed out to each client (See Appendix A). The letter was either read aloud in a group setting or individually with those who were not readily available and present during the group announcement. These clients were informed that if they decided to voluntarily participate, their participation would be held anonymous and strictly confidential. Such clients were also informed

that they had the right to opt out of the study, at any time, and any decision to do so would not result in any punitive or other adverse repercussions.

### **Data Collection and Management Procedures**

Clients who agreed to participate in the study were given an informed consent to sign acknowledging their voluntary participation in this study (See Appendix B). If agreed, such consents were signed and immediately collected directly preceding the group or individual client announcement. Those who decided to participate during this same time were given a pre stress and anxiety questionnaire and then collected. Upon completing eight weeks of mindfulness meditation participants were given the post stress and anxiety questionnaires to complete at the end of their meditation group or in a secluded separate office location. After doing so, the questionnaire was immediately collected. In order to maintain each participant's complete anonymity, all participants' written consents were held in a separate locked location from their questionnaire test instruments. Each participant was also assigned an ID number in order to anonymously link their pre and post questionnaire test results. The test results were also held in another separate secure locked area.

### **Instruments**

Since this research study's focus was to examine the impact that mindfulness meditation had on the stress and anxiety levels in the study participants, two questionnaire test instruments were used to assist in determining such impact.

#### **Perceived Stress Scale-10 (PSS-10).**

Sheldon Cohen, a psychologist and professor at Carnegie Mellon University and the director of the Laboratory for Stress, Immunity and Disease, along with several research colleagues created the Perceived Stress Scale (PSS) in 1983. It is one of the most popular tools

used for measuring non-specific perceived psychological stress (Lee, 2012). The PSS-10 is a 10 item multiple choice self-administered and self-reported questionnaire with a five-point Likert scale ranging from 0 to 4 (0= Never, 1= Almost Never, 2= Sometimes, 3= Fairly Often, 4= Very Often). Among these 10 question items four are positively worded and subsequently, are reversed scored. The PSS-10 is an instrument that is intended to show comparisons of a participant's perceived (self-appraised) stress in relation to current objective events occurring within the past month period (Cohen, Kamark & Mermelstein, 1983). A score around 13 would be considered average, while subjects who had a score of 20 or higher would be considered to have a high degree of stress. A high score not only exhibits a high degree of stress but also indicates a longer duration of perceived stress. As a result, participants would be considered at risk for a clinical psychiatric disorder. This instrument can be self-administered in populations that have at least a junior high school education (Cohen & Williamson, 1988).

The PSS has established high levels of reliability and validity ( $r=0.85$ ). Reliability is high in test-retest correlation. This level of reliability was shown in a smoking study done with college students, at the University of Oregon. Evidence of concurrent and predictive validity was also found in this and other studies. The PSS correlates in a predicted way with various measures of stress such as the Job Responsibility Scale and Life Events Scale (Cohen, Kamark & Mermelstein, 1983; Cohen & Williamson, 1988).

### **Beck Anxiety Inventory (BAI).**

The Beck Anxiety Inventory (BAI) was created by Aaron T. Beck, a psychiatrist and professor at the department of psychiatry at the University of Pennsylvania, along with some of his colleagues in 1987 (later published in 1990), in order to measure the severity of anxiety in children and adults (Beck & Steer, 1990). The BAI is a 21-item multiple choice self-

administered and self-reported questionnaire that lists common symptoms of anxiety that the participant was bothered by within the past month, such as: fear of losing control, heart pounding/racing or unable to relax. The BAI is an instrument that interprets the intensity of the participants reported anxiety level by rating each anxiety symptom on a 4-point Likert-like scale, that ranges from 0 to 3 (0= Not at All, 1= Mildly, but it didn't bother me much, 2= Moderately, it wasn't pleasant at times, 3= Severely, it bothered me a lot. The maximum score is 63 points ranging from low anxiety, in scores between 0-21, moderate anxiety in scores between 22-35, and high anxiety and a potential cause for concern, in subjects with scores that exceed 36. The BAI requires a basic grade school reading level for self-administration. (Beck & Steer, 1990).

The BAI has high internal consistency ranging from .92 to .94 in adults and a test-retest (one week interval) reliability of .75. The BAI has construct and concurrent validity levels of .47-.54 when correlated with the Hamilton Anxiety Rating Scale and the State Trait Anxiety Inventory, respectively. This was shown in studies done in patients diagnosed with having an anxiety disorder (Beck & Steer, 1990).

### **Data Analysis**

The statistical package for the social sciences (SPSS-21) was used to analyze the data from the PSS-10 and the BAI. The data from both questionnaires was then entered into SPSS-21 software in order to conduct a descriptive analysis of the data. The SPSS software was used to generate averages of the pre and post test questionnaires. More specifically, the means and standard deviations were calculated in order to make comparisons between the groups' pre and post test scores, as well as the participants' individual pre and posttest scores.

### **Results**

This study examined the impact of mindfulness meditation practice on the stress and anxiety levels of female inmates from a county correctional facility. Utilizing the available research as a prognosticator, it was hypothesized that mindfulness meditation practice would reduce levels of stress and anxiety in inmates at MCF (Cicero, 2013; Danfoe & Stermac, 2013; Edenfield & Saeed, 2012; Himmelstein, 2011).

Among the 12 females that initially participated in this research study, 6 females completed the study. The data reported and evaluated in this study is subsequently based on these 6 female participants (n=6). The results from this study were obtained by comparing the *PSS-10* and *BAI*'s overall pre and posttest questionnaire mean scores.

When analyzing Figure 1, the average score on the *PSS-10* pretest questionnaire was 22.7, with a standard deviation of 4.7. This was compared to the posttest questionnaire scores, whose average results were 14.5, with a standard deviation of 4.8. In addition, when comparing the *BAI* pre and posttest averages, the posttest results were substantially lower than the pretest results. The *BAI* pretest average results were 23.5, with a standard deviation of 9.4, and its posttest average results were 6.2, with a standard deviation of 6.4.

	Minimum	Maximum	Mean	Standard Deviation
PSS 10 Pre-test	14	28	22.7	4.71
PSS 10 Post-test	8	22	14.5	4.8
BAI Pre-test	16	41	23.5	9.4
BAI Post-test	0	16	6.2	6.4

**Figure 1. *PSS-10 and BAI Pretest and Posttest Mean Score Comparison Averages. This figure illustrates an overall decrease in total mean scores when comparing all pre and posttests.***

As indicated in the table below, *Figure 2* represents each of the six individual participant's pre and posttest questionnaire scores. This table shows each participant's PSS-10 and BAI posttest questionnaires. These tests revealed that each of them had a substantial reduction in their perceived level of stress and anxiety. Participant # 1's perceived stress scores revealed that it had decreased by more than half, showing a 15 point difference, from 28 (a high stress level) on their pre PSS-10 questionnaire to 13 (an average stress level) on their PSS-10 post questionnaire. Participant # 1's BAI showed a substantial decrease, going from 41 points, a very high anxiety level that is a great cause for concern, to 12 points, a 29 point substantial decrease, indicating a very low anxiety level. Participant # 3 demonstrated a modest degree of improvement on their PSS-10 pre and posttest questionnaires, going from 14 points, a very low stress level, to 8 points. This score shows a 6-point decrease, which is lower, but still falls within the very low stress level range. Participant # 3's BAI tests scores exhibited a much more substantial reduction. This participant's level of anxiety scores decreased from 17 points, very low anxiety, to 0. Participant # 4's pre and posttest PSS-10 scores modestly exhibiting a 6-point reduction. Participant #4 decreased from 23 points, indicating a high degree of perceived stress to 17 points, scoring a somewhat average stress level. This same participant's level of anxiety, per their BAI pre and posttest questionnaire scores showed a 7 point decrease, 24 points, which indicates a moderate degree of anxiety, to 16 points, indicating low anxiety. Participant # 5 exhibited a substantially large reduction on both of their perceived stress and anxiety pre and posttest questionnaire scores. This participant made a substantial decrease on their PSS-10, moving from a high stress score level of 24 points, to an average stress score level of 12 points. This demonstrated a 12-point decrease. This same participant's pre and posttests BAI scores demonstrated the greatest reduction among all of the participants regarding their anxiety level.

Their scores, quite substantially decreased from 25 points, exhibiting moderate anxiety, to 1 point, indicating very low anxiety, overall. This was a 24-point decrease. Participant # 6’s PSS-10 went from 25 points on their pretest, indicating high stress, to 15points on their posttest, indicating average stress, a 10 point decrease. On their BAI they went from 16 points, low anxiety, to 4 points even lower anxiety, a 12 point decrease. Only one participant’s, participant #2, score remained the same, receiving 22 points, high stress, on both their PSS-10 pre and posttest questionnaires. Yet, this same participant showed, a substantial decrease on their BAI pre and posttest questionnaire scores, going from 18 points, very low anxiety, to 4 points, which was still in the “very low” range, but substantially lower than it was originally, indicating a 14 point reduction.

Participant	PSS-10 Pretest Score	PSS-10 Posttest Score	BAI Pretest Score	BAI Posttest Score
1	28	13	41	12
2	22	22	18	4
3	14	8	17	0
4	23	17	24	16
5	24	12	25	1
6	25	15	16	4

*Figure 2. Individual participants’ pre and post PSS-10 and BAI test questionnaire scores. \*Note: The lower the score the lower the degree of perceived stress and anxiety.*

There were a few unexpected findings in this study. Six women, two African Americans and four Caucasians, dropped out of the study after five weeks. Two of the Caucasian women stated that they were having difficulty sitting still and wanted to participate in the facility’s

supervised trustee and parks work programs instead, while one of the African American participants relayed that she became bored. There was another African American woman who expressed a desire to participate in the study but was never able to do so because she was infraacted due to behavioral concerns, and subsequently removed from the Drug and Alcohol Re-entry Program and relocated to another housing unit.

There were three Caucasian women who also dropped out of the study after five weeks, citing that their Christian religious beliefs warranted that they drop out of the study. They contended that such practice was contrary to their religious values and teachings that prohibited an emptying of the mind, which could allow the devil to come in. Additionally, because the mindfulness meditation groups were by facilitated by Zen Buddhist practitioners, these same participants stated that they believed that such religious practice was contrary to their Christian beliefs.

### **Discussion**

The purpose of this study was to examine whether mindfulness meditation was an effective intervention in reducing stress and anxiety in county inmates. In examining this, this research study's overall goal was to more closely determine whether or not practicing mindfulness meditation would reduce stress and anxiety in inmates at New York State's MCSO, MCF.

After evaluating the data, findings from this study further support the existing literature surrounding the multiple physical, emotional and psychological benefits that mindfulness meditation has on its participants in general and more specifically, in correctional settings (Danfoe & Stermac, 2013; Edenfield & Saeed, 2012; Himelstein, 2011). Such findings further lend substantial support to this study's hypothesis that practicing mindfulness meditation will

reduce levels of stress and anxiety in inmates in a county correctional facility, as was revealed at MCF.

When comparing data from the pre and posttest questionnaire, every participant showed a substantial reduction in their stress and anxiety levels. Among these six participants, only one remained at the same level regarding their perceived stress on their PSS-10 posttest score. The most substantial results occurred between three participants regarding their anxiety. One participant went from having low anxiety to exhibiting no anxiety at all. Another participant displayed moderate anxiety levels and after their eight week participation in mindfulness meditation groups, reduced her anxiety level to having next to none. One participant's pre mindfulness meditation group anxiety level indicated having very serious concerns. As a result of her eight week participation in the mindfulness meditation group, she was able to reduce her anxiety to what is considered to be a very low level. In relation to participants' perceived stress, all but one participant exhibited high stress levels. After their participation in mindfulness meditation groups, each of them showed a substantial reduction in their stress levels, which had substantially diminished to average or low level results.

There were several participants that voluntarily made unsolicited comments regarding the impact that participating in mindfulness meditation groups had on them at MCF. Each participant that completed the eight week program expressed experiencing positive benefits due to their meditation practice. Some of these same participants reported that mindfulness meditation produced states of calmness and relaxation, while reducing sleep deprivation. After completing the PSS-10 and BAI posttests, without the researcher asking, one participant voluntarily stated, "Before I started meditating I was anxious, and would stress out about everything all the time. Now, I just focus on my breathing, relax and let it go." Another

participant voluntarily stated, “It helped me to relax and forget about everything. It helped me sleep better. I would use it before going to sleep every night.” Yet another participant voluntarily talked about mindfulness meditation’s longer lasting benefits, “I will use what I learned in these meditation groups for the rest of my life, it was so helpful. It helped me to clear my mind and become less nervous, calmer and develop a greater sense of peace within.”

Such unsolicited comments further support the value and impact that mindfulness meditation has on those who learn to practice it. Its ability to produce calm, relaxation and act as a potential sleep aid for participants speaks to its ability to reduce levels of stress and anxiety in those who practice it, since such physiological, mental and emotional states generally require lower levels of anxiety and stress in order to be present. Such statements also revealed that mindfulness meditation practice can be used as a regular tool beyond the actual group sessions, to further aid in reducing and preventing anxiety and stress that the participants experience on a daily basis.

The Tidewater Detention Center’s findings similarly revealed that meditation practice helped their female detainees reduce their stress and anxiety levels as they learned to relax, become more focused, peaceful, worry free and to remain calmer in most situations (Sumter, Monk-Turner & Turner, 2009). Similarly, in the eight week program that was introduced in six correctional facilities to both male and females in Massachusetts, MBSR, a form of mindfulness meditation, helped inmates to better deal with the stress of incarceration by gaining inner calm and life-long inner resources as they become more self-regulated and less reactive to intense emotional states (Sameulson, Carmody, Kabat-Zinn & Bratt, 2007).

The findings surrounding religious conflict could be attributed to the participants’ ethnocentrism surrounding other non-Christian religions. This could also be based on an overall

lack of understanding of Buddhism as a philosophical construct that could be embraced by all belief systems due to its basic life principles as discussed earlier in this paper.

Participants that dropped out of the study after five weeks due to boredom and difficulty sitting still, could be attributed to the two-hour length of the mindfulness meditation group. Sitting still for long periods of time may be quite difficult for some individual participants who have limited attention spans and other outstanding medical, developmental and mental health disorders. Making an adjustment regarding the length of group could aid this concern. Fluctuating, the length of sitting and walking meditation and yogic postures, and even including a bathroom break could also help to alleviate some of the barriers to continued participation.

Although behavioral concerns in corrections settings are fairly common and would be a natural barrier to completion of the mindfulness meditation group for some, the literature shows that its continued practice had substantial benefits in reducing institutional behaviors (Himmelstein, Hastings, Shapario & Heery, 2011; Perelman et al., 2012; Sumter, Monk-Turner & Turner, 2009). It is also important to note that inmates with mental health conditions that are not being medically managed (i.e. serious and persistent mental illnesses, SPMIs) would not be appropriate for mindfulness meditation as a treatment intervention. Such an intervention could pose a greater risk to the inmate and other participants if they were to become traumatically triggered and/or psychotically symptomatic. In order to address certain mental health complex needs, the mindfulness meditation group would have to adapt to the various needs and abilities within this SPMI population (Dafoe, Stermac, 2013).

### **Limitations**

There were a number of anticipated and unanticipated limitations that impacted this research study. A major limitation of this study was its small sample size; six participants.

Since this rate of participation is below what is statistically required (having 20 or more participants) in order to conduct a statistically sound quantitative study, one could question this study's overall reliability due to its inability to generalize. Participants that dropped out of the study after five weeks due to boredom and due to difficulty sitting still was another limitation that could be attributed to various physical, mental and emotional factors.

Certain tools and environmental conditions, that would normally be available and present when facilitating a mindfulness meditation group by the Rochester Zen Center facilitators, were missing. For example, meditation cushions, for specific meditative body posture alignment and a bell (which would be used to delineate meditation transitions) were not allowed as a result of facility policies. The environmental noises of classes in adjoining rooms, overhead announcements and other disruptive distractions, such inmate calls for medical and visits posed challenges to the group as well. These disruptions would break participants' concentration and ability to stay focused. Subsequently, this may have affected the full experience of the mindfulness meditation practice and even in some degree contributed to the study's attrition rates. These environmental conditions could have also potentially hindered an even greater reduction in those remaining participants' stress and anxiety levels.

The inability to conduct a 2-3 day retreat as originally proposed could be seen as another limitation. The inability to conduct such a retreat was due to the facility's housing and security personnel policies. Such policies required a minimum of 15-30 participants in order to secure and utilize a separate housing area, which would financially justify the use of a sheriff's deputy for such housing post. Failure to culminate the eight week mindfulness meditation sessions with a retreat may have hindered even greater reduction rates of stress and anxiety in participants. Meditation retreats can provide a deeper mindfulness immersion process. Subsequently, given

the absence of a retreat, participants were unable to have as deep an experience. Doing so could have promoted a greater understanding and enhanced incorporation of mindfulness meditative techniques, which may have further impacted test results.

From a cultural perspective, a limitation appeared to be that some participants had difficulty assimilating Eastern meditative techniques to Western culture. In order to more successfully integrate mindfulness meditation into a Western correctional setting, doing so may require providing a more detailed introductory overview, by its facilitating practitioners, regarding Buddhism, mindfulness meditation and its often times misunderstood philosophical perspective.

### **Implications for Future Research**

Given the additional value that comes with including the personal accounts of study participants and gender comparisons, this project could be further enhanced if future researchers conducted a cross-gender analysis via a mixed- method approach. This type of analysis would not only increase the pool of participants being studied, it would also allow the researcher to see if men responded differently than women to mindfulness meditation practice. Moreover, including the participant's sex, race, ethnicity, age, socio-economic status, sexual orientation and even religion as added research variables, could lend some additional cultural findings and greater subject and program understanding and effectiveness. Conducting future research in these areas would be of particular importance regarding how certain cultural worldviews may impact the participant's receptivity to such a non-traditional alternative treatment intervention like mindfulness meditation.

Finally, conducting a mixed-methods study would allow for a greater interpretation of mindfulness meditation practice to be captured. In this, certain aspects and personal nuances of

the practice and its participants could be gleaned through a qualitative study that a quantitative study alone could not capture. Furthermore, doing so would allow the actual voices of its participants to more directly speak to the specific impact that practicing mindfulness meditation has had their lives.

### **Implications for Counseling**

The most obvious implication for counselors in correctional settings is that they can use these findings to better guide them in addressing stress and anxiety in inmates. These findings further reveal the importance and major benefit of exploring alternative intervention approaches, like mindfulness meditation, in order to aid counselors to address various conditions in inmates. The deeper implications of using mindfulness meditation to address stress and anxiety and various other conditions in inmates in correctional settings are still yet to be greater researched and more fully explored. Nonetheless, it has become increasingly clear that incorporating mindfulness meditation practice in inmate rehabilitation treatment services can produce quite positive results as a valuable intervention tool.

### **Conclusion**

Mindfulness meditation practice in correctional settings continues to show great promise as a practical intervention in addressing inmates' physical, emotional, psychological and spiritual concerns. Although there were some limitations in this study, the overall findings showed that mindfulness meditation practice had a positive impact and substantial reduction on the stress and anxiety levels of inmates in a county correctional facility. As a result, this practice was ultimately able to provide important needed tools to inmates, empowering them to better cope with and manage their stress and anxiety. Through mindfulness meditation practice the

participant learned to use their breath and the state of mindfulness as tools to release tension, gain greater relaxation and calm, and to increase their awareness and self-regulation.

Acquiring mindfulness meditation tools are particularly relevant in correctional settings, due to the environment's inherently unpleasant and punitive nature, which could contribute to an inmate's overall level of stress and anxiety. Subsequently, based on this study's findings, incorporating this form of meditative practice more widely throughout our country's correctional facilities would be an intelligent administrative institutional decision. Moreover, given that mindfulness meditation practice tends to enhance an inmate's neurological processes, self-regulatory and coping abilities, such practice could be very cost effective. It could contribute to reducing the expensive use of certain medications, psychiatric counseling interventions, and decrease incidents of behavioral institutional infractions. Most importantly, implementing a mindfulness meditation program at MCF or at other correctional settings costs virtually nothing, since its facilitators are unpaid volunteers and the need for any equipment or other resources are minimal.

In sum, although mindfulness meditation is Eastern in its roots, it is increasingly becoming an innovative Western intervention technique in many health care and other rehabilitation settings. In this, the use of mindfulness meditation in New York Monroe County Sheriff Office's, Monroe Correctional Facility Drug and Alcohol Reentry Program and various other correctional settings throughout the United States, is nothing less than an intelligent practical intervention approach in addressing stress and anxiety in inmates. Failure to address these concerns can only lead to greater physical, emotional, psychological and spiritual pain and suffering in inmates, as well as additional problems in the facilities where they are housed. Even though the use and effectiveness of mindfulness meditation in corrections settings still needs to

be better researched and more fully explored, its ability to promote a more humane, personally empowering and practical corrections oriented alternative cannot be denied.

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### *Appendix A: Prospective Participant Recruitment Letter*

Dear Prospective Participant,

I am a student at The College at Brockport, and I am conducting a study on the use of Mindfulness Meditation as a tool to aid in reducing stress and anxiety levels in rehabilitation treatment program participants at Monroe Correctional Facility's Drug and Alcohol Re-entry Program. This study will involve completing 2 questionnaires regarding anxiety and stress prior to the study (1 questionnaire consisting of 10 questions and the other consisting of 21 questions, each questionnaire will take no more than 15 min.). After 8 weeks, upon completion of the study, you will be given the same 2 questionnaires to complete. The answers to these questions are important because they will allow me to determine whether or not the mindfulness meditation program helped the participants to acquire improved stress and anxiety.

At the conclusion of the program study you will be given the post-tests questionnaires

Please be aware that the results from this study will be used to determine the benefits of alternative program techniques in reducing stress and anxiety. These results will also be used to improve/enhance already existing techniques that are being used to address such inmate concerns.

If you have any questions regarding this study, you may contact:

Patricia Williams-McGahee

Dr. Patricia Goodspeed-Grant

Department of Counselor Education

Department of Counselor Education

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### *Appendix B: Informed Consent Statement*

#### **Informed Consent**

The purpose of this research project study is to examine the impact that mindfulness meditation has on the stress and anxiety levels of Monroe Correctional Facility (MCF) inmates. In addition, this research project is being conducted in order for me to fulfill the necessary requirements to complete my Master's thesis for the Department of Counselor Education at the College at Brockport, State University of New York.

In order for you to participate in this research project study, your informed consent is required. You are being asked to make a decision whether or not to participate in this study. Your participation is totally voluntary. Participating or refusing to participate in this study will not affect your sentence or the rehabilitation treatment services that you are currently receiving at Monroe Correctional Facility. You are free to change your mind or withdraw from this study at any time without penalty. If you wish to participate in this research project study and agree with

the statements below, please sign your name in the space provided at the end of this consent form.

Note: The pre and post-questionnaires will be given to participants in a classroom at MCF prior to the first and last meditation group session.

I understand that:

1. My participation is voluntary, and I have the right to refuse to answer any questions.
2. My confidentiality will be protected. My name will not be written on the survey. There will be no way to connect me to this survey. If any publication results from this research, I will not be identified.
3. There will be no anticipated risks or benefits because of my participation in this research project study.
4. Per MCF's protocol, I will have regular access to a professional counselor on staff if at all needed.
5. My participation involves completing 2 questionnaires regarding anxiety and stress prior to the study (1 questionnaire consisting of 10 questions and the other consisting of 21 questions, each questionnaire will take no more than 15 min.). After 8 weeks, upon completion of the study, I will be given the same 2 questionnaires to complete.
6. A maximum of 30 people will take part in this study. The results will be used for the completion of a Master's thesis by the primary researcher.
7. Data and consent forms will be kept in separate locations in a locked filing cabinet by the investigator. All data and consent forms will be destroyed via shredding within 1 year after the research has been accepted and approved.
8. If I have any questions regarding this study and my participation in it I can contact Patricia Williams-McGahee @ (xxx) xxx-xxxx, xxx@brockport.edu or Dr. Patricia Goodspeed-Grant @ (xxx) xxx-xxxx, xxx@brockport.edu.

**I am 18 years of age or older.** I have read and understand the above statements. All my questions about my participation in this study have been answered to my satisfaction. I agree to participate in the study realizing I may withdraw without penalty at any time during the survey process. Returning the survey (and/or completing an interview if appropriate) indicates my consent to participate.

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Participant Signature

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Date

