

# **The Effects of Vipassana Meditation and Other Rehabilitation Programs on Alcohol and Drug Relapse and Criminal Recidivism**

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## **Abstract**

The specific aims of the proposed research are to evaluate the efficacy of Vipassana meditation as a correctional intervention (a) to reduce alcohol and other drug use, and its concomitant problems, (b) to reduce recidivism, and (c) to enhance the opportunity for a more balanced lifestyle, including increased self-awareness, self-efficacy, and hopefulness. Vipassana means "to see clearly" and is a non-sectarian practice. Vipassana is described as ordinary experience plus mindfulness plus equanimity yielding insight and purification and is initiated within a highly structured ten-day course. In non-inmate populations, the practice of Vipassana has been shown to be effective in reducing impulsiveness and increasing tolerance of common stressors. Preliminary results with inmate populations also show promise for its effectiveness in reducing alcohol and substance abuse, reducing recidivism, reducing psychopathological symptoms, and increasing more positive behaviors such as cooperation with prison authorities. To date, studies of Vipassana as an intervention in correctional facilities have been conducted primarily in India. Vipassana meditation, in particular, is being evaluated as an intervention technique with this King County Jail inmate population because the ten-day course is an ongoing program at the facility and because there is interest in implementing Vipassana meditation courses in other jurisdictions nationwide.

## **RESEARCH PLAN**

### **A. Specific Aims**

The broad, long-term objectives of the current proposal are to reduce future substance abuse and related criminal recidivism of incarcerated individuals through development of spiritually-based interventions, and to develop a better understanding of the role of spirituality in promoting change following such interventions.

The specific aims of the current research are:

1. Document the effectiveness of a specific spiritual practice, Vipassana Meditation, for reducing alcohol use, alcohol-related negative consequences, and criminal recidivism in a correctional population.

Effectiveness will be demonstrated through reductions at 6-month follow-up in typical weekly quantity of alcohol consumed and total problem score on the SIP, and lower incidence of re-arrest and re-incarceration of Vipassana workshop participants as compared to a case-matched comparison group receiving services as usual in the facility.

2. Evaluate several domains of spirituality as mediators of the effectiveness of Vipassana meditation on substance abuse outcomes in this population.

Domains of interest include Daily Spiritual Experiences, Meaning, Values, Beliefs, Forgiveness, and Religious/Spiritual Coping as measured by the Multidimensional Scale of Spirituality/Religious Behavior in Health Care Research (SF), and Optimism as measured by the Life Orientation Test.

3. Evaluate participant characteristics as predictors of willingness to participate in Vipassana meditation.

Vipassana participants at baseline will be compared to a random sample of non-volunteers on measures of spirituality, motivation for change, alcohol/drug use history, PTSD symptoms, prior criminal history, and psychopathology.

## **B. Background and Significance**

The excessive use of alcohol and other substances represents a significant public health problem in the United States. Epidemiological studies suggest nearly 20% of the population will experience a substance use disorder (abuse or dependence) at some point in their life, and substance use and dependence result in substantial harm to both individual users and society at large. This includes short-term health and social consequences (hangovers, blackouts, interpersonal arguments, embarrassment) as well as consequences with longer-term implications (unplanned pregnancy, sexually transmitted disease, tolerance, withdrawal symptoms, accidental injury or death, and severe negative health effects).

Much of the harm to others caused by addictive behaviors is due to the relationship between AOD abuse or dependence, and criminal activity. For example, sexual assault, domestic violence, child abuse, assaults, fights, manslaughter, and homicide have all been linked to alcohol use (cites here from 9<sup>th</sup> special report to congress). In many cases, both the perpetrator and the victim are under the influence of alcohol or drugs at the time the crime is committed. A recent report to the U.S. congress concluded that, "In both animal and human studies, alcohol, more than any other drug, has been linked with a high incidence of violence and aggression." (U.S. Department of Health and Human Services, 1990). Alcohol may also create harm when drinking drivers cause injury or death to pedestrians or other motorists. In 1991, there were 1.4 million arrests in the U.S. for driving while intoxicated. It is estimated that alcohol plays a significant role in 41 percent of traffic accidents (Bureau of Justice Statistics, 1992).

Property crimes such as burglary, larceny, and robbery may also be related to either the acute effects of alcohol or drugs or to the need for money to buy substances. In addition, drug-defined crimes such as the manufacture, distribution, sale, or possession of controlled substances contribute to the relationship between drugs and crime. In 1991, there were a total of 4.3 million arrests for alcohol or other drug crimes accounting for over one-third of all arrests in the United States (Bureau of Justice Statistics, 1992). It was estimated in 1993 dollars that the economic cost of alcohol or other drug-related crime is \$61.8 billion annually and climbing (The Institute for Health Policy, 1993).

The consequences of alcohol or other drug-related crime for the individual user often include arrest, trial, probation, incarceration, and/or parole. One indicator of the rise in cost and

harm due to addictive and criminal behaviors is in the spiraling increase in substance-involved offenders at all levels of the criminal justice case processing system. From 1970 to 1997, the number of substance-involved offenders has continually increased from 21,266 incarcerated individuals in the Federal Bureau of Prisons with just over 16% being drug offenders to 98,483 incarcerated individuals of which over 60% are drug offenders. At the state level, the 220,000 drug law violators in state prison in 1995 represented a 1070% increase from 29,000 drug offenders under state supervision in 1980. At midyear in 1997, approximately 1.6 million individuals were incarcerated either in federal institutions, state prisons, or local jails and an estimated 3.7 million individuals were under probation or parole supervision (Bureau of Justice Statistics, 1997). Surveys show that 50-80% of offenders have a history of problems with alcohol and substance abuse (Wanberg & Milkman, 1998). In 1997, the National GAINS Center reported that over one-third of jail detainees met criteria for alcohol or drug dependence, and more than half of all arrestees tested positive for illicit drug use (National GAINS Center, 1997). In addition, failure to obtain adequate treatment for alcohol or drug problems has been associated with increased likelihood of re-arrest and re-incarceration. These findings suggest developing effective treatment programs for incarcerated individuals is an urgent public health priority.

Spiritual beliefs and practices have long been thought to be important in understanding the development, maintenance, and treatment of alcohol abuse, dependence, and problem use. Interest in the role of spirituality in addiction is increasing as witnessed both by a resurgence of research on spiritually-based interventions such as AA as well as by the recent conference on "Studying Spirituality and Alcohol" sponsored by NIAAA and The Fetzer Institute (NIAAA/Fetzer, 1999). Researchers and theoreticians have considered aspects of spirituality or religiosity as protective factors against developing alcohol problems, as moderators or mediators of treatment outcome, as dependent (outcome) variables following alcohol treatment, or as potentially efficacious treatment components (Miller, 1998).

Broadly defined, spirituality has been characterized as a 'search for the sacred' (Larson, et al., 1998; McCrady, 1998), with particular emphasis on the transcendent or transpersonal, that which falls outside the boundaries of human material existence (Wilber, 2000; Miller, 1998; Miller, 1999). The world's many religions are typically organized systems of beliefs, behavior, and moral codes designed to support and encourage the attainment of a spiritual life, shared by a community of believers and practitioners. Thus, spirituality (the transcendent) can be thought of as overlapping but not synonymous with any particular religious orientation or value system. While the specific beliefs, moral codes, and spiritual practices of religions vary, there is an essential unity among them in the theme of transcending human suffering by a transformation of consciousness.

Addiction and addictive behaviors such as alcohol abuse and dependence viewed from a spiritual perspective might be understood as misguided attempts to solve the problems of human existence by artificially altering one's state of consciousness with psychoactive substances that mimic authentic spiritual transformation temporarily (by altering senses, thoughts, and behavior), but which ultimately decrease spirituality resulting in both physical and mental disorders (Miller, 1999). From this perspective, authentic spiritual beliefs and practices are natural and healthy ways to prevent addictions from developing or to effectively treat substance use disorders that have already developed.

Traditionally, the spiritual approach to recovery and alcohol treatment has been most associated with AA and the Minnesota Model (Cook, 1988a, 1988b). Recent research suggests this approach may be at least as effective as other, non-spiritual approaches. For example, a recent multi-site study found a 12-Steps facilitation treatment based on AA to be comparable in effectiveness to two other treatments with substantial empirical support (Project MATCH Research Group, 1997). However, there is also good evidence that other spiritual interventions, particularly meditation-based interventions, are associated with reduced alcohol and substance use. Although most often thought of as a relaxation technique, meditation is also used to develop

mindfulness at physical, psychological, and spiritual levels (Marlatt & Kristeller, 1998). To be mindful is to be aware of the full range of experiences that exist, to bring one's complete attention to the present experience on a moment-to-moment basis. This is consistent with the Buddhist view of transcendence as 'enlightened awareness of the true being'. There are a variety of different types of meditation with somewhat different interpretations and methods, but underlying each is a focus on transcendence. Meditation has been used as a treatment or adjunct to treatment for a variety of clinical problems, including personality and conduct disorders (Marlatt & Kristeller, 1998); depression and depression relapse (Teasedale, 1997); panic attacks and anxiety disorders (Kabat-Zinn, 1992) and borderline personality disorder (Linehan, 1993). In addition, meditation has been used as an effective intervention for alcohol abuse, smoking, and illicit drug use (Alexander, Robinson, & Rainforth, 1994; Marlatt, 1994; Marlatt & Kristeller, 1998; Marlatt & Marques, 1977).

Both Transcendental Meditation and to a lesser extent Vipassana meditation have been evaluated as treatments for substance abuse, with encouraging results (Miller, 1998; Alexander, Robinson, & Rainforth, 1994; Gelderloss, Walton, Orme-Johnson, & Alexander, 1991). The Transcendental Meditation (TM) is a simple technique developed and popularized by Maharishi Mahesh Yogi (1986) which has as its source ancient Vedic tradition of India. As of 1994 there had been over 30 studies investigating the TM as a treatment for alcohol and drug problems (Alexander et al., 1994). Nineteen of these studies were included by Alexander et al (1994) in their review of the literature. While design quality and methodological rigor of these studies varied from retrospective surveys (n= 3) to random assignment experiments (n=6), all the investigations reviewed demonstrated some positive effect of TM in reducing alcohol and drug use. The meta-analysis showed that better designed studies using random assignment and control groups had at least the same or higher effect sizes for TM than less controlled designs. Importantly, many of these TM studies involved prison populations and heavy users of alcohol and drugs. For example, Bleick et al (1987) found that male felon parolees of the California Department of Corrections (CDC) who had voluntarily learned meditation while incarcerated had more favorable parole outcomes than statewide CDC parolees, as indicated by significantly reduced recidivism at six months, one year, and six years. In this study, prison education, vocational training and psychotherapy did not consistently reduce recidivism.

Vipassana meditation, in particular, is being evaluated as an intervention technique with inmate populations. Vipassana means "to see clearly" and is a non-sectarian practice. Vipassana is described as ordinary experience plus mindfulness plus equanimity yielding insight and purification (Young, 1994), and is initiated with a highly structured ten-day course. In non-inmate populations, the practice of Vipassana has been shown to be effective in reducing impulsiveness and increasing tolerance of common stressors (Emavardhana & Tori, 1997). Preliminary results with inmate populations also show promise for effectiveness in reducing recidivism, reducing psychopathological symptoms, and increasing more positive behaviors such as cooperation with prison authorities (Chandiramani, Verma, Dhar, & Agarwal, 1995; Kumar, 1995; and Vora, 1995).

Although these studies were conducted in the prison system in India, Vipassana is has also recently been implemented in the United States. The first Vipassana course in a North American correctional facility was conducted at the North Rehabilitation Facility (NRF) in Seattle, Washington in 1997. NRF is a minimum-security jail facility with an adult male and female inmate population of approximately 300. Since 1997, four additional ten-day courses have been held at NRF. Anecdotal reports suggest the effects of these courses have been quite positive. Jail personnel report that those who complete the course are more calm, more reasonable, and better disciplined (Meijer, personal communication, 2000). Early recidivism results also are quite encouraging, and clearly warrant additional research on this promising intervention.

Despite these encouraging preliminary studies of Vipassana meditation's effects on recidivism, little systematic research has documented post-incarceration effects of meditation on alcohol and drug use behavior or consequences, nor have previous studies evaluated the role of spirituality in the change process. As a result, it is currently unclear whether participants in Vipassana courses fare better post-incarceration than similarly motivated individuals not in these courses, and if so, whether an increase in important domains of spirituality can account for these changes. For the most part, research has also failed to evaluate other cognitive or emotional factors which might mediate the effects of meditation on substance use. Finally, little information is available regarding individual difference characteristics which might predict participation or non-participation in this voluntary treatment approach, nor the extent to which participant characteristics moderate the effectiveness of the Vipassana intervention.

The current study is an effectiveness trial designed to take advantage of the naturally-occurring opportunity to evaluate Vipassana meditation as a treatment for alcohol and substance abuse in the NRF correctional facility. The study is also a first step toward remedying some of the gaps in the literature regarding the role of spirituality and other hypothesized moderating and mediating variables in understanding meditation's effects. In particular, we hypothesize that individuals who participate in a 10-day Vipassana course will reduce or refrain from substance use, experience fewer alcohol-related negative consequences, increase in key domains of spirituality and optimism, and show changes in thought suppression, self-efficacy, and self-awareness consistent with the Vipassana model.

Given the present trend toward increased incarceration of individuals who have significant problems with alcohol and substance abuse, often with associated mental and physical health problems, there is a growing need for implementation of effective treatment interventions for correctional populations. Jail-based treatment programs offer an opportunity for inmates to change long-standing habitual behavioral problems such as addictive behavior, relapse, and recidivism. The present application is significant because of the potential ability of meditation (Vipassana course) to significantly impact these problem behaviors. If successful, similar programs could be offered to other jail and prison populations at relatively low cost.

### **C. Procedures**

Participants in this study will fill out questionnaires concerning: a. their alcohol and drug and its associated consequences, b. their typical weekly consumption of alcohol, c. the adverse consequences they have experienced due to drinking during the past three months, d. the type and severity of any psychiatric symptoms they have experienced, e. their motivation to change their addictive behaviors, f. their confidence that they can abstain from alcohol and drug in various circumstances, f. their level of optimism, g. their ability to meditate, h. their religious beliefs and behavior, and h. their use of religion to cope with life's demands.

Data collection will occur during the two week prior to each Vipassana course, during the two weeks following the Vipassana course and a 3 months and 6 months after release from NRF back into the community.

### **D. Literature Cited.**

Available on request from George Parks.