

The Effects of Chi-Kung on Spirituality  
and Alcohol/Other Drug Dependency Recovery

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Abstract

This article describes the effects of a Chinese breathing based meditative technique, Chi-Kung, on spiritual awareness in a drug dependency population. Implications for recovery are discussed as meditation improved the prospect of completing treatment.

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## The Effects of Chi-Kung on Spirituality and Alcohol/Other Drug Dependency Recovery

The treatment milieu for drug dependence sporadically includes relaxation exercises. Learning relaxation techniques gives the patient a coping device for reducing stress without resorting to addictive substances. Additionally these exercises are similar to meditation, which is an important component of the twelfth step in Alcoholics Anonymous (Alcoholics Anonymous World Services, Inc., 1993). This article focuses on the therapeutic process of meditation, and the benefits of its use in an inpatient substance abuse setting. The meditation technique described in this paper is called Chi-Kung. Kung means to practice (Chia, 1994). Western culture has no direct translation for Chi. In Japan it is called Ki, in China Chi, and the Indian Yogis call it Prana. For the purposes of this paper, the term Chi will be used. While Chi has no precise definition its many definitions are very similar in their essence. Chi has been described as the essential principle of harmony, the vital fullness of life, and the divine force that penetrates all things (Ueshiba, 1984). It is an integral component of the martial arts (e.g., Tai Chi, Chi-Kung, Aikido) and yoga (pranayama). Attempts to use of breathing as a method for spiritual development are ancient. For example, Yogis utilized this method approximately 4000 years ago (Koller, 1982). The intent of this investigation was to investigate the effects of meditation upon spirituality and early addiction recovery.

### Method

#### Participants

The participants were 40 inpatient residents at a substance abuse treatment center. Participants were randomly assigned. Nineteen were assigned to the meditation group, and 20 to the control group. Participants ranged in age from 19 to 50. The mean age was 31. Seventy percent of the

participants were males and 30% females. The participants were nearly evenly divided between whites (49%) and African Americans (49%). The education levels of the subjects was as follows: 42% had not completed high school, 39% had completed high school (or had a Graduate Equivalency Degree), 16% had some college, and 3% had completed a four year degree.

### Procedures

The setting for this study was a state operated 28-day residential substance abuse treatment program, which incorporates a 12 Step program. Participants were randomly assigned to either the meditation group or a control group upon admission to the program. The control group participated in an educational lecture that was already established as part of the treatment milieu. Length of time in treatment varied for each individual according to the treatment team's assessment of the patient's needs (mean days = 17.4, standard deviation = 6.4).

### Instruments and Measures

The author constructed a spirituality scale to empirically investigate the relationship between meditation, spirituality, and addiction recovery. It is a 33- item questionnaire constructed to measure the intensity of cognitive beliefs regarding spirituality. The scale was administered to both of the groups during their first three days in treatment. Participants completed the spirituality scale again during the last three days of treatment (see Appendix A).

The conceptual definition of spirituality used in this scale has the following four dimensions: 1) A belief in an ultimately larger spiritual reality that is characteristic of a God archetype, 2) A belief in a spiritual aspect of oneself that is separate from the physical body, 3) A perspective or experience of the world as spiritual, and 4) A belief that thoughts can effect reality. Alpha reliability for the scale was .9298. The dimensions of this scale were supported by factor analysis. The test retest reliability = .9240 (Niederman, 1999).

### Description of the Meditation Group Process

Chi-Kung means to practice the process of breathing to increase Chi pressure or life force. It was originally developed as a martial art method (Kung Fu) approximately 1000 BCE in China. Originally Chi-Kung was learned in order to guard against the effect of strikes to the internal organs and glands. Chi Kung over the years has evolved into a physical, emotional, and spiritual discipline. At a spiritual level it creates, condenses, and strengthens one's Chi. This increased connection to Chi develops the soul or spirit body in preparation for a spiritual journey (Chia, 1994).

The meditation group met twice a week for approximately 45 minutes. The average number of group members was seven. The setting was in a large group room that was isolated from noise and activity of the treatment center. The group sat in a semi-circle. The facilitator sat with the group on the outskirts. A portable cassette stereo was on the table facing the group. This stereo was within the facilitator's reach as the tape was stopped at fixed intervals during the group session.

Each session began with group members chatting idly while we waited for all the members arrive. This would also be a time for the facilitator to acquaint himself with new members. If there was a new member a review of the format for the session and introductions would be made. An audiocassette tape would structure the format for each session.

A commercial audiocassette titled "Healthy Breathing" (Cohen, 1996), re-edited it into three separate tapes, was used for the sessions. One tape was used each week on a rotating basis throughout the study. Each tape followed the following format: a) A brief discussion of an aspect of breathing and directions on how to practice a particular breathing exercise, b) Five minutes of soft flute music, during which the patients were directed to practice the aforementioned breathing

exercise, c) an explanation of another breathing technique, and d) another five minutes of music played while subjects practiced the second breathing technique.

Incorporating the tape provided the following structure. The first part of the tape was a five-minute general talk on breathing exercises. This segment allowed participants to begin to settle down and become focused on the task. The next segment provided ten minutes of specific instructions regarding a particular breathing technique. After the meditation technique was introduced the listener was directed to practice while listening to soft flute music. After five-minutes the music ended, which was the cue for the facilitator to stop the tape. Once the tape had stopped, the facilitator paused a moment to give participants time to exit the meditation state. Members were asked to comment on their meditation experience, each member briefly commenting during a five-minute break. The next segment provided ten-minutes of specific instruction regarding a second meditation technique. After the technique was introduced the process was repeated in which the listener was directed to practice while listening to soft flute music. After five-minutes the tape was stopped and the process of soliciting comments from the group was repeated.

The use of the re-edited tape was useful for several reasons. First, it standardized each session, providing familiarity and continuity for the participants. Second, it limited the influence of the facilitator as a crucial factor in the success of each session. The facilitator's responsibilities during the session were minimal and he was able to facilitate the group regardless of mood or energy level. Lastly the use of the tape allowed the facilitator to structure the session without having to monitor the time.

### Chi-Kung Technique

The narrator on the tape explains that the basis of Chi-Kung breathing is a technique called ‘natural flowing breath’. He says that “in the West this is called abdominal or diaphragmatic-respiration.” The following is an excerpt from the tape explaining how to do natural flowing breath (Cohen, 1996) (Reproduced with permission):

“Keep your eyes lightly closed. Breathe only through your nose both the inhalation and the exhalation. Breathing through the nose purifies and moistens the air. As you practice natural breathing keep the tip of the tongue lightly touching the upper palate throughout the exercises. According to Chinese medicine when the tongue touches the upper palate the yin and yang energy in the body flows more strongly through the acupuncture meridians. Of course if you have a sinus or respiratory problem then breathe whichever way is comfortable... Sit straight in your chair. Imagine that your spine is long and open. Your tailbone is rooted to the chair. You might even imagine that your tailbone is rooted into the ground and your head is reaching skywards. This gently stretches open the entire spine. The shoulders are relaxed sitting downwards. Your hands rest comfortably in your lap. The chest is relaxed neither unnaturally expanded nor depressed. Your belly is loose rather than held inwards... Your hips and legs are relaxed so that the feet can rest sensitively on the ground. Now as you inhale let the abdomen very gently expand don't force it. As you exhale let your belly release the breath again not forcing it. Breathe at your own pace without interference. Don't try to slow down the breath, this only speeds the breath up... It's a matter of releasing and surrendering to the experience of the breath rather than making an effort.”

In total, three breathing techniques were introduced and practiced. Each tape utilized two techniques. As such, each tape included a review of a technique, which had been introduced in the previous week. The meditation group was an open group and ran for a total of 11 weeks.

### Results

Generally participants in the meditation group were compliant and enthusiastic. Initially most of the newcomers to meditation found it difficult and approached it with some degree of humor. Yet by the third session most participants were earnestly meditating seated quietly, eyes closed, with a serene facial expression. All of the participants in the meditation group responded positively. Many referred to incidences in which they used their newly acquired meditation technique to cope with anger, frustration, and cravings for drugs/alcohol. Two of the participants were familiar with other meditation styles but claimed they were now adopting the Chi-Kung method.

Participation in the meditation group appears to have contributed to the likelihood of graduation from inpatient treatment. In the meditation group, 15 patients completed treatment (75%). In the control group 11 patients completed treatment (55%). Scores on the Spirituality Scale did not correlate with treatment completion. Additionally, participation in the meditation group did not significantly raise posttest spirituality scores.

An Independent Samples t-test found pretest scores on the Spirituality Scale to be equal for both the experimental ( $M = 122.35$ ) and the control group ( $M = 124.10$ ),  $t(38) = -.460$ ,  $p > .05$ . An Independent Samples t-test found the mean pretest Spirituality score for patients who completed treatment ( $M = 124.23$ ) to be equal to those who did not complete treatment ( $M = 121.36$ ),  $t(38) = .724$ ,  $p > .05$ . Posttest scores for the meditation group ( $M = 122.38$ ) and control group ( $M = 123.44$ ) were also equal,  $t(20) = -.153$ ,  $p > .05$ . A Paired Sample t-test showed no

change in spirituality score for the meditation group  $t(12) = -.200, p > .05$ . Also, there was no change in the control group  $t(8) = .085, p > .05$ .

### Discussion

This study examined the effects of meditation on spirituality and early recovery. The results indicate that participation in a meditation group increases the likelihood of completing residential treatment. Chi-Kung breathing exercises appear to be a beneficial adjunct to residential treatment. Implementing the meditation group within residential treatment requires little expense, no special training, and is simplified through the use of audiocassettes.

Additional research is needed to identify the salient variables within meditation that effect treatment completion. It is possible that involvement in the meditation group gave participants a feeling of well being and a reprieve from the tumultuous context of early recovery. Participants may have practiced on their own the Chi-Kung meditation techniques and utilized it as a coping mechanism. Counterconditioning, a therapy based on classical conditioning offers a possible theoretical explanation for the effects of meditation on treatment completion. Chi-Kung meditation may have provided counterconditioning by pairing stimuli that produces unpleasant feelings (e.g., anger, anxiety, and craving) with an antagonistic response such as the relaxation produced by meditation. By accompanying anxiety evoking stimuli with a suppression of the anxiety responses the bond between the two will be weakened (Association for the Advanced Training in the Behavioral Sciences, 1988). Such a skill could facilitate an internal locus of control regarding participants' feelings, thoughts, and anxiety level.

In addition to being exposed to spirituality in the form of meditation, the participants in the normal process of treatment were also exposed to the spiritual principles of Alcoholics Anonymous. Yet despite these spiritual influences participants in the meditation group appeared

to have no increase in their level of spirituality (Pretest  $M = 122.35$ , Posttest  $M = 122.38$ ).

Additionally, patients' level of spirituality upon entering residential treatment did not appear to be a predictor of completion of treatment. This finding may be indicative of threats to the validity of the spirituality scale. Conversely, it could also imply that strength of personal beliefs and convictions has little impact upon behavior in early recovery.

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## Appendix A

## Spirituality Scale-2

Please assist me in the development of this instrument. This is a 34 item questionnaire designed to measure spirituality. I would suggest that you answer these questions fairly quickly without too much reflection. Go with your immediate response and this scale should take less than five minutes to complete.

## INSTRUCTIONS:

These pages contain statements related to spirituality. Read each statement and circle ONLY ONE number on the five-point answer scale beneath each statement. Try to answer these questions fairly quickly without too much reflection. Please try to answer every item.

These pages contain statements related to spirituality. Read each statement and circle ONLY ONE number on the five-point answer scale beneath each statement. Go with your immediate response. Please try to answer every item.

For the questions that refer to "God" you may substitute your own personal word such as: Higher Power, Goddess, Lord, Supreme Consciousness, Tao, or Ultimate Other.

Strongly Disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly Agree	5

1. I seek to have a holy and sacred experience.

1    2    3    4    5

2. Life is made up of meaningless random events.

1    2    3    4    5

3. Everything in life happens by chance.

1    2    3    4    5

4. We create many of the events in our lives by focusing our thoughts on them.

1    2    3    4    5

5. There exists a non-material dimension of reality.

1    2    3    4    5

6. Contact with the spiritual part of life has given me a sense of personal power and confidence.

1    2    3    4    5

7. It is possible to use your thoughts to create changes in the world.

1    2    3    4    5

8. I practice one (or more) of the following on a regular basis: prayer, chanting, meditation.

1    2    3    4    5

9. Negative thoughts lead to having negative experiences.

1    2    3    4    5

10. There is a God.  
1    2    3    4    5
11. I believe that my "Higher Power" is full of Love.  
1    2    3    4    5
12. There is no God.  
1    2    3    4    5
13. I can make contact with a spiritual part of life.  
1    2    3    4    5
14. By just thinking about something you can make it more likely to happen.  
1    2    3    4    5
15. I believe that people who are in desperate and tragic situations can be helped through contact with spirituality.  
1    2    3    4    5
16. Our thoughts have the power to transform our lives.  
1    2    3    4    5
17. The universe is unfolding in a meaningful manner.  
1    2    3    4    5
18. I believe in a "higher Power" to which I can "let go" and surrender my life.  
1    2    3    4    5
19. Our actions in this life will have an effect on our spirit after death.  
1    2    3    4    5
20. Visualizing world peace can help make it happen.  
1    2    3    4    5
21. I believe that each person has a spirit that survives the death of their body.  
1    2    3    4    5
22. I can contact and communicate with my "Higher Power".  
1    2    3    4    5
23. I believe that the soul or spirit can exist separately from physical matter.  
1    2    3    4    5
24. It is possible to move objects with thoughts.  
1    2    3    4    5
25. To me life appears to have a meaningful design in which I can see things happen for a reason.  
1    2    3    4    5
26. I believe that people can increase their physical and emotional health through spirituality.  
1    2    3    4    5
27. I am not afraid to die because I know my spirit will live on.  
1    2    3    4    5
28. I have spiritual needs which money and possessions do not satisfy.  
1    2    3    4    5
29. Prayer can be used for healing.  
1    2    3    4    5
30. I do not always understand how or why, but I believe life is deeply meaningful.  
1    2    3    4    5
31. Love is an important and powerful force in the Universe.  
1    2    3    4    5

32. A person can grow spiritually as a result of pain and suffering.

1      2      3      4      5

33. When one truly searches for the meaning and purpose of one's life answers can be found.

1      2      3      4      5

34. Awareness of death, pain, and suffering have helped me develop spiritually.

1      2      3      4      5