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An Applied Clinical Combination of Zen Meditation and Behavioral Self-Management Techniques: Reducing Methadone Dosage in Drug Addiction

Most behavioral approaches to the problem of addiction have involved physical methods of aversive conditioning, either alone, or in combination with other techniques such as relaxation and systematic desensitization. Working on the premise that self-control skills are critical in curbing drug abuse, we have developed a self-control training package to help the individual deal with the environmental and behavioral variables which sustain addiction. Treatment involved teaching the client the skills of behavioral self-observation and functional analysis so that he could learn to monitor his own overt and covert behavior, and see which cues and consequences were involved in his drug-taking behavior. Subjects then practiced, through covert behavioral rehearsal, making drug taking environmental and internal cues discriminative stimuli for interrupting previously maladaptive behavioral sequences, and in engaging in incompatible responses: focused breathing; self-instructions, and covert self-modeling. Each subject was also instructed in formal Zen breath meditation and asked to practice 15 min, two times a day, for one month.[1]

Subjects ($N=2$) were volunteers from the methadone maintenance clinic at the Veterans Administration hospital, Menlo Park, CA. Subject 1 was a 25-year-old white male high school graduate who began using heroin regularly in 1966, and daily in 1969. During the 20 weeks prior to the study, he had detoxified steadily and without a major problem; his dosage was at 30 milligrams before the study. Subject 2 was a 29-year-old white male who dropped out of high school in tenth grade, and began using heroin daily in 1966. He used daily for six years, and had been maintaining at 40 m of methadone for 11 weeks before the study. Both subjects knew their methadone dosage, and were able to voluntarily choose whether they wanted to maintain or reduce their dosage. Urine samples were collected on a random basis, at least once weekly, to determine drug usage other than methadone. Once the subjects' dosage reached 0, they

[1]A longer version of these case studies, as well as a detailed description of the treatment techniques, may be obtained from the first writer, c/o P.O. Box 2084, Stanford, CA 94305.

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were no longer required to come to the clinic. Follow-up data are based on self-report interviews with a staff nurse of the clinic.

Subject 1's methadone dosage was 30 m for 3 weeks prior to intervention. During the one-month training intervention, his dosage dropped to 15 m. A one month follow-up revealed that his dosage had dropped to 5 m, and two months later he had completely detoxified. A two year follow-up revealed that he had remained free of all opioid use, without a concomitant increase in use of hard liquor or other drugs. Subject 2's dosage had been stabilized at 40 m for 11 weeks prior to intervention, and during the initial interview he noted he was "rather unconfident" about his ability to succeed in detoxifying from methadone. After 3 weeks of the training intervention, he decided to begin lowering his dosage. During the first month after the intervention, his dosage dropped to 15 m, but then jumped to 30 because of heroin usage. At that point he entered a detoxification ward, where he detoxified from heroin and methadone in four days. He then moved away from his drug-taking acquaintances. A six-month and a two-year follow-up revealed that he had remained free of all opioid use, without a concomitant increase in the use of liquor or other drugs.

Anecdotal information suggested some interesting information about the process of formal meditation and why it might have been a useful component in the training package: "brings a quiet peace" (i.e., relaxation strategy); "I felt a clarity of mind" (i.e., absence of covert images and self-statements); "I saw the current confusions of my life on a movie screen . . . normally these questions cause me gas pains, but this time there was no tension (i.e., "global" systematic desensitization?) (cf. Shapiro and Zifferblatt, in press). Several questions still remain unanswered: e.g., is formal meditation a necessary part of the treatment? is it sufficient by itself? is it the relaxation component of meditation that makes the greatest contribution? Is meditation really different from, or more effective than deep muscle relaxation, systematic desensitization, behavioral self-observation?

Although the current case studies suggest that the behavioral strategies may aid the practice of formal and informal meditation little research in this area has been done (cf. Girodo, 1974; Boudreau, 1972; Shapiro, in press). Therefore, even though it appears that this combination of meditation and behavioral self-control strategies may be a potentially powerful and exciting therapeutic tool, much more refinement and evaluation of the strategies needs to be undertaken.

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DEANE H. SHAPIRO, JR.
Stanford University (P.O. Box 2084, Stanford, CA 94305) and Pacific Graduate School of Psychology
AND
STEVEN M. ZIFFERBLATT
Stanford University and National Heart and Lung Institute

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