

## REDISCOVERING AND REAPPLYING CONTINGENT INFORMAL MEDITATION

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Habit control problems included smoking, nail-biting, and thumb-sucking with 7 college students as volunteer participants. A multiple baseline across subjects design was used. Subjects were randomly assigned to one of two treatments: contingent informal meditation or single session hypnosis. Contingent informal meditation combines behavioral strategies with meditation. The hypnosis condition involved one heterohypnosis session with instructions for self hypnosis. For contingent informal meditation, one subject achieved total cessation of smoking and one subject achieved total cessation of thumb-sucking. No hypnosis subjects achieved total cessation. Overall 5 of the 7 subjects, and all 4 of the Contingent Informal Meditation subjects experienced significant decreases in their habit.

Contingent informal meditation is a term that I have found both psychologists and meditation practitioners to be unfamiliar with. After scratching their heads, they might ask me if I am testing them with an oxymoron; something that sounds so behavioral linked to the word meditation. Contingent informal meditation is a technique devised by Shapiro (1978) based on previous attempts to integrate behavioral self-control strategies with meditation procedures (e.g., Boudreau, 1972; Shapiro & Zifferblatt, 1976). It most notably combines thought stopping (Wolpe, 1969), covert self-modeling (Cautela, 1971), covert self-instructions (Meichenbaum & Cameron, 1974) and informal meditation. Shapiro's instructions for the technique were modified slightly for this study, see Appendix A. The reasons for the modifications will soon become evident.

Contingent informal meditation requires the subject to not only use this technique when appropriate but also initiate a daily practice of meditation. Consequently, subjects are taught a method of meditation first and then secondly are taught the contingent informal meditation technique. The practice of contingent informal meditation is contingent upon the recognition of antecedent cues for a problem such as anxiety. The subject receives the general benefits of meditation practice while the contingent informal meditation technique acts as a reciprocal inhibitor of the problematic experience or behavior.

Contingent informal meditation had been applied mainly in the area of anxiety management and found to be effective (Shapiro, 1976). Transcendental meditation and Yoga have been used similarly to successfully treat claustrophobia and profuse perspiration (Bourdreau, 1972). This suggests that contingent informal meditation

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may be applicable to the treatment of maladaptive habits, such as smoking or alcohol abuse, when considering the anxiety component of habits (e.g., Oei, Tilley, & Gow, 1991; Shiffman, 1982). Contingent informal meditation may also be effective in habit control in as much as it acts as a competing response and competing response procedures have been found to be very beneficial in habit control (e.g., Silber & Haynes, 1992).

A review of the literature shows that just a general practice of meditation can enhance habit control. For example, Carroll (1993) found a positive correlation between the practice of prayer/meditation and the length of sobriety for 100 Alcoholics Anonymous members. Similarly, Johnsen (1993) found a trend toward the use of prayer or meditation by 22 former participants in a chemical dependency program who were abstaining from the use of mind altering drugs.

Cigarette smoking has also been found to be positively affected by the practice of meditation. These effects have usually been significant decreases in smoking, at least short term (e.g., Cohen 1984) and at least as effective as behavioral self-control groups (e.g., Ottens, 1975). Indeed, Aron and Aron (1983) surveyed 60 Transcendental Meditation practitioners who had quit or greatly reduced use of substances, such as tobacco, and found the habit cessation to take place gradually as the substance became less and less enjoyable. All of these studies support the logic that both addiction and meditation, as well as other transcendent techniques, lead to an altered state of consciousness (Metzner, 1994). If meditation can substitute for the habit, then the subject can benefit since meditation has positive health related effects as compared to the negative health related effects of such habits as cigarette smoking. We also might ask how much more successful would habit control be with the addition of a meditation technique specifically designed to have immediate effects and address behavioral dimensions of the problem. Such a technique is contingent informal meditation.

Based on the initial case history success of contingent informal meditation, Shapiro (1980) urged experimental replication. Experiments could also be designed to methodically "pull out" what the different aspects of the technique contribute to the outcome effects. To date, this has simply not occurred. The current study consequently undertook to replicate the effectiveness of contingent informal meditation and examined the use of it or single session hypnosis for 7 subjects who exhibited a variety of habit control problems, including: smoking, nail-biting, and thumb-sucking. For each of the 7 subjects a single subject multiple baseline experimental design was used. Hypnosis was also included in the study to compare to contingent informal meditation and because some experimenters have found that a single session of hypnosis is effective in producing abstinence from such habits as cigarette smoking (e.g., Stanton, 1978).

## METHOD

*Participants:*

Subjects were enlisted from various undergraduate psychology courses. Subjects were required to have a problematic level of a specific habit and also the desire to accomplish habit cessation. Because of these factors, only 7 volunteer subjects were obtained.

*Procedure:*

Subjects were randomly assigned to either contingent informal meditation or to hypnosis conditions. As a result of this process; the Contingent Informal Meditation condition was applied to two subjects who smoked cigarettes, one subject who thumb-sucked, and one subject who habitually engaged in nail-biting while the Hypnosis condition was applied to three subjects who smoked cigarettes.

The Contingent Informal Meditation subjects were given a 1 hr. instructional session on informal meditation and contingent informal meditation and were additionally given written instructions adopted and modified from Shapiro (1978), see Appendix A, and daily logs for record-keeping to take with them. They were instructed to practice informal meditation at least one time daily for a period of at least 20 min. as well as using the contingent informal meditation technique when an urge to perform the habit was recognized.

The Hypnosis subjects were given a 1 hr. session of hypnosis and instruction for using self-hypnosis as well as written instructions which were adopted from Spiegel (1979), see Appendix B, and daily logs for record-keeping to take with them. Hypnosis subjects were additionally instructed to use the self-hypnosis technique at least 10 times daily, including whenever they recognized an urge to perform the habit.

Subjects were in a single subject multiple baseline design. All subjects supplied self-report data for frequency of the habit, and additionally duration data was collected for thumb-sucking. Subjects carried out a baseline period ranging from 7 to 11 days, followed by the treatment period ranging from 21 to 25 days. Four subjects returned to baseline for a 1 week period. The time framework of the study was compromised due to the length of the college semester. Whereas it may be preferable to have longer periods of time for the different phases, the lateness of the semester allowed the experimenters only a limited amount of time with the subjects.

## RESULTS

Total cessation of habit was achieved for one Contingent Informal Meditation subject for smoking, see Fig. 1, and for one Contingent Informal Meditation subject for thumb-sucking, see Fig. 2.

Since it was suspected that noncompliance to instructions for the practice of daily informal meditation and using the contingent informal meditation technique was responsible for the lack of total cessation in the two other Contingent Informal Meditation subjects, correlations were carried out to look at the relationship between using the techniques and habit frequency. The two other Contingent Informal Meditation subjects had significant negative correlations, one for time spent practicing informal meditation and smoking,  $r(27) = -.499$ ,  $p < .005$ , and one for time spent practicing informal meditation and nail-biting,  $r(31) = -.686$ ,  $p < .005$ . The two other Contingent Informal Meditation subjects also had significant negative correlations between the frequency of using the contingent informal meditation technique and, respectively, smoking,  $r(27) = -.408$ ,  $p < .025$ , and nail-biting,  $r(31) = -.556$ ,  $p < .005$ . It was also suspected for the Hypnosis subjects that noncompliance to the practice of the self-hypnosis technique accounted for their failure to achieve total habit cessation, and therefore correlations were carried out. These correlations were also significant for the three Hypnosis subjects;

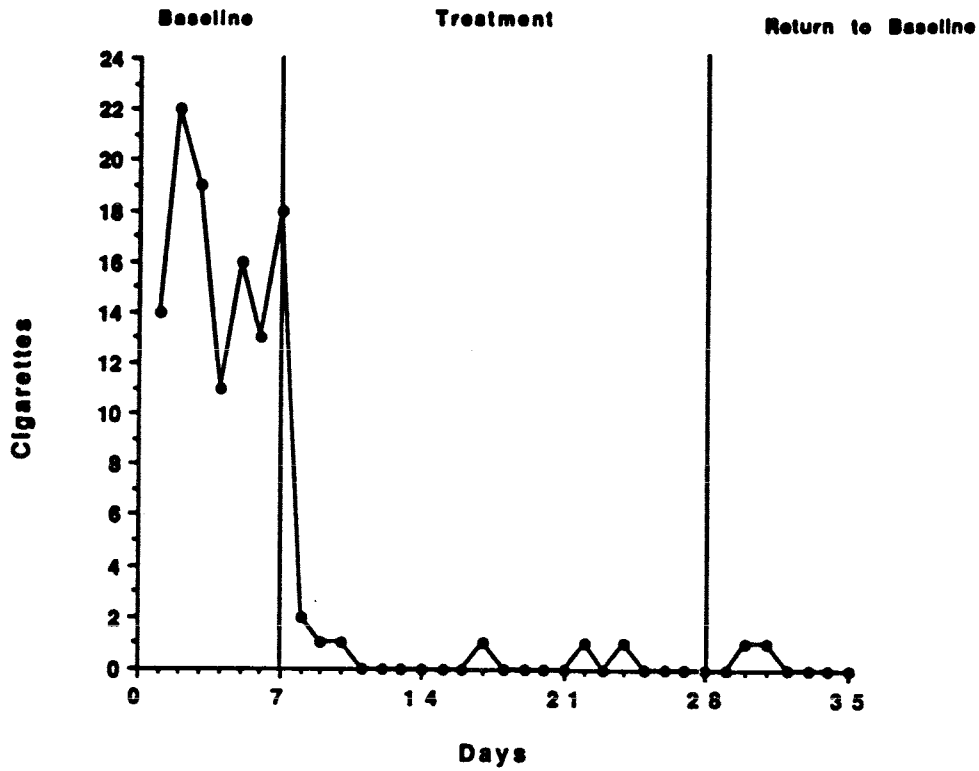


Fig. 1. Cigarette frequency for Contingent informal meditation Subject 1, including a: 7 day baseline period, 21 day treatment period, and 7 day return to baseline period.

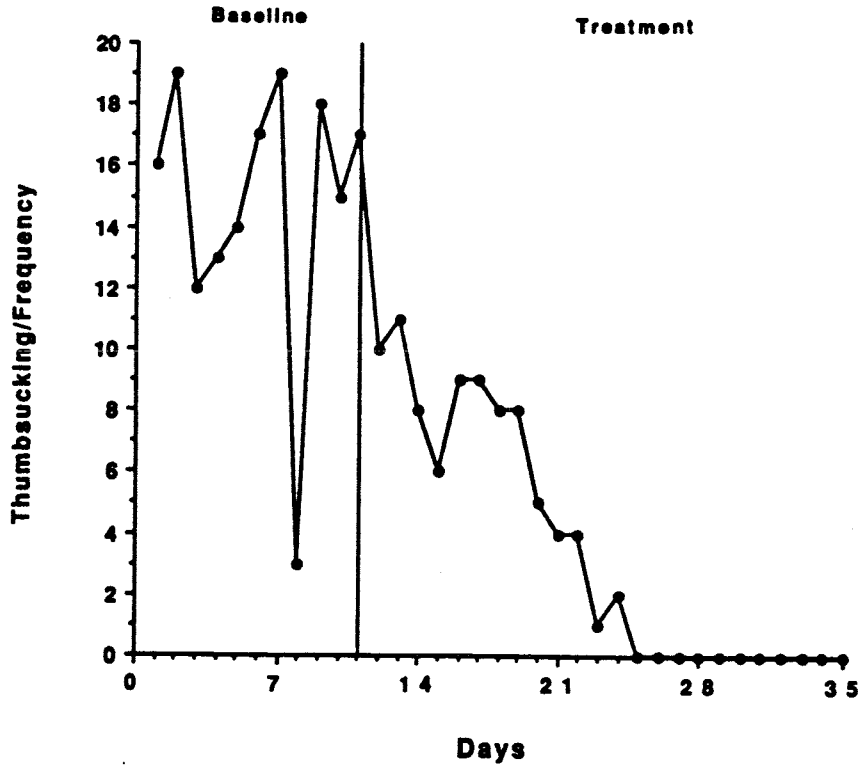


Fig. 2. Thumbsucking frequency for Contingent informal meditation Subject 3, including an 11 day baseline period and 24 day treatment period.

$r(27) = -.332, p < .05, r(27) = -.478, p < .005, \text{ and } r(31) = -.648, p < .005.$

### DISCUSSION

The results of this study suggest that contingent informal meditation may be a very powerful technique in the treatment of maladaptive habits. For those subjects who complied with instructions for use of the technique, a significant amount of control over the habit was gained, resulting in habit reduction. This may not be all that surprising to someone familiar with the effectiveness of meditation practice regarding self-regulation (Shapiro, 1994).

The contingent informal meditation technique may perhaps be a perfect marriage between environmental and response control, owing to the behavioral aspects of the technique, and motivational control, owing to the meditation aspects of the technique. Meditation may also present a relaxation component which could be crucial. Certainly meditation as a general technique addresses not only self-regulation but also our beliefs and values (Shapiro, 1994). It can lead to certain fundamental changes which we might consider spiritual. This is relevant when one considers the theory of spiritual emergency as indicated in the problem of addictions (Grof, 1993). It is certainly suggested that any follow-up studies attempt to draw out the contributions of the different components of the contingent informal meditation technique by manipulating these aspects for different groups of subjects. For example, how effective would contingent informal meditation be if it was not based on an actual regular practice of meditation? It is also important in the future to compare contingent informal meditation to other response substitution/interference techniques which do not have a meditation component. For example, how would contingent informal meditation compare to thought stopping with contingent sexual imagery? These will be our next steps along with soliciting a greater number of subjects and carrying out the interventions for a longer period of time.

Contingent informal meditation also seems especially indicated for subjects who are motivated to achieve habit cessation to the point that they will indeed comply with instructions to practice the technique. Other studies have of course found that compliance improves self-control treatment effects for maladaptive habits, or hinders them when not present (e.g., Gould & Clum, 1993). Our results indicate that it was subjects' noncompliance which resulted in those reported failures of total habit cessation.

Finally, single session hypnosis may also be a very useful technique for habit control (Stanton, 1978) but our results suggested that single session hypnosis is also dependent upon compliance to use of the self-hypnosis technique. Our report of failures for smoking cessation and the use of single session hypnosis is accounted for by subject noncompliance. The current researchers believe that subjects may benefit more from repeated hypnotherapy sessions (i.e., heterohypnosis) when noncompliance is an issue. This indication is based on the initial decrease in frequency that Hypnosis subjects experienced following the heterohypnosis session

which eventually "wore off" through noncompliance to the self-hypnosis technique.

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