

## SEQUENTIAL PHASES OF COVERT REINFORCEMENT AND COVERT SENSITIZATION IN THE TREATMENT OF HOMOSEXUALITY\*

SHERRILL R. KENDRICK and JAMES P. McCULLOUGH

University of Southern Mississippi

**Summary**—A two-phase therapy plan was used in the treatment of a 21-year-old male homosexual. Following a one week baseline period during which he counted the daily frequency of homosexual and heterosexual urges, homosexual fantasies were used for covert reinforcement of heterosexual urges. The second phase of treatment consisted of decreasing the daily frequency of homosexual urges by covert sensitization.

COVERT reinforcement (Cautela, 1970) and covert sensitization (Cautela, 1967) provide the behavior therapist with an effective rationale and technique for treating certain homosexual behaviors. Homme (1965) expanded an earlier Skinnerian position by stating that the private world of the individual is not made of any different stuff than the world outside the skin; hence, "private behavioral events obey the same laws as non-private ones" (p. 501).

Premack (1959) demonstrated how the experimenter might use response frequency to identify potential reinforcers. A high frequency response can be a reinforcer of a lower frequency response. Homme derived from this idea his program of "coverant control". His central thesis is that the subject can increase specific private behavior if reinforcing behavior occurs immediately following the occurrence of the private behavior. This principle was used in the treatment of an undergraduate male student who came to the clinic complaining of homosexual problems.

### *Case background*

S was a 21-yr-old white male who presented himself to The University Psychology Clinic because of homosexual problems, periodic episodes of depression and stuttering. The

speech defect was judged to be mild and assertive training was successfully used to modify this behavior. Since S's depression appeared to be elicited by his sexual difficulties, it was felt that it could be resolved by dealing with the client's sexual habits.

S said that he had had about 15 homosexual encounters since the age of 17. He related a history of homosexual experiences which began in the second grade. He usually assumed the aggressor role. There had been no homosexual contacts since September, 1969. S stated that he was occasionally aroused by females and that he had had about 15 dates during the past 4 yr. He said that he wanted to achieve a heterosexual adjustment. We decided that even though his heterosexual responses were less frequent and less intense than the homosexual ones, they did provide a basis for shifting his primary sexual interest from males to females.

### TREATMENT PROCEDURES AND OUTCOME

Formal treatment began on a once per week schedule in September, 1970. S was encouraged to increase the frequency of heterosexual contacts and to make sexual advances on dates. Part of each session was used as a sexual

\*Requests for reprints should be addressed to James P. McCullough, Department of Psychology, University of Southern Mississippi, Hattiesburg, Mississippi 39401, U.S.A.

training period, and the client was given the opportunity to discuss his experiences on previous dates and to receive feedback from the therapist. He continued to date throughout the year though his heterosexual experiences stopped short of sexual intercourse.

A 7-day baseline period was established by having *S* count both his homosexual and heterosexual urges during his waking hours (Fig. 1). A sexual urge was defined as a thought plus a concomitant emotion. The client was given the Reinforcement Survey Schedule (Cautela and Kastenbaum, 1967). The fantasies judged by *S* to be the most vivid and pleasant were homosexual. Since the homosexual urges were more frequent than the heterosexual urges, the former might be used as a reinforcer to increase the frequency of the latter. We decided to use several homosexual fantasies of equal strength to reinforce heterosexual imagery following the covert reinforcement paradigm.

During phase 1, the client was instructed to imagine himself participating in a heterosexual activity and that contact was progressively becoming more explicitly sexual. When the heterosexual image became clear, *S* was told to visualize a homosexual image (the reinforcer). He was told to terminate the reinforcer when he signaled to the therapist that its image was clear. This sequence was repeated, at 1-min intervals, until five trials were completed. A set of five trials was given at the beginning and again at the end of each session. *S* practiced

five times per day at home during this phase.

Following Cautela's program, *S* was shifted each week to an increasing ratio of heterosexual to homosexual images until a 5:1 ratio was achieved in the sixth week. Figure 1 shows the daily frequency of urges which occurred outside the therapy sessions throughout Phase I (days 8–42). *S*'s average number of heterosexual urges per week increased to 31 during this phase. His heterosexual base rate was 21 per week.

Phase II of treatment began on Day 43 and continued for 14 days. Covert sensitization was used to decrease the frequency of homosexual urges. The homosexual fantasies were now paired with verbally induced nausea while the heterosexual imagery was reinforced by using highly reinforcing nonsexual imagery from the Reinforcement Survey Schedule. Five sensitization pairings and five covert reinforcement trials were administered during each therapy session; and the client also practiced the sensitization pairings 10 times daily at home. The increasing frequency of heterosexual urges and decrease of homosexual urges are illustrated in Fig. 1. (Four days of data relating to the homosexual urges were lost (days 46, 49, 51 and 52); but our impression was that the trend of the lost days was consistent with the recorded days during this period.) The average frequency of heterosexual urges per week was 30. For the first time, the frequency of homosexual urges was consistently below that of the heterosexual urges.

Two months and 3 months after treatment the

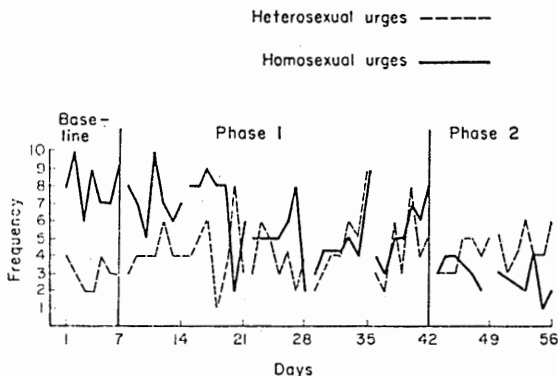


FIG. 1. The daily homosexual and heterosexual urge frequency compared across stages of treatment.

patient was seen to evaluate the effects of therapy. He reported that he had been dating one girl steadily. He also said that his homosexual urges were infrequent and much less intense than before treatment. He was encouraged at both sessions to employ covert reinforcement and covert sensitization procedures whenever he wished to modify the frequency and quality of his sexual urges. He stated he was doing so irregularly.

### DISCUSSION

The present case study supports the view of Homme and Cautela that similar behavioral laws are operative in both covert and overt processes. Success attended the application of covert sensitization and covert reinforcement to the covert processes of the client. Homosexual imagery, used contingently as a reinforcer, increased the frequency of heterosexual behavior. During the fifth treatment week (days 29-35), S had a nocturnal emission that, for the first time in his life, solely involved heterosexual imagery. The dream content included sexual intercourse, producing in the client emotions he had never experienced in real life. This event served as an additional reinforcer to him and suggested to him that an

internal change was actually occurring. The frequency of heterosexual contacts increased as treatment progressed. S dated more frequently and engaged in petting more often on dates. He also sought out and talked to more female friends on campus than he had done prior to treatment.

We were both convinced that the client's record keeping was as reliable as possible. He was a conscientious person who accepted the fact that accurate record keeping was an important part of his therapy.

The use of homosexual imagery to reinforce heterosexual imagery appears to be a useful therapeutic tool for subjects who are not actively engaged in overt homosexual behavior and who can to some extent be aroused by females.

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(Received 18 December 1971)