

## SEXUAL FETISHISM: AN EXPERIMENTAL ANALOGUE

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Conditioned sexual responses to a pair of female boots were established by the following method. A colored photographic slide was repeatedly projected on a screen immediately prior to the presentation of slides of sexually arousing nude women. The criterion of five successive sexual responses to the boots was attained by the three Ss in 30, 65 and 24 trials respectively. Extinction and spontaneous recovery were also demonstrated.

The purpose of the present study was to produce, by conditioning, a model of sexual fetishism. This disorder consists of an excessive attachment to, and concern with, some inanimate object or objects which arouse strong sexual impulses. These objects (e.g. boots) are sought after, and frequently collected, by the fetishistic patient who often uses them to obtain sexual arousal. Masturbation commonly accompanies real or imagined contact with the fetish (McGuire, Carlisle & Young, 1965).

In the past two years some encouraging results have been obtained in the treatment of a small number of fetishists by means of aversion therapy (Eysenck & Rachman, 1965; Rachman, 1965). This development is now being facilitated by the introduction of a monitoring instrument, the phallo-plethysmograph. This measure which was developed by Freund (1963; 1965) appears capable of making a valuable contribution to the study of masculine sexual behaviour. In the present investigation it was used as an index of conditioned and unconditioned sexual arousal.

### METHOD

The UCS consisted of colored photographic slides of attractive, naked girls which were projected onto a screen. The CS consisted of a colored slide of a pair of black, knee-length woman's boots (a common fetishistic object). The CS was presented for 15 secs. and was followed a second later by one of the six slides of the nudes. The latter slides were presented for 30 secs. The inter-trial interval was 1-3 minutes—an inconstancy enforced by the necessity of allowing the S's sexual arousal to diminish before re-presenting the CS. The response to be conditioned was sexual arousal as manifested by penis-volume changes

measured on a modified Freund-plethysmograph. The instrument used was designed by the Physics department of St. George's Hospital, London, and consists of a fine-bore, extensible rubber tube which contains mercury. As the length of the tube increases, the length of the mercury thread is also extended (but decreased in cross-section). This decreases its resistance and the deflections are recorded electronically.

A CR was defined as five successive plethysmograph reactions to the CS. Extinction was defined as five successive failures to respond to the CS. Stimulus generalization was assessed immediately after the S reached the CR criterion by presenting the following slides: brown, short boots; high-heeled black shoes; low-heeled black shoes; brown string sandals; golden sandals.

After ascertaining that no sexual responses occurred to the CS or to the generalization stimuli, each S was given 18 conditioning trials per session with 5-minute rests interposed after each block of 6 trials. After the completion of the first session, any UCS slide which had failed to produce consistent sexual responses was replaced. At least one day, and not more than three days, elapsed between sessions. Spontaneous recovery was assessed one week after extinction.

The three Ss who volunteered for the experiment were young unmarried psychologists. For ethical reasons, the general aim of the experiment was explained to them in advance.

## RESULTS

Subject no. 1 attained the CR criterion after 30 trials. Stimulus generalization was observed in response to two stimuli, the high- and low-heeled black shoes. An additional 12 reinforced trials were then given. At the following session the CR was extinguished in 19 trials (including the last five failures to respond). Spontaneous recovery occurred at the re-test one week later and the CR was re-extinguished in 14 trials.

Subject No. 2 acquired the CR after 65 trials and a generalized response occurred to the low-heeled black shoes. An additional 12 reinforced trials were then given. At the following session, 39 CRs were evoked before the extinction criterion of five successive failures was attained. Spontaneous recovery was observed one week later and 20 extinction trials failed to eliminate the CR. An additional session, carried out four days later, was required to re-extinguish the CR. In all, 32 extinction trials were required.

Subject no. 3 acquired the CR after 24 trials and showed generalization to the high- and low-heeled black shoes. After an additional 12

reinforced trials were given, extinction was accomplished in the subsequent session after only four CRs had been evoked (13 trials). Spontaneous recovery was noted one week later but the CR was quickly re-extinguished in 10 trials—only two positive CRs were actually elicited.

## DISCUSSION

Sexual arousal was successfully conditioned to the CS (boot fetish) in all three Ss. The S who took twice as long to condition showed the greatest resistance to extinction. In one S the CR proved to be weak and unstable and was extinguished after only four CRs were elicited.

All the Ss displayed stimulus generalization to at least one stimulus (low-heeled black shoes) and two Ss also showed a GCR to the high-heeled shoes.

Spontaneous recovery was noted in all three Ss. The second extinction-training phase produced very similar results to those obtained initially. The S whose responses were easy to extinguish in the first instance responded in similar fashion one week later. The resistant S's CR was difficult to eliminate at both stages.

In brief, three of the major phenomena of conditioning were demonstrated. There seems little question, therefore, that sexual arousal can be conditioned to previously neutral stimuli. Whether sexual CRs can be as easily acquired to other types of stimuli is an open question. It is conceivable that the common fetishes (e.g. boots, hair, fur) are, as a consequence of naturally-occurring conditioning, particularly sensitive stimuli. This possibility is to be examined later.

Premature speculation about the genesis of fetishism would be misplaced. The artificial induction of fetishism described above is relevant only insofar as it demonstrates that this abnormal reaction *can* be acquired by a process of conditioning.

The establishment of a model does, however, open up two possible lines of investigation. Firstly, it is now feasible to study the influence of various conditions and events on a misdirected sexual response such as fetishism (and also transvestism?). The type of question which might be examined in this manner is, for example, the influence of drive strength on the degree and generalization of sexual responsiveness. Secondly, it is now feasible to study in miniature the variables involved in aversion therapy (see Eysenck & Rachman, 1965). This approach could include the effects of variations in the duration and intensity of the aversive stimulus and/or the temporal relations involved in the treatment procedure.

A necessary first step, however, is the development and refinement of the experimental method described here. Having demonstrated the phenomenon, we are now engaged in studying it more closely.

## REFERENCES

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