"Aversive Imagery" Treatment in Adolescents*

ISRAEL KOLVIN

Nuffield Child Psychiatry Unit, Fleming Memorial Hospital in association with the University of Newcastle-upon-Tyne

Abstract: A technique of "Aversive Imagery" in the treatment of intellectually dull and verbally unforthcoming adolescents is described. Two cases are discussed, namely a fetishist and a petrol addict. With the fetishist the treatment was supplemented by psychosexual instruction, education and reassurance about acceptable heterosexual relationships. The fetishist recovered in eight sessions, the petrol addict in twenty sessions. Later enquiries revealed no relapses but the fetishist merits prolonged follow-up.

INTRODUCTION

Adolescents with persistent compulsive disorders or disorders with a compulsive component have always constituted a major psychotherapeutic problem. Generally, the response to traditional psychotherapy has not been impressive, but it is especially poor in the intellectually dull and verbally unforthcoming. The author knows of no published work which claims any measure of success with this latter group.

In these circumstances he was led to an *exploration* of a variation of behavior therapy. Both chemical and electrical physical aversion techniques have now been widely used for such conditions as alcoholism and sexual perversions (Rachman, 1965). However, due to a reluctance to use physical methods with adolescents, the author considered possible ways of deconditioning the unwanted behavior by the use of noxious aversive stimuli at an imagery level.

The inspiration for the technique derives from three major sources—firstly Wolpe (1958) in his description of psychotherapy by reciprocal inhibition indicated it was not necessary to present actual objects; Franks (1958) pointed out that it was not essential to use a nauseainducing agent to produce conditioned aversion; and finally Lazarus and Abramovitz (1962) used "emotive imagery" in the treatment of children's phobias.

"Aversive Imagery Therapy" essentially consists of the evocation, in the imagination, of the specific erotogenic or compulsive stimulus and the immediate disruption of it by the evocation of a noxious aversive stimulus.

An account is given here of a fetishist and a petrol addict.

METHOD

The patient's help was enlisted in drawing up a list of "dislikes" which consisted of situations or experiences which were for him unpleasant. The only use made of this list was to

^{*}Reprinted from Behaviour Research and Therapy, 1967, 5, 245-248. Copyright 1967 with permission from Pergamon Press Publishing Company and Israel Kolvin.

ascertain for the particular patient the maximum noxious stimuli. In addition, an attempt was made to ascertain the precise fetishist situation.

Thereafter, the patient was taken into a darkened consulting room where he reclined on a couch and closed his eyes. He was encouraged to conjure up imagery according to a story related by the therapist. Empirically it was found that vivid imagery was more easily produced when the adolescent was in a relaxed state. A colorful story of the crucial event was now presented and the patient was asked to visualize accordingly. By careful observation it became apparent when the patient was just becoming affectively excited, i.e. motor tension, breathing, expression, etc. At this stage the aversive image was introduced, in a suggestive and vividly descriptive manner. The response was immediate and in the main reflected in the patient's expression of distaste. In this way the full erotically toned course of events was truncated and the sequence of events unpleasantly anticlimaxed.

With the fetishist, outpatient sessions were conducted twice weekly; this was determined by geographical considerations. With the petrol addict, the sessions were undertaken daily for five days a week. Each session consisted of two to four trials. In the case of the fetishist, the treatment was supplemented by an exposition of the biology and psychology of normal sexual behavior, and simple explanations and reassurance and indications of how to advance towards achieving socially acceptable heterosexual relationships.

THE PATIENTS

Case X. Fetishist aged Fourteen Years

The parents separated following an unhappy and argumentative marriage. The father is reported to be an irresponsible, unstable and inadequate psychopath. Mother is an intelligent, warm and insightful person who has managed to maintain reasonable standards in the face of considerable economic adversity.

X was the fourth child. His early development was normal. The first discordant note was the presence of severe shyness in the immediate preschool period followed by some excessive anxiety on first attending school. At school his progress was poor and he was described as academically slow. Then at the local secondary school he was considered educationally backward and found his way into the lowest stream. At this latter school he stole a sum of money from one of the teachers and was placed on probation for one year; he apparently complied satisfactorily with the terms of the probation order.

At the age of fourteen he was charged with indecent assault on three women. It was suspected that he had committed a further series of similar offences which the victims had not reported. X's description of the acts suggests that they were essentially unplanned. On certain occasions when he saw a young woman wearing a skirt, he would be overcome by a kind of trembling and other emotions which he did not have the language to describe; he would feel compelled to run after her and put his hand up under her clothes. He would then run away trembling with exhilaration, excitement and fear.

His mother described him as a quiet, shy, solitary boy who is prone to be solemn and sulky. She added that he erected barriers around himself and it was difficult to get through to him.

At the clinic he revealed himself as a serious-minded person, pleasant but shy, timid, reserved and verbally unforthcoming. He reluctantly admitted to anxiety and guilt about his frequent masturbation and also reported a number of frightening dreams. On the Mill Hill

Vocabulary Scale (1948) he was rated as grade V and on the Progressive Matrices (1938) he was rated as grade IV. During the course of the early interviews the boy denied any psychosexual knowledge. His problems were explored with him during a psychotherapeutic approach but progress was limited. This was thought to be due to the boy's dullness and inaccessibility. He remained plagued by the urge to commit the above-mentioned acts. At this stage it was decided to decondition him with an aversive technique.

His list of unpleasant experiences included some food-fads and other minor dislikes, but the only major distressful situation for him was falling in his dreams and looking down from a precarious situation or from a great height. It was decided to use this unpleasant falling experience from his dreams as the noxious stimulus. Seven half-hour sessions were undertaken over a period of three weeks. One month later some reinforcement was administered. Towards the end of therapy the mother reported that the boy was more approachable, less difficult and less inclined to sulk. The probation officer who had known him for some time claimed that there was some evidence of "a growing maturity." The boy denied experiencing any further compulsive urges.

Case Y. Petrol Addict aged Fifteen Years

At the time of referral Y was at a residential school for the educationally subnormal. There he was described as a sensible, even-tempered youth, hardworking to the extent of being obsessional and extremely stable except in the area of his addiction. On occasions, after sniffing the petrol, he would pass out completely; and it was these attacks of unconsciousness which eventually after some seven years, brought the addiction to light. Y had even gone to the length of breaking into a shed in order to obtain petrol.

At interview, the school's description was confirmed. He was a sturdily-built youth who proved to be intense but friendly, forthcoming to a limited extent, and intellectually dull. He denied sipping the petrol though he did admit to having once tasted it. He said he enjoyed the smell of it. In addition, it both made him feel "smashing" and also resulted in what can be described as expansive visual hallucinatory experiences in the form of cowboy pictures. He preferred being on his own because this provided him with the opportunity of seeking out petrol. His main interests were television, work and snooker.

The background history is as follows — Y's milestones, except for late speech development, were apparently normally achieved. The school psychologist reported that in the early school years he was stubborn and difficult but these remitted on his admission to the residential E.S.N. school. His IQ (Terman-Merrill) was sixty-three. His EEG was slightly immature.

The family is an intellectually dull one—both parents are dull and two other siblings are educationally subnormal. The parents are described as reliable and conscientious farmworkers.

There were grave doubts about whether any form of treatment would be efficacious because of Y's intelligence and his persistence. It was eventually decided to try a form of aversion therapy. A list of unpleasant experiences was obtained, but, as in the first case, his main aversion concerned heights and falling. Again, this was used as a noxious stimulus. Twenty half-hour sessions were undertaken on consecutive days except for weekends.

Thirteen months after the completion of treatment the patient is well and has not returned to his petrol-sniffing habits. This is indeed satisfactory in view of Ackerly & Gibson's (1964) statement in their review of a dozen cases of lighter-fluid sniffing; "Up to the present time the social agencies' and Juvenile Courts' methods of controlling the long-standing 'sniffers' who can be considered addicted have not been successful."

PROGRESS

Soon after the initiation of treatment both patients became mildly distressed. They then asserted that they were no longer experiencing the unwanted urges and claimed that they would no longer act in the undesirable manner. (This closely parallels Raymond's experience with adult fetishists.) They were persuaded to remain in therapy and completed the course of treatment without any further untoward reactions.

When there was evidence that a distaste or an aversion had developed (at the imagery level) for the compulsive and sexually provocative situation, the close supervision of the boys was relaxed. Both reported that the previous urges and desires had completely disappeared.

FOLLOW-UP

The length of follow-up is indicated below

Petrol Addict: thirteen months, no relapse reported.

Fetishist: Eleven months quite well. Thirteen months after the completion of treatment he accused a neighbor's wife of an illicit affair. When confronted, he claimed that he had been misled by a friend and that he had behaved "stupidly." That this may not be the reflection of a highly moral attitude but a different expression of a sexual problem has to be borne in mind. Seventeen months afterwards, X working and apparently quite well.

DISCUSSION

Adolescents suffering from perversion or addictions are nearly always a major treatment problem. Though many drop this behavior once it comes to light, or alternatively, rapidly respond to probationary supervision or simple measures instituted at a psychiatric clinic, there is a small percentage who do not respond. Unfortunately, up to the present, in this latter group the repertoire of treatments available has been small and their efficacy dubious. The aversive drug and shock therapies available for older perverts and addicts are, in relation to children and adolescents, still regarded with disfavor ethically and aesthetically by psychiatrists.

However, the writer considered these disorders so gravely handicapping and of such serious consequence to the adolescent, that any method that may be beneficial could not be lightly discarded. The benefits accruing from the removal of the symptoms in certain cases would far outweigh the moral and ethical objections, especially if more acceptable aversive techniques could be evolved. The use of aversive imagery was examined from this point of view; and in the case of this particular group of boys was considered worthy of exploration.

Some major criticisms of aversion techniques with sexual perversions is that they fail to remove the underlying psychopathology and in addition, could result in the patient developing an aversion to all sexual relations—even normal ones. The writer has tried to minimize this risk by supplementary explanations and reassurances about normal heterosexual relationships. He therefore combined both "aversive therapy" and psychotherapy in the case of the fetishist. These are unusual but not unique bedfellows as a number of behavior therapists have recently expressed the view that it is "practical to submit some cases to both" concurrently (Meyer & Crisp, 1966; Gelder, 1964).

It must be admitted that aversive images are not ideal aversive stimuli. They have the disadvantage that the timing of the noxious stimulus is difficult; in this respect they can however be considered to be at least more accurate than aversive drug techniques. The technique

also depends on the capacity of the patient for visual imagery and for life-equivalent autonomic responses to pleasant and unpleasant imagery. Then there are the inevitable questions about the propriety of using drug and faradic shocks with adolescents. In the writer's experience most parents of adolescents and the adolescents themselves are reluctant to consider any treatment which incorporates a form of punishment; in this respect faradic shocks are viewed more antipathetically. In the few cases, completed and current, there have been no serious objections to aversive imagery therapy. More problematic is the choice of the noxious stimuli—neither of the two boys had any major dislikes and the only important noxious situation for both was falling in their sleep and looking down from great heights. So far there has been no substitution of the disorder by any other specific type of behavioral or sexual abnormality.

It must be pointed out that in both cases the home, in spite of previous unsettlement, was at the time of referral to the clinic reasonably stable and supportive. It is impossible to say what part this has played in the apparent sustained improvement.

A method bearing some resemblance to the above was previously described by Gold & Neufeld (1965). The main difference and similarities of the two methods are delineated in the following table.

The Gold & Neufeld Technique

A. 4 components

- 1. Relaxation.
- 2. Desensitization technique to overcome fears of failure.
- 3. Imaginary aversive therapy.
- Discrimination learning technique which teaches the patient to actively reject and choose the two alternatives presented in the same session.
- B. Imaginary therapy consists of a gradual deconditioning process

The Kolvin Technique

- A. 3 components
 - 1. Relaxation,
 - 2. Aversive imagery.
 - 3. Psychotherapy.
- B. Aversive Imagery consists of the evocation of the compulsive or erotogenic stimulus and the immediate disruption of it by a noxious one.

C. More elaborate technique.

C. Less elaborate technique.

Acknowledgment. I should like to thank Dr. V. Pillai for his help in one of the above cases, and Miss L. J. Wright of the Newcastle Child Psychiatry Unit for her secretarial assistance. I am also grateful to Dr. A. W. Drummond and Dr. P. Leyburn for referring the above cases. Also Mr. I. Mottahedin for advice on certain theoretical aspects.

REFERENCES

Ackerly, W. C. & Gibson, G. (1964) Lighter fluid "sniffing". Am. J. Psychiat., 120, 1056-1061.

Franks, C. M. (1958) Alcohol, alcoholics and conditioning. J. ment. Sci., 104, 14-33.

Gelder, M. G. (1964) Behaviour therapy and psychotherapy for phobic disorders. Paper read at Sixth int. Congr. Psychother., London.

Gold, S. & Neufeld, I. L. (1965) A learning approach to the treatment of homosexuality. Behav. Res. & Therapy, 2, 201-204.

Meyer, V. & Crisp, A. H. (1966) Some problems in behaviour therapy. Br. J. Psychiat., 112, 367-381. Rachman, S. (1965) Aversion therapy: Chemical or electrical? Behav. Res. & Therapy, 2, 289-300. Raymond, M. J. (1956) Case of fetishism treated by aversion therapy. Br. med. J., 2, 854-856. Wolpe, J. (1958) Psychotherapy by Reciprocal Inhibition. University Press, Stanford.