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Some Problems in Behaviour Therapy*

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Behaviour therapy is conducted in this department under combined general psychiatric and behaviour therapist supervision. Patients considered suitable for behaviour therapy are first assessed clinically at a phenomenological and psychodynamic level. On the basis of this assessment an appropriate symptom or number of symptoms are selected for treatment by behaviour therapy. The patient is thereafter observed by the original clinician and assessed at regular intervals. Meanwhile the behaviour therapist treats the specific symptom or symptoms.

Our main interest so far has been to gain experience with various behaviour therapy methods; also to examine some of the aspects of so-called "symptom substitution" and the relevance to treatment of the therapist-patient relationship (Crisp, 1964a and b). The latter studies are described elsewhere (Crisp, in press).

Although the literature (Bandura, 1961; Eysenck, 1960 and 1964; Grossberg, 1964; Jones, 1960; Rachman, 1963; and Wolpe, 1958) has concentrated on differentiating various behaviour therapy methods, it has often been found useful in the present work to combine several techniques, either together or in sequence, in the treatment of some patients. Various problems have been encountered and observations made whilst conducting treatment. These will be presented and discussed in relation to the relevant established body of knowledge, experimental and clinical. So far experience is based on 54 cases but only those which were found to highlight certain problems will be mentioned in detail. Initially, therefore, only brief reference is made to the total patient group in terms of diagnoses and post-treatment clinical status.

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All patients were referred by psychiatrists who thought that behaviour therapy might be helpful to them. None were rejected. They were characterized by having a specific observable pattern of abnormal behaviour. It is emphasized that no attempt was made to establish either intra- or inter-group consistency for such variables as conventional psychiatric diagnostic entities, age, sex, social class, severity of symptom, history of previous treatment or method of selection for behaviour therapy.

Description of Patient Groups. They may be classified in behaviouristic terms as follows:

1. Patients seeking help for specific maladaptive behaviours definable in terms of stimulus (S)—response (R) model.

   (*a*) *Without other symptoms*—19 cases comprising: 6 social anxiety states, 2 insect phobias, 1 cat phobia, 2 craft palsies, 1 frigidity, 1 bulimia, 1 obsessional rituals, 1 writer's cramp, 1 nocturnal enuresis, 1 encopresis, 1 stammering (on the telephone only), 1 impotence.

   (*b*) *With other symptoms*—usually such phenomena as depression, diffuse anxiety, depersonalization, insomnia. 18 cases consisting of: 6 agoraphobias, 3 social anxiety states, 2 thunder phobias, 1 claustrophobia, 1 claustrophobia and flying phobia, 1 psychogenic vomiting and alcoholism, 1 obsessional rituals, 1 drug addiction, 1 bulimia, 1 abnormal head posture.

2. Patients with persistent or fluctuating symptoms where stimuli evoking the maladaptive responses could not easily be defined.

   (*a*) *Without other symptoms*—10 cases of stammering.

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(*b*) *With other symptoms*—7 cases comprising: 3 psychogenic pain, 2 torticollis, 1 stammering, 1 multiple tics.

The total patient group comprised 31 males and 23 females. The age range was 13–62. Twenty-eight patients were treated as in-patients and 26 as out-patients. 32 out of 54 patients had previously undergone treatment, sometimes prolonged and usually of a psychopharmacological or psychotherapeutic kind. Some patients who were already taking psychotropic drugs were maintained stabilized on such treatment. In two instances other aspects of the patient's psychiatric illness were being concurrently treated in psychotherapy by other therapists.

Treatment

Thirty-six cases were treated by V.M. and the remaining cases were treated by other therapists, mostly under V.M.'s supervision. A variety of methods were applied, namely, reciprocal inhibition (systematic desensitization and practical retraining), operant conditioning, aversion therapy, modification of expectancies, assertive training, negative practice and positive conditioning. All patients were told that treatment was aimed at a specific symptom. The rationale of the treatment was briefly explained to them. They were told that the outcome could not be predicted. No patient refused treatment outright but three terminated it prematurely. These cases are included in the series because they had more than three treatment sessions. None of them showed improvement.

The average number of treatment sessions per patient was 25 (range 3–60). A session here is defined as a period in which the therapist was actively engaged in treating the patient. The average time per session was 45 minutes.

Results of Treatment

Behaviour therapy was usually aimed at a symptom or one aspect of a symptom complex (e.g. the need to avert gaze in a social anxiety state). The degree of change of such specific behaviour following treatment was jointly rated by both authors on a three-point scale—much improved, slightly improved, unimproved. It is emphasized that this rather crude categorization applied strictly to the assessment of the change in behaviour under treatment and not to other aspects of the patient's behaviour. Changes in persistent, observable behaviour presented relatively little difficulty for the raters. However the majority of assessments depended ultimately to some extent on the patient's and the relatives' reports, and it may be that these were less valid.

It was considered that immediately following treatment 15 patients (28 per cent.) were much improved *in respect of their symptom*, 24 patients (44 per cent.) were slightly improved, whilst 15 patients (28 per cent.) were unimproved.

Follow-up

It was possible to follow up 49 patients. The mean follow-up time at present is 12 months (range 2 months–2 years 6 months). There were two patients whose symptoms improved during treatment, remained improved at the end of treatment, but later recurred. They were treated again and have so far maintained the improvement in their symptom. Otherwise there were no known recurrences of the specific symptoms treated in any patient *after* discharge from the hospital.

General Problems

Selection of patients for treatment

Since most systematic attempts to apply modern learning theories to the problem of treatment adopt more or less orthodox Hullian stimulus-response theory, the S-R model has determined to a great extent the selection of cases and symptoms for treatment. Consequently one finds that a majority of reports on behaviour therapy are concerned with patients with relatively well-defined behavioural abnormalities elicitable by clear-cut stimuli.

From a practical point of view this trend is understandable because it is easier to apply a large body of experimental methods and principles available in learning theories to disorders in which the concepts of stimulus and response can be relatively clearly defined. For this reason the number of phobic patients treated by behaviour therapy is greater than

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other types of patient. The S-R approach makes it extremely difficult to deal with diffuse, pervasive or fluctuating symptoms.

These criteria for selection have been further reinforced by reports that behaviour therapy has been most successful with specific neurotic symptoms (Grossberg, 1964; Metzner, 1961, 1963) but such conclusions may be premature. Recently, behaviour therapy has been applied to "complex psychoneurotics" (Bevan, 1960; Costello, 1964; Schwitzgebel and Kolb, 1964; Walton, 1960a; Walton and Mather, 1963; Wolpe, 1964) and to schizophrenic patients (Cowden and Ford, 1962; Walton, 1960b) with some success. Additionally, the method of operant conditioning (Ferster, 1958; Lindsley, 1956; Skinner, 1953, 1959), when applied to eliminate specific symptoms or to elicit more adaptive behaviour in psychotic patients, has produced encouraging results (Ayllon, 1963; Ayllon and Haughton, 1962, 1964; Ayllon and Michael, 1959; Davison, 1964; Fuller, 1949; Isaacs *et al.*, 1960; Kennedy, 1964; King *et al.*, 1960; Peters and Jenkins, 1954; Rickard *et al.*, 1960; Wolf *et al.*, 1964).

One might ask at this stage whether the classification of the present material bears any relationship to the outcome of behaviour therapy. The data suggest that there is no obvious relationship. Thus at times there was surprising improvement with complex cases in group 1b whose referral had followed on the failure of all other therapeutic measures. On the other hand some patients with monosymptomatic states from category 1a best fitting the S-R paradigm, failed to respond well.

There have also been frequent comments in the literature regarding the apparent importance of the patient's motivation, personality type, and level of anxiety for the outcome of behaviour therapy (Beech, 1963; Eysenck, 1960, 1962, 1964; Franks, 1956; Meyer, 1957, 1964; Meyer and Crisp, 1964; Meyer and Gelder, 1963; Thorpe and Schmidt, 1964). It is not known how these variables may influence the outcome of treatment.

At present there are few acceptable criteria for selection of patients which might enable prediction of the outcome of behaviour therapy in any one patient.

Selection of symptoms for treatment

The most explicit and systematic attempts to account for the aetiology and nature of neurosis in terms of learning concepts have been made by Eysenck (1960, 1963a and b, 1964), Jones (1960) and Wolpe (1958, 1961b).

It is important to bear in mind that in a behaviouristic analysis all the symptoms have to be dealt with to remove the total neurosis. This means the removal, not only of instrumental acts elicited by a variety of stimuli, but also conditioned anxiety drive (CAD), since in its role as an acquired drive it may, if not reduced, mediate and reinforce other instrumental responses. This may provide a behaviouristic understanding of "symptom substitution".

Practising behaviour therapists are becoming more aware that direct attack on presenting symptoms (CAD and instrumental responses) does not always lead to recovery. Some complicating factors appear as follows:

(*a*) The presence of historically earlier sources of anxiety. Thus, the presenting symptom may be the result of higher order conditioning and secondary generalization.

(*b*) Secondary gains (rewards) derived from the presenting symptom. Once a symptom has been acquired it may become rewarding in some circumstances and the newly acquired rewards may reinforce and maintain it.

(*c*) The presence of long-standing and widespread maladaptive behaviour in other areas of social activity (akin to the clinical concept of "personality disorder").

Walton and Mather (1963) have attempted to show how some of these factors may complicate the outcome of behaviour therapy of obsessive-compulsive patients. It appears, from their limited evidence that, in cases of recent onset, treatment of CAD was sufficient. In chronic cases both the original sources of anxiety and the rituals had to be dealt with. They argue that in these cases the links between the historically earlier sources of anxiety and the rituals were "loosened" but not sufficiently for it to be possible to treat successfully the rituals alone.

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One of the present cases failed to respond to practical retraining for claustrophobia. This was the presenting symptom which had emerged after initial treatment by psychotherapy for a depressive illness. On a psychodynamic hypothesis it was proposed that the symptom was associated with her barely recognized feelings of intense hostility towards her husband, together with newly established dependency needs towards the hospital. The patient's anxiety, associated with overt expression of hostility towards her husband within the controlled therapeutic situation, was systematically desensitized and a full remission of her phobia ensued. A few weeks after discharge the patient relapsed. This time she presented with somatic symptoms which facilitated her readmission to the hospital under a gynaecologist. On discharge from the hospital she obtained a voluntary full-time job which enabled her to stay out of the house all day, yet not contribute financially to the home. The symptomatology in this case is complex and she is now being managed by out-patient supportive psychotherapy.

A number of cases of writer's cramp presented similar problems in terms of selection of symptom(s) for treatment. In these cases the overt maladaptive motor behaviour had to be treated at the same time as the apparent underlying fear and resentment of authority (Crisp and Moldofsky, 1965). Beech (1960) reported similar complications in treatment of his cases of writer's cramp. One of the present cases treated for obesity (Meyer and Crisp, 1964) became severely depressed following reduction of her weight. This sequence of events occurred twice.

Four out of 13 phobic patients failed to respond at all to systematic desensitization and graded practical retraining. Two of them did not improve during in-patient treatment; the other two did improve but failed to maintain the improvement on discharge. At a behavioural level they were characterized by the inconsistency, i.e. unexpected fluctuations of the symptom in response to treatment and by the emergence of new symptoms. There was no evidence that fluctuating depression was a factor influencing the variability of the symptom in these patients. Further explorations of these cases revealed many complex facets to their allegedly single symptom. It was considered psychodynamically that in many of the chronic phobias there was basic fear of personal sexual or aggressive activity and that the phobia sometimes fulfilled dependency needs at the same time. Often it seemed that the phobia had come to play a central role in the patient's life, determining the nature of most of their interpersonal relationships and binding them to a rigid and safe way of life. Most of these cases were also said clinically to be suffering from "character disorder".

Another type of problem is encountered in patients where there are a number of presenting symptoms which may seem to be unrelated at the behavioural level. In one case two symptoms (psychogenic vomiting and alcoholism) required separate attention while in another case treatment of the social anxiety led to remission of all symptoms. At the moment there are often no acceptable behavioural criteria on the basis of which one could decide beforehand the order of selection of symptom for treatment in such cases.

On the basis of this experience the problem of what constitutes a symptom for treatment would seem to be a most acute problem for behaviour therapy at its present stage of theoretical and practical development. Is it to be the instrumental response, the CAD directly related to the instrumental response, historically earlier sources of CAD, secondary rewards or a combination of these? At present there is no reliable and valid way of tracing the historical development of symptoms. It is particularly difficult to determine whether the presenting symptom is mediated by anxiety directly related to a specific stimulus or whether it is the end product of, and still mediated by, historically earlier sources of anxiety.

Experience has not yet thrown any light on this problem. As stated earlier, some apparently straightforward cases failed to respond well to treatment; on the other hand some very complex cases, both in terms of current symptomatology and in terms of complex historical development, responded well.

There is a great need for behaviour therapists to develop some means of assessing psychiatric

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states with a view to determining the most appropriate symptom for treatment. In the present state of knowledge the behaviour therapist is obliged to be pragmatic and he often selects for treatment the presenting symptom which appears to be most incapacitating and potentially amenable to the available methods of behaviour therapy.

If the response to an initial behaviour therapy programme is poor, re-appraisal of the case and the treatment method may be indicated. At the behavioural level the best evidence so far that the therapist is not treating the relevant symptom has been an unexpected fluctuation in response to treatment or the emergence of a new symptom. In this context, formulations in terms of psychodynamic theory may be useful to behaviour therapists provided the stimulus situation assumed to be relevant does evoke observable abnormal behaviour. This proviso is essential, since behaviour therapy relies on the active elimination of overt behaviour and on the development of new adaptive forms of behaviour. In the authors' view it is practical to submit some cases to both behaviour therapy and psychotherapy concurrently. This view conforms to that recently expressed by Gelder (1964).

Motivation and Treatment

There are a number of papers which discuss the importance of the initial attitude of the patient to therapy in terms of the ultimate outcome (Crisp, 1964a; Freund, 1960; Lazarus, 1963; Meyer and Gelder, 1963; Oswald 1962). Some patients are obviously seeking help for certain symptoms; some patients show apparent ambivalence at the clinical level towards seeking help; while others are openly resistent and are directed to therapy by next-of-kin or social pressure. Most of the above workers find that the first group of patients do better in treatment. In the present study motivation was only assessed at the clinical level. Nine patients were obviously poorly motivated for treatment and only two of these patients made any improvement at all.

In eight apparently well-motivated patients, however, outcome was not good, and in these cases there were often technical problems in treatment or else the emergence of other symptoms during treatment.

Motivation was sometimes observed to change and fluctuate during treatment in ways which may have introduced important variables into the therapeutic situation. Deterioration in motivation for treatment often seemed to be associated with:

(*a*) emergence of new symptoms or enhancement of symptoms not treated.

(*b*) failure to effect quick improvement in the treated symptom.

(*c*) development of extreme dependency on the therapist or protective hospital situation.

(*d*) development of poor patient-therapist relationship.

(*e*) development of a hostile attitude to treatment situations and methods used; for instance, direct manipulation of behaviour is not acceptable to some patients.

The above factors were often associated with each other. In the authors' view the relationship between the patient and therapist may become a very important factor for clinical outcome. Perhaps it would be relevant to state here that in the authors' view it is doubtful whether a good relationship of the type encountered in behaviour therapy often produces permanent cures "per se" (Crisp, 1964b).

Sometimes the patient's presenting state included a state of depression. During treatment the depression sometimes diminished and often motivation towards treatment then improved. On the other hand depression sometimes deepened during treatment with generally adverse effects. In several cases its emergence as a new symptom was accompanied by a cessation of improvement or a relapse in the symptom under treatment (four cases). In one case failure to improve in a specific symptom became the main preoccupation of an emerging anxiety depressive state. In other cases lifting of depression was associated with a speeding up of the rate of improvement in the symptom; in one case a temporary lifting of depression was associated with more rapid generalization in the treatment situation. In yet other cases it seemed, certainly so far as the patient was aware, that

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the reduction in depression was a reaction to the improvement in the symptom under treatment (Meyer and Gelder, 1963).

The above considerations are often not apparent or readily measurable at the onset of treatment or even later. In spite of these difficulties attempts should be made to provide more objective measures of aspects of motivation!

Problems related to discharge

Most of our in-patients showed some deterioration in their treated symptom and became more anxious when discharge from hospital was imminent. The process leading up to discharge could not always be as gradual a one as ideally it should have been. It may be that anticipatory anxiety concerning the testing out of their behaviour in their everyday environment was therefore excessive. At the same time they were leaving behind their anxiety-reducing milieu and therapist. One of the reasons for in-patient care may have been that it was the only way of bringing the symptom under control and this same factor may militate against just sending a patient back to his or her own stimulus-ridden environment. In such cases either one of two courses of action may be helpful. Firstly, when considerable improvement in the hospital has been achieved, the patient may be sent home for gradually increasing periods of time with instructions as regards graded tasks. This procedure attenuated the sudden transition from the hospital to home environment. Secondly, if the above procedure does not work, the therapist may well need to go into the patient's environment and carry out actual retraining.

Patients whose symptoms were not uncontrollably or unpredictably evoked in their home environment (e.g. cases of flying phobia, other travelling phobias, insect phobias where stimulus was seasonal) were usually treated on an out-patient basis provided the symptom did not itself prevent their attendance (e.g. specific travel phobias). Out-patients, in behaviour as in other therapy, were less often overdependent on the hospital than in-patients. In such cases the symptom could be brought under control in the environment, and therapy was aimed at retraining in the practical situations by giving the patient instructions with regard to graded tasks. Some of the patients, however, required the therapist's direct assistance in this practical retraining.

Problems related to interpersonal relationships

In some patients family members seemed to be significantly involved in mediating or maintaining symptoms. In these patients it was considered necessary to deal with family members as well. Spouses of patients with sexual disorders, such as frigidity and impotence, attended some treatment sessions and were given instructions as to how to help in carrying out the patient's graded retraining programme. In a case of an encopretic boy the mother appeared to reinforce the habit unwittingly. She was instructed as to the management of the boy. The child of an agoraphobic patient was involved in her symptom. The child was admitted with the mother and used in treatment. In another patient who was suffering from chronic obsessive-compulsive illness, the rituals were mainly concerned with the safety of the child. The child was admitted and included in the treatment sessions with the mother. The husband of this patient and the husband of another similar case, who both seemed to exhibit a passive role in relation to their wives, attended some treatment sessions and were trained in exerting authority and encouraged to restrict their wives ritualistic behaviour.

The problem of relationships with significant persons in the patient's environment has received a great deal of attention from neo-Freudians. For instance, Wolf (1960) maintains that most neurotic disorders stem from the development of abnormal interpersonal relationships. The problem remains one of assessing the nature and significance of such relations and the part they play in the patient's symptomatology.

Ethical problems

Many behaviour therapists are psychologists and are not trained as medical practitioners. They are therefore in no position to undertake the sole management of patients whose symptoms may have medical, as distinct from social

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and psychological, determinants. Patients may also require other forms of medical treatment (e.g. drugs) whilst undergoing behaviour therapy. In our department, therefore, the psychiatrist is officially in charge of patients referred for treatment and there is joint therapeutic responsibility.

The specific nature of therapy sometimes involves exposure to traditionally non-professional techniques, e.g. taking patients out for walks, into restaurants, bars, or into their own homes. Such practices sometimes need to be restricted to safeguard the therapist's and the medical practitioner's professional interests. The use of "punishment" in therapy has also led, in the present study, to discussions concerning the propriety, motivation and personal involvement of the therapist in such techniques. The latter have only been used after such discussions and following general agreement by the patient and the doctors concerned. It may become expedient in the future to obtain the patient's written permission for some behaviour therapy procedures.

The additional problem of the justification or otherwise of sometimes bringing about change in a patient or relative to the extent that a major personal, interpersonal or social upheaval follows, is again common to all psychiatric therapeutic measures.

Problems Related to Treatment

Selection of method

The initial difficulty for the behaviour therapist is sometimes that of paving the way for retraining therapy. Thus, as an initial step, it may be necessary to find a method for bringing the maladaptive behaviour under control before attempting systematically to modify it. This problem is particularly acute with persistent symptoms, e.g. tics, stammer, diffuse anxiety, depression, obsessional rituals, that do not seem to be related to any specific stimulus or stimulus situation.

A number of possible methods of achieving this have been put forward (Bandura, 1961; Eysenck, 1960, 1964; Jones, 1960)—the incompatible response method; removal of manipulanda; change of environment; toleration method; negative practice; operant conditioning; aversion therapy; reality testing. This list is not complete and should not be regarded as exhaustive, nor are the mechanisms without overlap.

The literature suggests that the incompatible response method is most effective in removing "neurotic inhibitions" but is of relatively little value in developing new positive habits particularly in patients who have not previously learned the appropriate pattern of behaviour. One of the most promising methods, when this is the case, is said to be operant conditioning, a technique based in the experimental work of Skinner (1953, 1959) and Lindsley (1956, 1963b) on both animals and humans. Where the problem is one of attempting to eliminate socially undesirable habits, treatment by aversion therapy is often claimed to be the most effective. These generalizations are partly derived from theoretical considerations and partly from uncontrolled observations in clinical practice.

Since the evocation of the symptom, when the patient is under treatment, is detrimental to the outcome (through intermittent reinforcement), every attempt should be made to put the symptom under control both in and out of the specific treatment situation. This is relatively easy to achieve for patients with symptoms elicited by specific stimuli or stimulus situations, e.g. most phobias. The patient is merely removed from the phobic situations and during the treatment the anxiety-evoking stimulus is gradually introduced while the patient's relaxation is maintained. In some cases in the present study a high sustained level of anxiety or depression was associated with difficulty in the treatment of the specific symptom. In such cases (four patients) appropriate psychotropic drugs were administered. If such ancillary treatment is used, it introduces another variable into the treatment and it is useful to establish a base line of its therapeutic efficacy before going on with the specific treatment. A similar problem was sometimes encountered with patients taken on for treatment who were already taking drugs. Some patients, following removal from the phobic situation, could dispense with

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such drug treatment but this was not always the case and under such circumstances it was again useful to stabilize the clinical state in the new situation before embarking upon the specific treatment.

Other monosymptomatic conditions, especially persistent tics and abnormal movements which are sometimes regarded as very suitable for behaviour therapy, have presented major difficulties. The problem with these cases has been to find a method of putting the symptom under even temporary control so that treatment could proceed. A number of methods and various techniques were tried to control the symptom, usually without any success (the methods tried were: massed practice (Rafi, 1962; Yates, 1958a), reduction of anxiety by relaxation, physical restraint, "punishment", sedatives, continuous sedation) and therefore treatment could not begin. Stammering is another condition where the major problem has always been that of bringing the symptom under control. In the majority of cases such methods as negative practice, relaxation, shadowing, "punishment" and hypnosis produce some improvement during treatment sessions, but this is usually not maintained outside the clinical situation. Empirically it was found that speaking with the aid of a metronome produced some measure of the desired control. The problem then was reduced to designing an apparatus which could be used by the patient in everyday life so that the control could be extended outside the clinic (Meyer and Mair, 1963).

A similar problem was encountered with the two patients suffering from chronic obsessive-compulsive neurosis. Some degree of control over rituals was achieved in one case by the reciprocal inhibition method, but this improvement was not maintained on discharge. More complete control over rituals was attempted by constant supervision and restriction of activity. This method of treatment is based on the principle of change of expectancies (Jones, 1960). In one case success was achieved by this technique. The other case was readmitted to try out this method, but it proved difficult because the stimuli evoking rituals were pervasive and the patient frequently cheated. (In passing it is conceivable that the method of reality testing is more applicable to patients who expect immediate untoward consequences if they do not carry out their rituals.)

The problems of personality variables and aetiology of the symptom in relation to selection of a method of treatment was illustrated in a reported case of encopresis (Gelber and Meyer, 1965) where the patient appeared to derive some degree of perverse pleasure from soiling. The nature of the symptom suggested aversion therapy, but the boy was unable to tolerate this approach. Thus, he became unhappy and withdrawn when his activity was restricted as part of the treatment method. He did react well, however, to the method of rewards.

To summarize, up to date there is lack of adequate information on the basis of which one could select appropriate and efficient methods of treatment for various symptoms and psychiatric conditions. Also, there is lack of knowledge as regards the relationship between methods and personality variables. Some symptoms defy all attempts, using known methods, to initiate control, and often one has to take recourse to an empirical approach seemingly best suited to the individual patient.

Reciprocal inhibition method

This method can be applied in two forms: direct practical retraining or systematic desensitization on imaginary level. Both techniques have certain limitations and involve a number of difficulties.

As regards practical retraining—

(*a*) It is tedious and time-consuming, particularly when anxiety-eliciting stimuli involve complex social situations. The therapist is required to participate actively by presenting, or taking the patient to, progressively increasing symptom-provoking situations. This is relatively easy in phobic disorders involving objects easily obtainable, since the treatment can be carried out in the consulting room. In cases involving complex social situations, e.g. fear of going out, travelling, eating or drinking in certain situations, the therapist may need to go with the patient into these situations. Bannister (1964) has overcome some of this difficulty by developing group therapy technique for agoraphobics.

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(*b*) In applying this method it is essential to keep anxiety under control. For this purpose Jacobson's (1938) relaxation technique, which is widely used (Wolpe, 1958, 1961a), is relatively easy to apply in the consulting room while the patient sits in a chair. Such control may become extremely difficult to exert while the patient is active in situations outside the consulting room. Tranquillizers or special techniques (e.g., walkie-talkie apparatus in cases of agoraphobia) have been used in the present study in an attempt to overcome this difficulty. If psychotropic drugs are used caution must be exercised since evidence suggests that some of them may depress learning ability (Franks, 1960; Franks and Laverty, 1955; Franks and Trauton, 1958).

(*c*) The above difficulties are enhanced in some cases because the arrangement of the graded hierarchy for retraining in practical situations becomes cumbersome and sometimes impossible. For example, in one case of social anxiety state in a professional person the professional status of people had to be graded and the relevant people approached. In two other female patients who were unable to eat with strangers, particularly with attractive young men in public places, it was almost impossible to organize retraining along the dimensions of "attractiveness" and social situations involving eating.

(*d*) Another problem, closely related to the last, is the need to provide a fine grading of situations. In cases where there is a too steep stimulus generalization it is difficult to effect smooth transition from step to step in the hierarchy. For example, in one case of insect phobia the transition from dead winged insects to live ones proved very difficult. Movement of wings evoked great anxiety despite a careful gradual retraining before coming to this step. In a case of phobia of vomiting, the act of vomiting produced unmanageable panic and there was no way of finding graded situations.

(*e*) Some symptom-provoking stimuli are not readily available. For instance, in two cases direct practical retraining was impossible because of the nature of stimulus (thunder) eliciting the maladaptive responses. In these cases it did eventually prove possible to evoke anxiety by playing a tape recording of a thunderstorm. Following desensitization to the recording some improvement occurred in both patients, but real thunder continued to evoke a great deal of anxiety. An attempt has been made to carry out retraining with real thunderstorms, but this has proved extremely difficult because of the unpredictable fashion in which thunderstorms occur. During treatment of two phobics involving seasonal insects, the insects disappeared before the completion of treatment!

With regard to systematic desensitization, based on relaxation and treatment at the imaginary level, the authors' experience has been disappointing. Only limited support was found for its wide therapeutic efficacy as claimed by Lazarus (1961, 1963) and Wolpe (1958, 1961a). Whenever relevant, this method was tried first in our sample. The following difficulties and problems were encountered.

(*a*) Most of the patients failed to generalize from the therapeutic situation to real life. There was major success with only two cases. One case recovered fully. In the second case the phobia of confinement in theatres, cinemas and boardroom meetings responded completely, but fear of flying remained unaltered. In a few other cases improvement was obtained but not to a sufficient degree.

(*b*) Some cases either lacked vivid imagination or maintained that the procedure was artificial and did not evoke any anxiety in them.

(*c*) Some cases failed to respond well to Jacobson's technique of relaxation (neither hypnosis nor carbon dioxide inhalation as advocated by Wolpe were tried). Reasons for these differences in response were not obvious.

In addition, the method involves technical problems some of which are discussed by Lazarus (1964) and Lazarus and Rachman (1957). In the present study, the following points were noted.

(*a*) The value of the patient's reporting of the experience of anxiety may be questioned. Such reporting may depend on many factors. Thus at times our patients have appeared to

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become anxious but have not reported the experience of anxiety and vice versa. Some reliable measure of anxiety is greatly needed.

(*b*) In the construction of hierarchies for treatment the aim is gradual transition from one item to another. Since this is achieved in terms of patient's reported anxiety one can never be sure whether the steps are in fact regularly arranged.

(*c*) Consistent with Clark's (1963) findings it was found, in some cases, that anxiety was evoked more by one modality of imagination than another. It was also found that all but two cases required some degree of practical retraining. Simultaneous application of desensitization at the imaginary level together with practical retraining may prove to be a useful technique.

Method of rewards; operant conditioning

The use of this method has been mainly concerned with analysis and control of specific behaviours, particularly of psychotic patients. Apart from the few studies cited earlier, the aim has not been therapeutic but to see which specific symptoms can be brought under the control of specifiable environmental stimuli (Barrett, 1962; Bijou and Orlando, 1961; Ferster, 1961; Ferster and De Myer, 1961; Flanagan *et al.*, 1958; Hutchinson and Azrin, 1961; Lindsley, 1956, 1959, 1960, 1963a).

Studies of generalization and permanence of behaviour changes brought about by operant conditioning are scanty and not very impressive, particularly in psychotic patients. Isolated reports on treatment of neurotic patients, however, indicate that this method may be very useful for some psychoneurotic conditions (Bachrach *et al.* (in press), Brady and Lind, 1961; Neal, 1963; White, 1959). In the present study this method was successful in the patient with encopresis and with a case of anorexia nervosa in which vomiting was a major problem.

There is enough experimental evidence available on the use of the operant method to make investigation of its application to the broader requirement of clinical treatment possible and fruitful.

Determination and administration of appropriate schedules of reinforcement for individual cases present some problems (Gelber and Meyer, 1965). In two cases it was almost impossible to apply the method since the patients appeared to be totally uninterested in the usual rewards. In addition, the application of the method often requires the use of expensive and elaborate apparatus.

"Punishment"; Aversive Therapy

This method has been used for some time to treat anti-social habits. The frequently disappointing results may be due to lack of regard to experimental work on punishment and the basic requirements of classical conditioning. Eysenck (1963a) and Franks (1960) have drawn attention to the most common errors and inadequacies in the application of this method. We would like to emphasize the following:

(*a*) At best, punishment, used by itself, produces temporary suppression of an undesirable habit (Estes, 1944). It may however be very effective in a situation which provides an alternative course of action (Kimble, 1956).

(*b*) Punishment does not appear to be very effective in dealing with responses mediated by a high degree of anxiety. It elicits additional anxiety which may add to that already existing and the condition may worsen (Beech, 1960; Jones, 1960).

(*c*) Conditioning is most effective if the unconditioned stimulus is given immediately after the conditioned stimulus and if the punishing consequences eliminate, or at least precede, the positive reinforcement resulting from the act to be eliminated. It is extremely difficult to exert such control with emetic drugs (Eysenck, 1963a).

(*d*) Partial reinforcement, i.e. when punishment is given in a certain proportion of trials, results in slower extinction (Eysenck, 1963a; Lewis, 1960; Lovibond, 1964).

(*e*) To prevent extinction of the newly acquired habit after the initial intensive treatment, periodical conditioning is necessary (Eysenck, 1963a; Franks, 1960).

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These considerations have led the authors and other workers (Blakemore, 1964; Blakemore *et al.*, 1963; Feldman and McCulloch, 1964, 1965; Raymond, 1964; Thorpe *et al.*, 1964) to modify the usually adopted techniques of this method. In the treatment of an alcoholic, faradic shocks were used as punishment and these were given intermittently in a random order. The procedure approximated to escape training in that the shocks were withdrawn as soon as the patient dropped a receptacle containing her preferred alcohol and grasped a receptacle containing a non-alcoholic drink (various beverages and soft drinks were used). In sequence, sipping alcohol, touching the glass with lips, lifting the glass, and finally touching the glass with hands, were all punished. After the initial intensive training (180 trials in 6 days) the patient was exposed to alcohol in her room for gradually longer periods of time and finally alcohol was left in her presence for 24 hours a day. At the same time brief sessions of the original escape training were given periodically and the interval between administration of these was gradually extended. Finally, any report on the patient's part of an increased urge to drink was dealt with by administration of brief conditioning sessions.

The greatest practical difficulty with aversion therapy is that some patients do not wish to take punishment (Meyer and Crisp, 1964), or break down during the treatment. In addition, treatment of sexual deviants, particularly homosexuals, usually demands that the patient should be trained to develop a heterosexual propensity. This, if not impossible, is methodologically very difficult.

Discussion and Conclusions

This report has been based on experience in the treatment of 54 patients suffering from diverse behavioural abnormalities. As such it only offers clinical impressions and observations as regards a variety of problems. No attempt has been made here to assess in a controlled and systematic fashion the efficiency of behaviour therapy techniques. The emphasis has been on practical problems encountered. The experience has indicated a great diversity and complexity of problems, often unique in each case, which may have wide implications for this type of treatment.

The most important problems that the practising therapist is confronted with are as follows:

(*a*) At present criteria used for selecting patients who would profit most from treatment by behavioural methods are inadequate.

(*b*) There is lack of adequate means for determining the exact nature of stimuli and responses constituting the symptom.

(*c*) Finding appropriate and effective methods and techniques for putting abnormal behaviour under control frequently presents considerable problems. Sometimes a great deal of ingenuity is needed.

(*d*) Very little is known of how personality variables may influence the outcome of treatment and how treatment methods and techniques may be modified so as to accommodate them.

(*e*) Various complications may arise during treatment which require a wider behavioural evaluation of the patient and his life situation. Continued attention to the original symptom may not be sufficient.

(*f*) Frequently there are considerable practical difficulties in applying the methods of behaviour therapy.

Considering the lack of precision in the field of learning (Rotter, 1960) and the number of problems awaiting solution, the results of treatment in the present series are encouraging. The average number of treatment sessions is not unfavourable as compared with other forms of treatment. The incidence of relapses is low. The figure of 72 per cent. slightly or greatly improved for the total sample is considerably lower than that of 89 per cent. given by Wolpe (1961a). It appears that Wolpe's sample (210 cases) consisted of out-patients whereas the present sample is more representative of a psychiatric population, comprising in-patients and out-patients. Lazarus' (1963) overall improvement rate of 78 per cent. given for a sample of out-patients (408) is more consistent with the present figures.

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It appears that various degrees of success in the outcome of treatment may ensue for different groups of patients and specific symptoms. This is also reported by Lazarus (1963) who shows the range of improvement from 20 per cent.–81 per cent. For 126 cases of severe neurosis improvement rate was only 62 per cent.

No doubt experimental work attempting to provide answers to the questions posed by behaviour therapists will improve the efficacy of this type of treatment. The experimental work of Lovibond (1964) on the treatment of enuresis demonstrated how theoretical and practical advances can be made in this field. It is this type of investigation—aimed at improving the efficacy of particular methods of treatment—that is urgently needed.

Much has been written on or about behaviour therapy and a great deal of heated discussion regarding its merits and demerits between advocates of behaviour therapy and "depth therapy" has taken place (Bandura, 1961; Bookbinder, 1962; Eysenck, 1950, 1963a and b, 1964; Grossberg, 1964; Wolpe, 1958, 1961b; Yates, 1958b). The main issues of contention have been the status of learning theory, the effects of symptomatic treatment (symptom substitution) and the role of non-specific therapeutic agents like "suggestion", "insight" and "transference". The problems of "transference" and "symptom emergence" are discussed, in relation to this group of patients, by the second author in another paper (Crisp, in press). Here we would like to point out that in a field where there are vast gaps in knowledge and lack of adequate experimental evidence for various theoretical positions, there is no place for dogmatism. Problems of this nature are settled by experimentation. It is incumbent on behaviour therapists and psychodynamically oriented therapists to validate their respective theoretical formulations. Rudimentary attempts to exert internal control over some variables, thought to play a role in treatment, have been made by behaviour therapists (Lang and Lazovik, 1963; Lazarus, 1961; Schmidt, 1964; Wolpe, 1962). Their results suggest that at least in some cases improvement was related to the specific methods of behaviour therapy administered. It is hoped that behaviour therapists will be given greater opportunity to carry out this type of investigation.

Finally on the basis of the literature and as a result of the present study the authors would like to evaluate the present status of behaviour therapy.

So far the abundant literature on behaviour therapy has concentrated on the methods rather than on the therapeutic efficacy. There is a lack of controlled trials of the type reported by Lazarus (1961) and more recently by Gelder (1964). The follow-up studies are inadequate, particularly in terms of personality assessment and general adjustment. There are no generally accepted criteria for assessing changes in specific symptoms or wider aspects of personality. This makes comparison of different studies difficult. Various methods of treatment derived from learning principles have not been tried adequately; some of them show considerable promise. The range of applicability has not been established and the case material chiefly consists of relatively "simple" monosymptomatic patients seeming to fit the S-R model. Even some "simple" cases fail to respond to the known methods of treatment whereas some of the complex cases react well. The reasons for this variability in outcome are not understood. The noticeable lack of reports in the literature on failures does not help towards a better understanding. The incidence of symptom substitution and of relapse is usually said to be low. If this is so, it is perhaps premature to state that this is because of specific treatment methods rather than other lesser known contributory therapeutic variables. When relapses do occur they can sometimes be reasonably explained in learning theory terms (Eysenck, 1963a).

Although behaviour therapy is still in its infancy it has come to stay as a useful adjunct to the clinic. However, it may fall into disrepute if it is uncritically accepted as a ready-made and well established form of treatment. Failures will accumulate because of insufficient examination of experimental data and aspects of clinical assessment. If theoretical and practical advances are to be made, a more rigorous and planned experimental approach to the problems outlined in this paper is greatly needed.

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Summary

The results of treatment by behaviour therapy of specific symptoms in 54 patients are presented. The overall improvement rate, during and following therapy, of symptoms under treatment was about 70 per cent. Some of the practical problems inherent in the methods used and also some of the complexities of the associated therapeutic variables are outlined and discussed.

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