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Behaviour Therapy and Phobic Disorders.

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Introduction

There are a number of established forms of treatment for neurotic symptoms. In some patients symptoms are relieved by drugs which control anxiety, in others by antidepressant drugs (Sargant and Dally, 1962), still others appear to respond to some form of individual or group psychotherapy. More recently behaviour therapy has been introduced, and there are now a number of reports which claim that it is successful in a variety of neurotic disorders (Eysenck, 1960a).

So far reports of behaviour therapy, like many of those of more orthodox forms of treatment, offer illustrations of method rather than proofs of the efficacy of the treatment. Eventually some form of controlled trial will be needed to evaluate all these methods of treatment, but a great deal needs to be known about the clinical application of behaviour therapy before undertaking any large-scale study.

Most published reports deal with isolated cases which are difficult to compare, and little is known about the results of treatment of a group of patients who share a particular symptom except for such studies as those of writers' cramp (Liversedge and Sylvester, 1955; Beech in Eysenck, 1960a), bed wetting (enuresis) (Jones in Eysenck, 1960a), stuttering (Lehner, 1954, case in Eysenck, 1960a) and fetishism (Oswald, 1962).

Phobic symptoms appear to be particularly suitable for behaviour therapy; they are seen commonly in the clinic, and they are difficult to treat by other means. We therefore chose a small group of patients with agoraphobia and treated them with behaviour therapy.

We wanted to find out whether this treatment would be equally effective in all phobic patients, and if not whether we could suggest relevant variables which might be responsible for the differences. In addition, we wished to find out what effect successful treatment of one symptom or one group of symptoms would have on others which had not been treated and how lasting were the effects of treatment.

Method

Behaviour therapy now offers a number of techniques of treatment, each of which derives from the principles of modern learning theory and each of which has its particular use. These have been recently reviewed (Eysenck 1960a). The method which seems particularly suitable for phobic symptoms and which has been most frequently used is that of reciprocal inhibition (Wolpe 1958). According to Wolpe: "If a response antagonistic to anxiety can be made to occur in the presence of anxiety-evoking stimuli so that it is accompanied by a complete or partial suppression of the anxiety responses, the bond between these stimuli and the anxiety responses will be weakened."

In applying this principle we have chosen Wolpe's relaxation responses. The patients were taught to relax in the therapist's presence. In addition, the principle of primary stimulus generalization was used. Many phobic patients display anxiety so intense when presented with certain environmental situations that they are not amenable to any therapeutic approach. However, the generalization principle indicates that the presentation of an experimental situation which resembles the original one but evokes a reduced amount of anxiety can be exploited therapeutically. In such situations, one can attempt to substitute an adaptive normal reaction for the original unadaptive

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anxiety response. A graded continuum of similar situations can then be employed moving towards the original one so that the original unadaptive response can be eliminated. This is essentially one of the methods advocated by Jersild and Holmes (1935). It can be done practically by taking the patient to the situations or symbolically by asking the patient to imagine them.

Selection of Cases

The criterion for selection was that agoraphobia should be a predominant symptom irrespective of diagnosis. Cases 1 and 5 were referred by Dr. F. Kräupl-Taylor and cases 2, 3 and 4 by Professor Hill.

Method of Assessment

The cases were assessed clinically, and from information from relatives. In cases 2 and 3 this was supplemented in two ways. First, one of us (M.G.) who remained unaware of the details of treatment, saw the patients twice weekly to assess the mental state, and to detect any affective changes which could influence the patients' subjective account and render it unreliable. Second, an attempt was made to quantify the patient's subjective report of symptom changes, by using a card-sorting procedure. The symptoms were recorded systematically, then statements were prepared which expressed the symptoms in the patient's own words. Each was typed on a separate card and these were mixed with a number of "filler" items to bring the total number of cards to about 40. At each assessment, the cards were shuffled thoroughly and the patient was asked to sort them into five piles. Each pile represented the degree of severity of the symptom placed in it, and each was defined by a statement which ranged from "symptom absent" in the first pile, to "symptom always present and causing marked distress" in the fifth. By shuffling the cards, and by increasing the total number with filler items, we made it difficult for the patient to remember responses on the previous assessment. This is important when the assessment has to be repeated twice weekly for several weeks. The method has obvious shortcomings, but it is convenient and seems sufficiently reliable for a preliminary enquiry. It must be checked in two ways; by an independent assessment of the affective state, since a depressive mood swing may alter the patient's assessment of his neurotic symptoms and by regular information from relatives or employers since the patient may either simulate or disguise symptoms. We took both precautions.

Results of Treatment

Case 1

A housewife, aet. 42, admitted for treatment of severe phobic symptoms. No family history of mental illness. In childhood nervous and shy, and enuretic until eight. After uneventful schooling worked until first child was born. Married aet. 23, but always dissatisfied with marriage and disliked the demands which home and family made. Reserved and made friends with difficulty; found it difficult to show affection to children; mild cyclothymic traits; conscientious, superstitious and indecisive but no marked obsessional traits.

Phobic and obsessional symptoms began aet. 29, in puerperium of second pregnancy with fears of harming herself and others: depressive mood not prominent. Treated in a psychiatric hospital with psychotherapy. On discharge, five months later, unable to be alone at home and lived with relatives for a year. Went home although fears never disappeared. Aet. 31, sought further treatment and attended Maudsley Hospital where again no significant depressive component found. Group therapy under the supervision of Dr. Kräupl-Taylor, but after a year little improvement either in general state or in fears. When 33 her father died. Soon after this developed severe phobic anxiety when travelling alone. Group therapy for a further year, again little improvement. Aet. 35, further increase in symptoms, this time apparently unassociated with stress, and stopped work because she could not travel alone. For next seven years, up to the time of admission could go out only with companion, and then only with sodium amytal. Fears of closed spaces and suffocation appeared. Rarely went out. Aet. 41, she again sought treatment and Dr. Kräupl-Taylor arranged supportive psychotherapy, for nine months until symptoms increased further and she was admitted.

Main symptoms were: phobic anxiety in closed spaces accompanied by sensation of suffocation, worse during hours of darkness; phobic anxiety when travelling, so severe that unable to make any journey alone; obsessional fears of harming others; fears of death and objects associated with it. Had not worked for seven years, and could not go out anywhere alone. It was decided to observe her affective state carefully, because of mild depressive symptoms, but no evidence of superimposed depressive illness was found. Since phobic symptoms were long-standing and resistant to treatment in the past, leucotomy was advised by Dr. Kräupl-Taylor. Accepted for operation, with reservation that even this would probably have only limited effect. Behaviour therapy then suggested as a

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last resort, before operation, and started five weeks after admission. Only minimal changes in mental state as a result of stay in hospital up to that point.

Psychological Test results

Mill Hill I.Q.=110; Progressive Matrices I.Q.=110; Maudsley Personality Inventory (M.P.I.) Score: Neuroticism=42 (+ 2·5σ); Extraversion=12 (− 1·35σ).

This patient was taking sodium amytal and dexedrine when treatment started. Dexedrine was withdrawn, and sodium amytal was restricted to occasions when a new stage of training produced severe anxiety. It was impossible to carry out reciprocal inhibition of this patient's agoraphobia until three other phobic symptoms had been dealt with. She developed such severe phobic anxiety on the ward stairs and in corridors, that it was necessary to treat this first. Her fears of objects which reminded her of death were treated symbolically by the use of a graded series of pictures of morbid objects, such as cemeteries and coffins, which were capable of producing anxiety. There was considerable generalization from this latter treatment. Attention was then directed to the agoraphobic symptoms and the patient was taken out daily over gradually increasing distances. Progress was very slow, with much fluctuation from day to day, but steady improvement from one week to the next. An initial attempt to carry out treatment in the hospital garden had to be abandoned because the garden provoked more anxiety than the street. The patient felt that there was nothing to catch hold of in the garden should she feel panic.

Progress was so slow that it took four months to train her to walk a quarter of a mile to meet the therapist. This slow progress contrasted with the rapid improvement in the fears of morbid objects, stairs, and lifts, which were also treated. During treatment there were three brief periods of depression. The first occurred just after a period of relatively rapid progress, and it seemed possible that this might be some form of symptom substitution, but this was not supported later on.

Because progress was slow, it was decided that the aims of treatment in hospital must be limited, and she was discharged when she was able to walk for about a quarter of a mile. It was fortunately possible to find her a job within this distance of her home, and she was trained to walk over the route. One feature of this case was the lack of generalization within this symptom, so that training over one route did not enable her to take another route without experiencing severe anxiety. Her husband helped with further training under supervision, and eventually she could travel to and from work alone. Her symptoms increased again when the evenings became dark, but this was also overcome by reciprocal inhibition.

Twelve months after discharge she is still working. She is able to walk to work, do her own shopping and visit the hairdresser, all of which she had not done for seven years, but still cannot walk alone except in the places where she has been treated. Nor has there been generalization to other modes of travelling, and she must take sodium amytal before a car journey. No new symptoms have appeared. Improvement has been maintained in the other symptoms which were treated, but she continues to experience periods of anxiety and mild depression. Although there has been only a limited change in her symptoms, she feels that her life is much improved, now that she can get out of the house. Her employer is more than satisfied with her work. Other changes in social adjustment have been slow; marital adjustment has not improved, but she meets new people at work and enjoys this, and is beginning to visit friends. She has started taking dexedrine again (5 mgms. o.m.) and sodium amytal gr. 6 at bedtime and during the day if she has to travel by car. She remains dependent, pessimistic and has little self-confidence. She has formed a dependent relationship with the therapist, despite precautions to minimize this. Her husband summed up the result: "Now that she is able to go to a job, she takes an interest in herself again: before, she didn't care. Although far from cured, it has been well worth all the treatment."

In summary, this patient showed relatively little generalization when the agoraphobic symptoms were treated and made very slow progress, in the course of which she developed a dependent relationship with the therapist. There was no evidence of symptom substitution and her general condition improved. Total treatment time, 140 hours. Follow-up period: 12 months.

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Case 2

A single woman, aet. 22, developed phobic anxiety aet. 16. Mother died when patient was 10. No family history of mental illness, and no known history of birth trauma. Well until five, when right temporal lobe abscess developed, secondary to otitis media. This was drained. Major and minor seizures developed soon afterwards and continued with varying frequency, minor seizures predominating. A quiet, sensitive, timid young woman, a worrier and a perfectionist. Worked until aet. 19, when phobic symptoms became too severe.

Phobic symptoms began after an unexplained attack of severe anxiety in shops and when out alone. Aet. 17, began to experience phobic anxiety in buses, but still able to get to work with difficulty. Aet. 19, symptoms increased; entered a psychiatric hospital for three months, and treated with methedrine and pentothal interviews. No cause discovered for the phobic symptoms. Seizures controlled with drugs. Slight improvement in phobic symptoms but these relapsed soon after return home; did not resume work. Fears developed of harming others and of poisoning food which she prepared. Aet. 21, readmitted for a further three months. Seizures again brought under control but no improvement in phobic symptoms. After six months at home symptoms increased. Readmitted and transferred to Maudsley Hospital.

Thorough clinical and EEG investigation by Professor Hill indicated that neurosis and temporal lobe epilepsy were not causally connected, and the former was contributing more to disability. Epilepsy again controlled. Careful psychiatric assessment showed no significant depressive component to the illness and behaviour therapy started. At this time, main symptoms were: agoraphobia, phobic anxiety in shops, phobic anxiety when with only one other person, accompanied by obsessional thoughts of harming the other person; phobic anxiety in lifts and on stairs; fears of poisoning others with food she prepares, and when eating in company. Also a number of obsessional symptoms, especially counting and checking rituals and fear that she might choke when eating. Unable to work for three years.

Psychological Test Results

Wechsler I.Q.=Full Scale 92. M.P.I. Neuroticism=32 ($+ 1{\cdot}09\sigma$). Extraversion=22 ($- 0{\cdot}35\sigma$).

This patient, like the first, developed such severe anxiety on the ward stairs that it was impossible to undertake any further training until this symptom had been brought under control, otherwise any subsequent training was begun with too high a level of anxiety. When this has been achieved, the agoraphobia, her fear of being with another person and her fear of entering shops were treated. This patient was specially assessed, and seven control periods, each of a week, were interposed. In these she continued to see the therapist but was given no behaviour therapy. No changes in the severity of her symptoms could be consistently related to these control periods, either on the psychiatric assessment, or on the patient's self-rating. There were, however, considerable fluctuations in the symptoms, treated and untreated, which were unexplained.

When the agoraphobic symptoms had subsided sufficiently, she took a job near the hospital. At this stage, her fear of heights was well controlled, she was able to be alone with another person without anxiety, and she could enter shops without difficulty, but her numerous other symptoms, which had not been treated, were unchanged. The therapist did not take part in further behaviour therapy but continued to see the patient, and planned further graded tasks which she carried out by herself. These were directed mainly to the agoraphobia, which was still troublesome although she could now travel to work. One obsessional symptom was also treated—a checking ritual which sometimes made her late for work—and it diminished. Two months after starting work, there was a sudden deterioration in most of her symptoms which coincided with criticism by the employer of her slowness at work. This was due to a number of obsessional rituals which she had tried to hide from us, but which were revealed by a routine enquiry about her progress. These rituals occurred only at the office, and even then did not appear in the presence of the therapist. Treatment was not possible at the office and the symptoms could not be reproduced elsewhere. Instead, the patient was seen three times a week and given tasks to carry out herself. This might be regarded as much as a form of supportive psychotherapy as behaviour therapy, and as such it was outside our original aim, but the needs of the patient were felt to outweigh the requirements of our investigation at this stage. She was later discharged to a hostel. There was little further change in her symptoms, but five months after the start of treatment she lost her job because obsessional symptoms were interfering further with her work. However, she found another post herself and was able to work satisfactorily. Troublesome obsessional symptoms, and attacks of panic in the street,

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continued but she was able to travel wherever she wished.

She has become dependent on the hospital. There has been no significant change in the original obsessional symptoms, which were never treated directly, and some new obsessions have appeared (particularly checking rituals). The obsessional fear of choking is now the most distressing symptom. Despite this very limited change in the symptoms, there has been a marked change in social adjustment: she has been able to work for the first time for three years, has joined a social group and has been out with a boy friend for the first time. These improvements seem directly related to the reduction of the phobic anxiety in the presence of another person, and in her difficulty in travelling. It is not claimed that it would have been impossible to produce some of these changes by other means, although no such improvement had, in fact, occurred during two previous periods in hospital.

In summary, this patient showed very little generalization from treated to untreated symptoms. Nevertheless, there was an improvement in social adjustment. Treatment time: 70 hours. Follow-up period: eight months.

Case 3

A married woman, aet. 25, had experienced severe phobic symptoms for three years. Mother highly strung and beset by fears, one maternal aunt had phobic symptoms. Early history uneventful, no childhood neurotic symptoms. Married aet. 22; sexual relationship satisfactory. Two children aet. 18 months and six months. A calm, easy-going woman before illness, placid and sociable, with diverse interests, not subject to mood swings.

Aet. 21, short episode of tension with fears of dying, which began when taking an important examination and passed quickly when this was over. Two months after marriage, aet. 22, anxiety symptoms returned, without obvious cause, with phobic anxiety when out alone or travelling in trains. Symptoms persisted until aet. 23, when she gradually developed fears of heights, which suddenly became worse during a car journey in mountainous country. Symptoms increased gradually and she became unable to go out alone and gave up job. Further increase during first pregnancy, and entered hospital. Treated with 12 ECT, with temporary improvement, but soon relapsed. In following year, became pregnant again, and symptoms again increased. Further 12 ECT without improvement, although, again a partial spontaneous improvement after child born. Aet. 25, came to England with family, and her symptoms increased further. Referred to Professor Hill, who arranged behaviour therapy. At this time, unable to go out alone and could not take children out. Severe phobic anxiety in high places, and the unusual symptom of inability to wear high heels or stockings without experiencing anxiety. Enquiry suggested that these symptoms were of same "anxiety hierarchy" as fears of heights. Described fears of trains, buses, corridors and anaesthetics, also severe depersonalization and moderately severe symptoms of depression.

Psychological Test Results

Mill Hill I.Q.=108; Progressive Matrices I.Q.=126; M.P.I. Neuroticism=14 (-0.54σ) Extraversion=31 ($+0.65\sigma$).

Treatment began with re-training on stairs, in lifts and corridors, and was extended to the agoraphobic symptoms. An independent assessment of the mental state was made, and the patient recorded her symptoms with the card-sort. Three control periods were interposed, in which no behaviour therapy was carried out, but the patient continued to be seen by the therapist. As in Case 2, these produced no measurable change in the assessments of symptoms. This patient was depressed when treatment began, and was treated with Tofranil 50 mgms. t.d.s., together with Stelazine 5 mgms. b.d. It is difficult to say what part these drugs played in the subsequent improvement. There had been a temporary and incomplete improvement when she had been treated with ECT in the past, but it had not apparently been as marked as that which followed behaviour therapy, nor had it been so specific in its effect on the phobic symptoms.

There was a rapid improvement in her fears of high places, stairs and lifts, and at the same time a striking improvement in the phobic anxiety which she had experienced when wearing high heels and stockings, even though these latter symptoms were not treated. This improvement did not extend to the other untreated symptoms but was restricted to those which were functionally related to the fears of high places. Meanwhile the agoraphobic symptoms were treated and she was able to go much further by herself, but nevertheless continued to rate the anxiety as severe and said that what she had learnt was that anxiety did not increase

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further as she continued to walk. Training was extended progressively to buses and trains, and eventually she was able to travel alone by train for an hour's journey. Throughout the treatment she continued to complain of distressing symptoms of depersonalization, which did not improve.

Treatment was stopped prematurely because the therapist moved to another hospital, and she was discharged after two months. She remained well for a month, managed her house without difficulty, and was able to visit friends, but her symptoms gradually returned, with the exception of the fear of heights. Her husband says that the relapse is not complete and has himself asked if the patient can have a further course of behaviour therapy.

In summary, this patient's phobic symptoms improved quickly but relapsed after a month. Treatment time: 60 hours. Follow-up period: eight months.

Case 4

A single man, aet. 32, admitted for treatment of longstanding neurotic illness. Father had been treated for depressive illness.

Nervous child, often vomited when anxious, unable to tolerate dental examinations, and feared the dark. Made few friends at school and afraid to play games. Left several jobs because of anxiety symptoms at work. Poor mixer, quiet and shy, worried easily and over-concerned about health. Had a number of blackouts, once thought to be epileptic, but this diagnosis not supported by investigations by Professor Hill. Aet. 23, suffered short illness with some psychotic features. This cleared quickly and no recurrence in next 10 years.

Aet. 27, phobic symptoms developed and became unable to go out alone. Took sodium amytal gr. 3 t.d.s., until aet. 29, when symptoms improved spontaneously and was again able to go out alone without drugs.

Aet. 30, a further relapse and unable to travel without companion. Aet. 31, could not make the journey at all, stopped work. Admitted to hospital, where psychiatric examination showed severe tension and anxiety but no evidence of serious depression. Professor Hill's assessment: severe phobic illness on basis of longstanding neurotic disorder. Phobic symptoms were agoraphobia, phobic anxiety in buses and trains, fears of talking to other people, and fears of dental treatment so intense that unable to tolerate any form of dental examination.

Agoraphobia was treated first and gradually improved. It was then noted, however, that treatment was more difficult in the afternoons because the patient was, unaccountably, more anxious at that time. This difference gradually became more marked and anxiety was maximal immediately after lunch. If lunch was postponed, the anxiety was also postponed. This could not be explained, but it was overcome by giving the patient a picnic lunch during training sessions. This was found to reduce anxiety, training could continue and eventually anxiety disappeared. By the sixth week, treatment was transferred to the area about his home, and satisfactory generalization of the original training was obtained. A week later he was discharged but out-patient treatment was continued, at first daily, and then at increasing intervals for 18 months.

On discharge, he could travel anywhere on his own, and said that he enjoyed this for the first time for years. His fear of dental treatment, which had not been treated, had not changed. There was a marked improvement in those parts of his life which had previously been restricted by his inability to travel, so that, for example, he made new friends and gained some confidence in social gatherings. Nevertheless, he remained a timid, insecure man, and continued to experience periods of tension. He was unable to establish a mature sexual relationship. Four months after discharge, he found a job for himself and has kept it. The employer is satisfied with his work.

He has been followed for 18 months and there have been two short-lived partial relapses. In one he had dental trouble, became very anxious at the prospect of treatment, and lost confidence. He was seen and reassured, but no further behaviour therapy was needed. The symptoms subsided when the dental trouble resolved. The second relapse began when both parents were taken ill and he was at the same time under increased pressure at work. He was treated with reassurance and Librium, and again improved when the stressful situation resolved.

In summary, this case showed good generalization of treatment from one situation to another, and a limited improvement in general social adjustment. However, he remained insecure and vulnerable to stress. Treatment time: about 60 hours. Follow-up period: 18 months.

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Case 5

An adolescent girl aet. 16 referred with agoraphobia and "blackouts". The father had been discharged from the army with seizures, but no known family history of mental illness. Patient was well until aet. eight, when began to show minor neurotic symptoms and recurrent abdominal pain, for which no cause found. Quiet, moody, self-willed girl, who appeared to keep her feelings in check.

The blackouts began at school. Full investigation revealed no evidence of epilepsy, and thought to be hysterical. Also phobic symptoms for three years. Became anxious in crowds, or when eating in front of others, either at school or, latterly, in restaurants. It appeared that hysterical dissociative states were provoked in situations where phobic anxiety developed. Abreaction failed to reveal any unsuspected emotional conflicts. Behaviour therapy suggested since on theoretical grounds she appeared to be suitable subject.

Psychological Test Results

Mill Hill I.Q.=100; Matrices I.Q.=126; M.P.I. Neuroticism=28 (+ 0·76σ) Extraversion=2 (− 2·36σ).

The presence of phobic symptoms, suggested that behaviour therapy might be suitable for this patient, although the history of hysterical symptoms in the past made for caution.

At first, the agoraphobic symptoms responded well to reciprocal inhibition, and at the same time there was some general improvement, and she appeared less tense and more active. After three weeks, there was a sudden and unexpected increase of anxiety and a fit, for which no organic basis was found. Chlorpromazine 50 mgms. t.d.s. was given to reduce tension, and behaviour therapy was continued. For the next few weeks there were marked variations in performance during treatment, and she showed a number of further hysterical symptoms in the ward, culminating in a demonstrative suicide attempt.

The case was reviewed and it was decided to persevere with behaviour therapy but to give no further drugs. For the next month her state continued to fluctuate, and there were further hysterical symptoms. It was decided to make a last attempt to treat her with behaviour therapy, and a job was found near the hospital whilst treatment continued. She remained in this job for a month but then complained of a number of physical symptoms, for which no cause could be found, despite careful investigation. She stopped work. Throughout treatment, improvement in the agoraphobia was consistently followed by new hysterical symptoms. This did indeed seem to be the substitution of one symptom for another. Behaviour therapy had to be abandoned, and the patient returned home because further in-patient treatment appeared unlikely to succeed. She remained at home for 12 months, seldom going out, and then made a spontaneous recovery, found a job and ceased to complain of phobic anxiety.

In summary, this patient did not profit from behaviour therapy; moreover it became increasingly difficult to use the methods of behaviour therapy because any progress in treating the agoraphobia was followed by a variety of other symptoms. Treatment time: 80 hours. Follow-up period: one year.

Discussion

It is clear from our cases and from others that have been reported recently (Oswald 1962) that there are wide differences in response to behaviour therapy. In every case there was an initial improvement in the treated symptom and with this a general increase in well-being. It was sometimes necessary to treat other symptoms before the treatment of the leading symptom could be carried out. For example, in Case 1 much time had to be spent in treatment of fears of stairs and corridors because they prevented the patient from going to the street. Moreover, treatment of the leading symptom in one situation did not always carry over to others and had to be repeated in a variety of situations which the patient might encounter. (Cases 1, 2 and 5 showed this). Treatment in the patient's home surroundings was particularly needed, for the abnormal habit was usually strongest there, probably because it had been most practised in this setting. This need to extend training outside the hospital, to home, sometimes to restaurants, to cinemas, cars or to other places where phobic anxiety might be experienced, raises certain medico-legal difficulties. (These can sometimes be avoided if patients are taken out in pairs or in groups.) These two factors also increase the time needed for treatment.

Whilst it appeared that treating one phobic symptom sometimes resulted in improvement in

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other symptoms which were similar (e.g., Case 3 lost her fear of wearing high-heeled shoes, after she had been treated for fear of heights in the hospital lift), in no case did treatment of one phobic symptom result in improvement in a dissimilar phobia (e.g., in Case 1, treatment of agoraphobia had no effect on the fear of heights, although this itself improved rapidly when treatment was specifically directed to it). Furthermore, in Case 1 there was good generalization of the treatment of the fear of heights (i.e., having been treated in one high place she was able to tolerate others), but within the other main symptom (agoraphobia) the generalization was poor. In other words, there does not seem to be a single factor of "generalization" for each patient, which might be related to personality variables. This poor generalization makes the results less striking, but the very specificity of the changes argues against the idea that they are produced by such unspecific agents as suggestion or transference.

In Cases 1 and 4, as the treated phobic symptom improved, so other non-phobic symptoms subsided, but in the other cases, treatment of the main phobic symptom did not lead to the same degree of improvement, and in Case 5 the other symptoms actually increased.

We have followed our cases for a mean period of 11·7 months (range 8–18 months). If we consider only those symptoms to which treatment was specifically directed, then at the end of the follow-up period Cases 1, 2 and 4 had maintained and even extended the improvement which had been achieved in the hospital. Case 3 had relapsed after two months but not to the pre-treatment level; and Case 5, although she had improved at first, relapsed before she left hospital and behaviour therapy had to be abandoned. (We understand, however, that her symptoms later improved spontaneously.)

Some symptoms which were not treated did improve (Case 1 and 4) but this was not evident in every case nor was there a real change in personality. What did change was those aspects of the patients' general social adjustment which had previously been restricted by agoraphobia, for example, Case 1 started work for the first time for seven years, did some of her own shopping, went to a hairdresser again and visited friends. At the same time she took more interest in her appearance and felt a more normal person. Cases 2 and 4 illustrate the same point.

What are the important variables which account for these wide differences in response to behaviour therapy? The shortcomings of our investigations do not permit us to do more than put forward some suggestions. Our cases which were selected on the basis of the leading symptoms are otherwise very different, as the case histories show, and our sample is small. On the other hand it is difficult to know how cases should be matched for the purpose of such a preliminary study. Furthermore, treatment cannot be said to have been the same for all the cases, because clinical considerations made it necessary to adapt it to the needs of the individual. The most objective measure, the MPI, did not help us to predict the outcome of the individual case. This does not mean that such a score would be useless in predicting group trends. We cannot say anything about the relevance of age, or psychiatric diagnosis. Our attempt to introduce control periods in which no behaviour therapy was given did not produce changes in the rate of improvement as assessed by the ratings. It is difficult to reach a definite conclusion about this since the periods were short and the ratings probably insensitive. Perhaps these brief periods served only to consolidate what had already been learned. Alternatively, this finding may show the importance of the relationship between patient and therapist, since patients continued to see the therapist during the non-treatment periods. Indeed, the single factor which seems most relevant to the outcome of behaviour therapy is this relationship. The best results were obtained with Cases 1 and 4 with whom the therapist formed specially good relations. Moreover, symptoms often increased when the patient felt annoyed with or rejected by the therapist. This was evident in Cases 1 and 2. It appears that the continued progress in Case 1 is in large measure the result of maintained contact with the therapist who sees her fortnightly for follow-up study. Equally, feelings which the therapist forms in relation to patients influence the course of treatment just as the countertransference does

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in psychotherapy. Oswald (1962) has also drawn attention to this and questions Eysenck's statement that an unqualified assistant can conduct parts of the treatment. We have in fact allowed assistants to carry out parts of the treatment in some cases and no difficulties were encountered, provided that the patient transferred to the assistants the positive feelings which they had formed with the therapist, and provided that the relatively unqualified assistants were supervised by an experienced person who was aware of these difficulties.

The developmental history of the phobic symptoms may account in part for the individual differences in response to treatment. Some may originate in traumatic situations in which fear becomes attached to an object or situation originally neutral as in the well-known experiment by Watson and Rayner (1920). In others this is impossible to trace, and in these there might have been higher-order conditioning in which learning can be transferred to stimuli other than those used in the original situation. In these cases the presenting phobia may be so far removed from the original that to treat it may be of less value.

In addition, the longer a phobia has been present the more likely it seems that further difficulties will follow. The whole pattern of the patient's behaviour undergoes a change to accommodate the phobic symptom and in consequence, if the symptom is removed, it is necessary for the patient to make a new adjustment. For this he may need help and failure to provide this may lead to a disappointing result.

Behaviour therapy is the outcome of attempts to apply the principles of learning theory to the treatment of psychiatric patients. Some writers have also tried to regard any form of psychotherapy as a learning process (Bandura, 1961, Kanfer, 1961). On the other hand, adherents to psychoanalytic theory maintain that the effects of behaviour therapy can be understood in terms of psychoanalytic principles, particularly emphasizing transference. We know too little to be dogmatic at present, but learning theory has one advantage, namely that it gives rise to clear-cut and testable formulations and provides a rational approach to the treatment of certain cases. It seems also that behaviour therapy differs less from certain forms of psychotherapy than theory would lead us to expect. It has been recognized for many years that some form of retraining in the feared situation is an important part of the treatment of the phobic symptom. For example, Janet (1925) wrote: "Patients suffering from all kinds of agoraphobia were made to repeat day after day for months the practice of going out alone, and of passing through larger and larger spaces." He added that this treatment is limited to patients with isolated symptoms and that such monosymptomatic cases are uncommon. Freud (1919) mentioned that psychoanalysis should be modified for patients with phobic symptoms, and that they must be encouraged to return to the feared situation during the analysis. Some other psychotherapists have stressed this (Ivey, 1959: Terhune, 1949), and Laughlin (1956) wrote: "There is very often an important need for retraining, or a relearning experience in order to master the phobia. These people almost always have to go through the dangerous situation over and over again, and to re-experience the gradually decreasing anxiety . . . This can be a valuable adjunct to insight". Retraining has thus been made use of by certain psychotherapists, but it has been regarded as subsidiary to methods of orthodox psychotherapy. Learning theorists hold that retraining, guided by modern learning theory, has far wider application than the earlier writers supposed. On the other hand, the application of learning principles is less clear-cut than the theory suggests since treatment must be carried out by a therapist and the therapist introduces an interpersonal relationship which may itself influence the course of treatment. Indeed, in some cases, it may contribute to recovery, but in others a dependent relationship may be formed which hampers a purely behavioural approach to the case.

Those who wish to make use of learning theory to treat their patients should not ignore the relationship between the patient and the therapist. The two ideas are not incompatible.

Like most forms of treatment, behaviour therapy appears to be effective in a proportion of phobic patients but at present we cannot say precisely which cases will be helped nor the particular technique of behaviour therapy which

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will be most effective in an individual case. Further research should attempt to throw light on these questions. Undoubtedly, even in its present stage of development, it is a most useful addition to the clinic.

Summary

1. An account is given of the treatment by behaviour therapy of five cases with agoraphobia. Treatment was specifically directed to the phobic symptom so that its effect could be studied both on treated an untreated symptoms.

2. Treatment took on the average 80 hours per case.

3. The results of treatment varied both with regard to the symptom treated and with the general adjustment achieved.

4. The generalization of treatment to other symptoms was limited and in no case was a complete success achieved.

5. Evidence of symptom substitution was sought and was found in one case.

6. The importance of the relationship between the patient and the therapist is stressed.

7. Possible causes for the differences in response to treatment, the treatment itself and its theoretical basis are critically discussed.

8. Even in its present stage of development behaviour therapy is a valuable adjunct to existing methods of treatment in these cases.

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