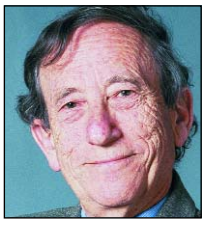
Eysenck and the development of CBT



JACK RACHMAN'S *Hans Eysenck Memorial Lecture, at the 2003 Annual Conference in Bournemouth.*

HANS Eysenck was one of the main contributors to the development of behaviour therapy. He was a leading theoretician, and he wrote and spoke in favour of its adoption over a period of 40 years. Yet in his last writings on the subject he expressed some disappointment, even dismay, about the developments he observed (Eysenck, 1997). In this article I will analyse the nature and value of his contributions, and then reconsider Eysenck's own evaluation in the light of recent developments in behaviour therapy, which has now evolved into cognitive behaviour therapy (Rachman, 1997).

Eysenck's involvement in clinical psychology came about by chance, not by choice. During the war the Maudsley Hospital, a research and clinical psychiatric facility, was transferred to Mill Hill. Dr Aubrey Lewis was the leading member of the psychiatric department, and he had ambitious plans for the subject. Hans Eysenck had recently graduated from University College London, but had no full-time employment and few prospects. His doctoral thesis had been a study on the psychology of aesthetics, and he had no knowledge, experience or interest in clinical psychology at this time. However, he had a stimulating meeting with Lewis, who was even at this early stage building up a comprehensive department of psychiatry, one which was to be firmly buttressed by the relevant sciences. At various points in his long career Lewis recruited sociologists, neurologists, epidemiologists. Lewis was looking for someone who would promote a scientific approach to psychiatric psychology. He was impressed by Eysenck's talent and drive, and Eysenck duly took up his post.

After the war Lewis urged Eysenck to go to the US to study developments in clinical psychology (Gibson, 1981). Eysenck saw much to admire in the emerging model, particularly ideas from the so-called Boulder model – the insistence that the training of clinical psychologists should be rooted in departments of academic psychology, that a good grounding in undergraduate psychology was a prerequisite, and that the training must include a significant research component, including a doctoral or other graduate research degree. However, Eysenck was unimpressed by the uncritical acceptance of the variety of forms of psychotherapy that were advocated and practised at that time. He was also critical of the widespread use of projective tests such as the Rorschach. As a well-grounded psychometrician, Eysenck regarded the widespread use of these tests as undiscriminating and unjustifiable.

On his return from the US, Eysenck set out recommendations for the development of clinical psychology in Britain, summarised by Gibson (1981):

- The laws established in academic psychology should be applied in the clinical field.
- Clinical psychology should be an independent profession.
- As psychotherapy and projective tests…do not derive from psychological theory or knowledge, and there is no evidence for their clinical usefulness, they should not be used by clinical psychologists, nor should they form any part of their training.

Starting from this base, Eysenck continued to work on his ideas for the profession of clinical psychology, and later for the development of a fresh approach to psychotherapy – one based on knowledge, methods and developments within academic psychology. An outline of his early plans was set out in his first and astonishingly successful popular book *The Uses and Abuses of Psychology* (Penguin, 1953).

In his desire to build therapy on the basis of academic psychology, Eysenck decided that conditioning processes provided the best foundation stone.

> *I came up with my first rudimentary idea of behaviour therapy – i.e., a method of treatment for neurotic disorders which would regard them as conditioned emotional responses to be extinguished through well known processes described in all the textbooks of learning and conditioning.* (Eysenck, 1997, p.1136)

This grounding would later be made explicit. One of the first textbooks of behaviour therapy, which I co-authored with Eysenck – *The Causes and Cures of Neurosis* (Kegan Paul, 1965) – was given the grand subtitle: 'An Introduction to Modern Behaviour Therapy Based on Learning Theory and the Principles of Conditioning'.

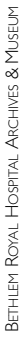
In the beginning

When the Maudsley psychiatrists and psychologists returned from Mill Hill at the conclusion of the war, Lewis encouraged Eysenck to establish a teaching programme for clinical psychologists. Monte Shapiro was appointed as the first head of the clinical training section. Eysenck and Shapiro agreed that there was a need for a fresh approach to the nature of clinical psychology, and hence a new type of training for the professionals who would enter into the field. In view of their criticisms of the unjustified use of most of the available psychological tests, and Eysenck's (1953) famous critique of the effects of psychotherapy, they were obliged to come up with constructive alternatives.

Given the great importance Eysenck attached to growing clinical psychology out of academic psychology, it was perhaps

inevitable that he should base the new kind of therapy on learning theory – the dominant orientation of most departments of psychology in the postwar years, certainly in North America. It was encouraging that the scientist who first described and analysed conditioning processes, Pavlov, had himself been interested in the possible clinical applications of his discoveries.

In the 1950s Eysenck and members of his department – notably Jones, Beech, Victor Meyer, Shapiro, Kendrick, Franks, Payne, Martin and others – had numerous discussions on the viability of building up a new form of psychological therapy based on conditioning. The members of the clinical training section were also encouraged to experiment with methods derived from a conditioning model. But this work was patchy and unsystematic, not least because most of the psychiatrists, following the lead of Aubrey Lewis, insisted that all forms of treatment should be carried out by medically qualified people. In those early years therapy by the psychologists was conducted quietly and almost surreptiously. These early cases were predominantly anxiety disorders, particularly agoraphobia. Some invaluable lessons were learnt,
and some highly stimulating case histories published, but there were no consistent applications and certainly nothing approximating a proper field test.



Eysenck, Meyer and Lewis at the top table of a Maudsley conference dinner

Enter Joseph Wolpe

In the 1950s and early 1960s Eysenck steadily elaborated his views on what form this new type of therapy might take. In 1954 Joseph Wolpe, a medical psychologist, published the early results he was achieving with systematic desensitisation, a fear-reduction technique he had developed in Johannesburg. The technique arose out of Wolpe's original research on the induction of artificial neuroses in laboratory animals using Pavlovian methods. Unlike most of his predecessors in this field Wolpe went on to explore different methods of 'treating' these disorders – extinguishing the conditioned fear reactions that had been induced in the experiments. He then faced the considerable difficulty of transferring these findings into clinical practice.

After a number of false starts Wolpe refined the method of systematic desensitisation, in which the therapist induced a state of relaxation in the patient and then asked them to imagine graded and gradual imaginal rehearsals of the situations in which they experienced fear. Wolpe (1958) was working in intellectual and geographical isolation at the time, but it was obvious even at that early stage that he and Eysenck shared some important views on the nature of therapy. Both of them used Pavlov as the starting point, both construed many psychological problems as the result of aversive conditioning experiences or as arising from deficient conditioning, and both thought that clinicians should shape up conditioning procedures for therapeutic purposes.

In addition to his experimental work, Wolpe was a busy clinician with easy access to patients with psychological disorders, especially those suffering from what were called neurotic disorders at that time. Wolpe's work provided clinical content for the theoretical framework that Eysenck had been constructing over a number of years. Wolpe and Eysenck did not agree on all points, but on the major propositions they were in full agreement. They never collaborated directly, but they established a lifelong intellectual friendship based on mutual respect.

Eysenck was an articulate and outspoken advocate of this new approach to psychotherapy and lectured and wrote on the subject with great energy and success, but Wolpe had the advantage of considerable clinical experience. (Eysenck jokingly boasted that he had a 100 per cent perfect clinical record – because he had only 'treated' one patient, and that successfully after one session.) They stimulated and supported each other, with Wolpe collecting and publishing more and more clinical results and Eysenck assertively promoting the ideas of behaviour therapy. In 1962 Eysenck established the leading journal in this field, *Behaviour Research and Therapy*.

The cognitive age

Both Eysenck and Wolpe were strong proponents of the view that behaviour therapy should remain closely connected with the prevailing behaviourism of the 1950s and 1960s. When cognitive concepts and techniques were infused into behaviour therapy from the mid-1980s onwards, both men had serious reservations about this development.

There were negative reasons as well as positive ones for incorporating cognitive concepts. On the negative side, the theoretical foundation of behaviour therapy, Hullian learning theory, encountered fatal obstacles and eventually disappeared. It turned out to be scaffolding rather than a foundation. The positive effects of absorbing cognitive concepts included greater explanatory value, an ever-widening scope, sharpened specificity, and the provision of psychological content (for example, by identifying which specific cognitions are implicated in episodes of panic).

The American lineage

Thus far the story has been confined to the development of what might be called the British form of behaviour therapy. At roughly the same time, the early 1950s, a parallel development was taking place in the US. Whereas the British approach was derived mainly from the ideas of Pavlov, Watson and Hull, the American form of behaviour therapy consisted mainly of the application of the ideas of Skinner and his colleagues (Rachman, 1997). Encouraged by Skinner, some of his students and colleagues tried to replicate in psychiatric patients the effects of conditioning so readily achieved with pigeons and other laboratory animals. The intention was to shape and reshape the behaviour of the affected patients by the systematic use of operant conditioning.

In the course of these developments the concepts of psychiatric disorder and abnormal behaviour were considerably altered and the value of the medical model of psychological problems was derided. The patients' problems were redefined as problems of behaviour, pure and simple, and the solution lay in providing a corrective programme of operant conditioning. The American psychologists conducted their research mainly with patients suffering from chronic psychiatric or developmental disorders. To their great credit a number of these early researchers,

such as Ayllon and Azrin (1968), defiantly insisted on working with the most severe cases, those patients who lived in the back wards of large psychiatric hospitals. Their research was distinguished by its inventiveness and boldness, but their large hopes were not fulfilled.

The British behaviour therapists worked in different contexts and almost always within a psychiatric hospital or service. They were dealing predominantly with outpatients who suffered from neurotic disorders, most of which would nowadays fall into the category of anxiety disorders. The British contributors, including Eysenck and Wolpe, were critical of Skinner's ideas, which they correctly regarded as too narrow and restrictive. After a period of relatively independent development the British and American forms of behaviour therapy were gradually integrated, and there is today little trace of those different beginnings.

Successes

From the mid-1960s until the mid-1980s behaviour therapists clocked up a number of valuable successes. Specific techniques for reducing fear and overcoming broader anxiety problems were developed and subjected to rigorous testing in randomised controlled trials. But the undoubted successes in learning how to treat anxiety disorders were not accompanied by a similar rate of progress in treating the other main psychological problem encountered in outpatient services, namely depression. Given the lack of progress in treating depression by the established methods of behaviour therapy and the waning prohibition against using cognitive concepts, behaviour therapists read Beck's work (Beck *et al*., 1979) with growing interest and were reassured by the inclusion of behavioural assignments in his treatment programmes. They were also impressed by his insistence on accurate and constant recording of key events and the self-correcting nature of the programmes. For example, patients were asked to make daily records of their maladaptive cognitions, automatic negative thoughts and counter-statements.

Setting aside whatever remaining suspicions they had about the acceptability of dabbling with these non-behavioural cognitive concepts, behaviour therapists began treating depressed patients with cognitive therapy. Some early successes helped to dispel the remaining inhibitions about using cognitive methods. Beck's form of cognitive therapy was based on the rationale that 'an individual's affect and behaviour are largely determined by the way in which he structures the world' (Beck *et al*., 1979, p.3), and the therapy was designed to identify, test and correct the underlying dysfunctional beliefs. Yet it was troubling that 'the development of cognitive therapy for depression has proceeded largely in isolation from basic cognitive science' (Teasdale, 1993, p.341). A divergence between psychological science and clinical practice was of course troubling for Eysenck as well, who also retained his behavioural doubts about the advisability or even justification for introducing cognitive concepts.

Thankfully, the steady infusion of cognitive concepts and techniques continued, and the two streams were welded together by the successful development of a theory and treatment for panic disorder (Clark, 1986) and for obsessive compulsive disorder (Salkovskis, 1985). Ironically, the infusion of cognitive concepts into therapy was promoted by a need to improve our methods for treating depression, but ultimately the cognitive approach proved to be more particularly effective in the treatment of anxiety disorders (see Clark & Fairburn, 1997).

To the modern day

The expanded and enriched form of behaviour therapy, cognitive behaviour therapy, is flourishing. In addition to the development of increasingly specific and increasingly effective methods of CBT, we have seen a fountain of new theories within the field (see box). This list, while not comprehensive, provides a glimpse of the speed and extension of original and bold thinking that has emerged. I believe that we are in the midst of a major revision of the nature of psychopathology.

What would Hans Eysenck, with his reservations about the invasion of cognitive concepts into behaviour therapy, feel about all of this? Before turning to the undoubted successes of behaviour therapy and CBT, successes which, as I say, Eysenck found immensely gratifying, let us consider his complaints.

> *Few behaviour therapists are interested in the theoretical underpinnings of what they are doing…there has arisen a whole school of cognitive behaviour therapy which argues against the importance of learning principles, criticising the principles of learning theory as if there had been no change in the last fifty years.* (Eysenck, 1997, p.159)

But it has to be said that many of the principles of learning theory, including the whole ambitious and impressive scheme set out by Hull, fell into discredit, and nowadays very few people know and even fewer care about what was a dominating theory in the psychological era in which Hans Eysenck grew up. Moreover, the conditioning theory of fear, which played an important and valued part in the early development of behaviour therapy, had to be revised and expanded (Rachman, 1990).

As to his concern that therapists are no longer interested in the theoretical underpinnings of what they are doing, I believe that the list in the box speaks to the contrary. Moreover, I am sure that if Eysenck had seen the richness and subtlety of these developments he would have set aside his resistance to using cognitive concepts and rejoiced.

His other disappointments include what he called a policy of eclecticism, an insufficient recognition of the genetic contribution of psychological disorders, and the neglect of personality variables. And it is true that personality variables, at least as measured in the economical and simple way of inventories and

A FOUNTAIN OF CBT THEORIES

1. Panic disorder (e.g. Clark, 1986; Barlow, 1988)
2. Obsessive-compulsive disorders:
   General theory (e.g. Salkovskis, 1985)
   Compulsive checking (Rachman, 2002)
   Obsessions (Freeston, 1996; Rachman, 1997)
   Hoarding (Frost, Krause & Steketee, 1996)
3. Social phobia (Clark & Wells, 1995; Heimberg, 1997; Rapee, 1997)
4. Post-traumatic stress disorder (Ehlers & Clark, 2000; Brewin, 2001)
5. Health anxiety (formerly hypochondriasis) (Salkovskis, 1985)
6. Generalised anxiety disorder (Wells, 1995, Dugas, 1998)
7. Bulimia (Fairburn, 1981)
8. Anorexia (Fairburn, Shafran & Cooper, 1999)
9. Body dysmorphic disorder (Veale, 2002)
10. Insomnia (Harvey, 2003)
11. Delusions (Chadwick, 1998)
12. Tics (O'Connor, 2003)

Full citations available from the author.

questionnaires, have had little success and are today used primarily in outcome research.

Turning to the successes of behaviour therapy, Eysenck said:

> *I did manage to get clinical psychology and behaviour therapy set up as professional activities in the United Kingdom, with a defined career and salary structure, with specific training schemes laid down by the Directorate of Health and Social Services in conjunction with the British Psychological Society...[this] now constitutes practically the only branch of psychology where vacancies outnumber available candidates* (Eysenck, 1997, p.158).

As to behaviour therapy specifically, he wrote that the methods 'which are advocated have proved extremely successful'. He went on:

> *[In our department] we are treating more than a thousand patients each year…this contrasts very much with the occasional case sent over to us in great secrecy when Aubrey Lewis was still opposing the notion of any form of treatment being carried out by psychologists.* (p.158)

Other successes that Eysenck mentioned were the greatly improved collaboration between psychologists and psychiatrists and the international recognition of these methods. He would have been pleased to read the results of surveys carried out in the US showing that CBT is the most widely endorsed form of psychological therapy, and that for two specific disorders, so far, the National Institute of Mental Health has recommended CBT as the psychological treatment of choice (panic disorder and obsessive compulsive disorder).

I believe that it is correct to extend this list of successes. While it is undoubtedly true that the profession of clinical psychology and the use of behaviour therapy are both well established, he might also have said that the evolution of behaviour therapy has produced a major change in the way in which all forms of psychological therapy are viewed and evaluated. Arising in part from Eysenck's original and severe criticism of the claims made for the effects of psychotherapy in 1953, increasingly rigorous standards were introduced into the evaluation of psychotherapy. Nowadays there is a nearly universal acceptance of the need for evidence-based therapies. The main style of collecting this evidence is by use of randomised controlled trials, which Eysenck advocated from the very early days.

As a result of the development of CBT, we have seen important changes in our views of psychopathology. To take one example, the development of effective methods of fear reduction, starting from Wolpe's method of systematic desensitisation, lead to a much deeper understanding of the very nature of fear itself. Thanks largely to the pioneering experiments of Peter Lang (1968), it became evident that 'fear is not a lump' but rather consists of at least three loosely coupled systems – behavioural, physiological and cognitive. We have also learnt a great deal about the fluctuations in fear, what induces fear, what reduces it, the conditions under which it returns after a period of absence, the tendency for many people to over-predict their fears, the nature of fear summation, and so on. This incidentally also provides an excellent example of the success of applied science.

'Eysenck made an invaluable contribution to the development of behaviour therapy'

But I would add one note. We are inclined to think of clinical psychology as the application of psychological science, as if clinicians merely leech off the basic science. Yet it is a two-way process, and in the case of the psychology of fear I believe that the clinicians have made important and substantial contributions to the psychology of fear and indeed to the psychology of emotion as a whole.

Did Eysenck make the difference? He put this question to himself and concluded:

> *Behaviour therapy would undoubtedly have made its mark without me, but probably a good deal later… Just suppose that my predecessor at Mill Hill, Eric Trist... had been asked by Aubrey Lewis to get a profession of clinical psychology started in England! As a convinced psychoanalyst he would have started it off on Freudian lines.* (Eysenck, 1997, p.4)

To conclude, I believe that Eysenck made an invaluable contribution to the development of behaviour therapy and helped to develop clinical psychology in tandem with behaviour therapy – much assisted of course by his colleagues in the Department of Psychology, notably Monte Shapiro. From the historical point of view the interweaving of the development of behaviour therapy and clinical psychology as an independent profession should not be overlooked. These contributions to clinical psychology and to behaviour therapy, coming from a psychologist whose primary interest was in personality, is no mean achievement. I firmly believe that despite his reservations about cognitive concepts, Hans Eysenck would now rejoice at the vigorous intellectual growth of cognitive behaviour therapy and its widening applicability.

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References

Ayllon, T. & Azrin, N. (1968). *The token economy*. New York: Wiley.

Beck, A., Rush, A.J., Shaw, B.F. & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Clark, D.M. (1986). *A cognitive approach to panic. Behaviour Research and Therapy, 24*, 461–470.

Clark, D.M. & Fairburn, C. (1997). *The science and practice of cognitive behaviour therapy*. Oxford: Oxford University. Press.

Eysenck, H.J. (1953). The effects of psychotherapy. *Journal of Counselling Psychology, 16*, 319–324.

Eysenck, H.J. (1997). *Rebel with a cause*. London: Transaction Publishers.

Eysenck, H.J. & Rachman, S. (1965). *The causes and cures of neurosis*. London: Routledge and Kegan Paul.

Gibson, H. (1981). *Hans Eysenck: The man and his work*. London: Peter Owen.

Lang, P. (1968). Appraisal of systematic desensitization techniques. In C.M. Franks (Ed.) *Assessment and appraisal of the behavior therapies*. New York: McGraw-Hill.

Rachman, S. (1990). *Fear and courage* (2nd edn). San Francisco: W.H. Freeman.

Rachman, S. (1997). The evolution of cognitive behaviour therapy. In D. Clark & C. Fairburn (Eds.) *The science and practice of cognitive behaviour therapy*. Oxford: Oxford University. Press.

Salkovskis, P. (1985). Obsessional compulsive problems. *Behaviour Research and Therapy, 25*, 579–583.

Teasdale, J. (1993). Emotion and two kinds of meaning. *Behaviour Research and Therapy, 31*, 339–354.

Wolpe, J. (1958). *Psychotherapy by reciprocal inhibition*. Stanford, CA: Stanford University Press.