

2321 Theory & Practice 2: Lecture 2

BEHAVIOUR THERAPY-1:

Assumptions, Definitions, History, & Themes

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INTRODUCTION

You will know quite a bit of this material from Theory and Practice 1 but this is a tiny overview of some important points as a refresher.

First force:

The psychodynamic tradition officially began in 1900 with the publication of Sigmund Freud's *The Interpretation of Dreams* which, incidentally he wrote out of the grief he experienced following his father's death. (Freud with his mentor-colleague Breuer had published work on 'Anna O'¹ in the later 1890s.) This stream or 'school' is highly introspective and usually places great store on subjective experience such as dreams and impulses buried in an hypothesised unconscious.

Second force:

Behaviourism began in 1913 as a laboratory approach to human behaviour. It only developed into a therapy, behaviour *therapy* (BT) in the 1950s. Please note the important distinction between behaviourism as a science and as a therapy. Not all behaviourists are behaviour therapists, just as not all psychologists are psychological counsellors. As you will see, important behaviourists such as Watson and Skinner were not *therapists* at all (although they would probably have approved of some of BT's practices). They were not therapists but scientists who worked in laboratories.

¹ Bertha Pappenheim was her actual name.

Strictly speaking, behaviour therapy does not seek to change behaviour directly; rather, **BT seeks to alter the antecedents to 'target behaviours' and the consequences of behaviours**. *Antecedents* are the events or happenings that precede the behaviour (e. g., smoking or nail-biting) the therapist/client is concerned to change. *Consequences* are the events that follow that particular behaviour.

Third force:

Personalistic humanism related to phenomenological and existentialist themes but having a decided optimistic outlook on humankind and life in general. (Personalistic humanism became the foundation for transpersonal psychology.)

"Fourth force":

Cognitive therapy (CT) developed out of the behaviouristic tradition in the late 1950s, gathering speed in the 60s and onwards to the present time. CT shares important similarities, in that this tradition regards thinking or thoughts as *behaviours* because they can be observed by the thinker. However, CT attempts to modify these behaviours *directly*.

1. ASSUMPTIONS

Behaviour therapy (BT) is based on behaviourism utilises a philosophy of naturalism and the spirit of logical positivism. Behaviourism is a reaction to psychodynamic thought and philosophy, particularly to its introspection and its hypothesised inner, human realities such as drives, instincts, ego, id, superego, repression et cetera. Like Freudian psychoanalysis, behaviourism is Darwinian in outlook.

a) Naturalism

Naturalism² assumes that the world [creation] = matter + energy. Hence, the world can be studied by the sciences of mathematics, physics and biology.

² Naturalism is also associated with psychodynamic school of therapy.

Humanity is also simply matter + energy. Anything outside these aspects is reducible to them or believed not to exist (for the purposes of science).

b) Logical Positivism

Behaviourism had a view of science (now discredited) known as logical positivism (LP). LP asserted a principle that had the intellectual world in thrall from the 1930s onwards which purported to be able to identify meaningful from meaningless statements. 'All meaningful statements are either true by definition (e.g., all bachelors are unmarried) or *empirically* verifiable or falsifiable'. For example, it was said that the sentence, 'Angels exist' is not so much false as it is meaningless. It is meaningless because there is no way of verifying or falsifying the statement through empirical [use of the senses] means.³

But the principle broke down when it was pointed out that it was incoherent because it cannot itself be verified or falsified by empirical means! Hence, it itself is meaningless. Nevertheless, the spirit of this principle still exercises an influence among some scientists (but not upon philosophers of science).

c) Reductionism

It's the notion that things can be better understood if they are broken down into smaller parts. That way, we can better control them. [Micro-skills in counselling were developed on the basis of this understanding .]

d) Environmentalism

is another important part of the philosophical baggage of behaviourism.

Environmentalism means that 'all behaviours are caused by factors outside of and external to themselves' (J&B, 147). So, you are here not because you decided to come (an existential or humanist notion), not because of libidinous

³ Just as a side issue the principle had to include 'falsifiable' because otherwise they would have had no way of asserting that, knowledge that was believed to be certain such as 'the moon has another half to it which we can't see' because, at that time, no-one had actually seen that side of the moon.

urges stemming from sexual or aggressive instincts but because 'outside stimuli impinging' on you (J&B, 148) compelled you to come.

e) Determinism

Behaviourism is based on naturalism, logical positivism, reductionism, environmentalism, and ultimately on determinism. The latter is correlative with environmentalism. We may think we are free to act as we do today but that is a delusion. We act because of antecedent conditions and post-behaviour reinforcers.

Lastly, I need to say a quick word about what Jones and Butman (1991: 148, 158) call behaviourism's *Model of the Personality*. It is probably not unfair to say that behaviourism does not concern itself with outlining a view of the person, an *anthropology*. The Self, so important for the phenomenological-humanist tradition, is not a concern for behaviourists. Some behaviourists would argue that personality or self does not exist, at least for science, it does not exist. What exist are behaviours *that are controlled by antecedents and consequences*. However, as we shall see, as time has progressed behaviourism has also opened up to ideas that once would have been anathema.

2. DEFINITIONS AND HISTORY

a) Definitions

Behaviour therapy⁴ is sometimes called *behaviour modification* (BM) and *cognitive-behavioural therapy* (CBT) BUT behaviour therapists usually distinguish among the terms. However, according to Spiegler and Guevremont (2003) the 'distinctions are not standard' (p. 5). However, Behaviour Therapy, as they contend, is the 'purest' term and tends not to include cognitive therapy techniques. B/Modification was very much associated with classrooms and hospital wards but also therapy settings too. It changed

⁴ Much of the following material has come from Spiegler & Guevremont (2003).

the consequences of behaviour that were said to reinforce the behaviour and stimulus conditions that led to the behaviour. CBT tends to change cognitions (thoughts and beliefs) that are believed to be causing or maintaining psychological problems/behaviours. To add to the confusion, Aaron Beck would describe his therapy as cognitive therapy (CT) and not as CBT because he does not seek to change behaviour as such.

b) History of behaviourism

(i) Ivan Pavlov



Ivan Pavlov (1849-1936) who had won the Nobel Peace prize in physiology and medicine in 1904 is credited with first demonstration of what is now known as classical conditioning. He took a normally unconditioned stimulus (UCS) (food) and an unconditioned response (salivation) and introduced a light/bell (a neutral stimulus that would normally elicit no behaviour at all in animals) along with the UCS for a number of times. After this pairing, the light/bell would elicit the salivation without the food being present. That is, the neutral stimulus had become a conditioned stimulus response (CSR). Pavlov was still working when he died at 86.

(ii) John Broadus Watson



The beginnings of behaviourism applied to humans took place in 1913 with the publishing of a paper, *Psychology as the Behaviorist Views It* (Green, 2001: n. p.) by **John Broadus Watson** (1878-1958). Watson rejected mentalist terms such as imagery, consciousness, and thoughts and would only accept objective, overt, measurable behaviours as the foci for valid, scientific endeavour. Watson conducted an experiment with an 11-month old boy in which he paired an unconditioned stimulus, a loud, upsetting noise, with the presence of a small white mouse. The boy soon became afraid of the white mouse and even developed fears of any white furry objects that resembled the

mouse (Green, 2001: n. p.). Today this would not be allowed on ethical grounds but then such safeguards were not applied to scientific research because of its ascendancy in both public esteem and in academia itself.

Remember again that at that time science was believed to be the only pathway to true knowledge. All other pathways will only arrive at something less than knowledge, perhaps only opinion or belief. Now, Watson was saying that science can only be attained via the study of behaviours. In making this statement, he was opposing the dominant **introspectionism**, which had been the main methodology in the early European psychology of Wilhelm Wundt⁵ (c. 1870) and of course in Freud's psychology. Such an approach was swept away by Watson's dogmatic stand. And it was, of course, a dogmatic stand! No *behavioural basis* can be found for such a position!⁶ But behaviourists were never ones to argue that their philosophy was superior to that of other positions; they did not want to be associated with philosophy or anything connected with metaphysics.

(iii) Mary Cover Jones

A student of Watson's, Jones, treated a 3-year old boy, Peter, for a phobic fear of rabbits in 1924. First, she had him watch other children handle a rabbit. Second, she gradually exposed Peter to the rabbit over some days. She achieved great success. And, these two methods of modelling and *in vivo* exposure are widely used techniques of behaviour therapy today.

(iv) O. Hobart Mowrer and Willie Mowrer (wife)

Influenced by Pavlov's work, they devised a method of dealing with bedwetting (enuresis). They placed a special pad under the bed sheet of the bed wetter which when contacted by urine in the night would ring a bell. Thus, the patient

⁵ First, scientific psychologist.

⁶ Hope you can see the irony in this development.

came to associate the sensation of a full bladder with the need to get up and go to the toilet.

(v) Edward Thorndike

Edward Thorndike, at Columbia University -at about the same time as Pavlov was working—investigated increasing or decreasing behaviours by 'systematically changing their consequences' (p. 19). This type of conditioning came to be called operant conditioning and was popularised later by B. F. Skinner.

(vi) Edmund Jacobson

In the 1930s, he experimented with muscle relaxation as a treatment for a number of disorders. His method was called progressive relaxation and is still advocated today. Unlike the relaxation script which you have received, Jacobson's method uses the tightening and relaxing of muscles and asks participants to discern the difference between, for example, a tight lower leg muscle and a relaxed one.

For Freud and his disciples, insight is the curative factor that leads to change. Hence, these therapies are termed insight therapies. The use of psychoanalysis requires some years for this insight to be gained. However, following WW2 the application of psychoanalysis to the problems of returning war veterans led to concern about its effectiveness and the length of treatment.

(vii) Hans Eysenck

This situation led to a classic study conducted by **Hans Eysenck** (pron. EYE-zink) in 1952. He concluded that patients treated by psychoanalysis were no better off than those who had had no treatment at all (defined as being on waiting lists⁷)! Debate has raged about this study ever since and one still finds anti-psychological Christians referring to it! They forget, of course, that

⁷ Which you have to consider as not quite being the same as having had *no* treatment at all. Being on a waiting list will almost certainly raise sufferers' hopes and this promotes healing.



Eysenck was a behaviourist! Re-analysis of his data has shown that his conclusion was exaggerated but the original conclusion led to search for new alternatives and one of those was Behaviour Therapy (BT).

c) Behaviour Therapy's Beginnings

BT had its formal beginnings on three continents simultaneously: in the UK, US and Canada, and in Sth Africa.

(i) UK

As mentioned above, behaviour therapy was developed by Hans Eysenck who collaborated with M. B. Shapiro. The latter emphasised the use of *individual cases* as did Skinner and his associates. But, Shapiro did this independently of B. F. Skinner in the US (see below).

(ii) US and Canada

Foundational work was done by B. F. Skinner in the 1930s on operant conditioning using pigeons and cats exploring different types of reinforcement schedules among other things. Keep in mind that Skinner was a researcher and *not* a therapist. However, one of his students, Ogden Lindsley, studied the possibility of using operant conditioning with psychiatric patients 'whose behaviours seemed aimless' and found that that they 'would consistently perform simple tasks when given meaningful reinforcers' (p. 20). He did not really develop a therapy proper but others built on his work. He may have been the first to use the term, 'behaviour therapy'.

In the late 1950s, Teodoro Ayllon (eye-YONE) in Canada took a patient diagnosed as schizophrenic and using reinforcement taught her to hold a broom in an upright position. A psychiatrist, unaware of the origins of her broom-holding behaviour, interpreted her action as '1. a child that gives her

love and she gives him in return her devotion; 2. a phallic symbol; 3. the sceptre of an omnipotent queen' (p. 21)! These explanations were consistent with the psychoanalytic model but the study demonstrated that a simpler and less complicated explanation for psychiatric symptoms might exist.⁸

Ayllon participated with a Nathan Azrin (one of Skinner's former students) to design 'the first comprehensive token economy at Anna State Hospital in Illinois' (p. 21). Token economies give CTs token reinforcers such as poker chips or points that can then be exchanged for actual reinforcers such as snacks or time watching TV. These economies were found to be successful.

Because of their newness, these economies met with resistance. Staffs at hospitals were not happy to allow patients that they had made progress with to go into such experiments so they tended to send those that they considered 'incurable'. However, this practice only strengthened the credentials of token economies when it was found that so-called incurables were actually benefiting using BT practices.

(iii) Sth Africa

Psychiatrist Joseph Wolpe (pron. volpay), disillusioned with psychoanalysis, developed some behaviour therapies in the 1950s most notably, systematic desensitisation. The latter used an ascending hierarchy of anxiety provoking situations with relaxation such as Jacobson's approach. Wolpe trained Arnold Lazarus and Stanley Rachman. The former sought to go beyond the bounds of a strict behaviourist model as opposed to Wolpe. Rachman emigrated to the UK and worked with Eysenck.

⁸ However, one might ask whether the behaviourist has actually given an explanation or just provided a treatment. The treatment is not to be scorned. Not at all. But, by itself, a successful treatment does not suggest a complete explanation.

(iv) Further Developments

In the 1960s, Albert **Bandura** developed identified observational learning as being a justifiable type of learning. This development introduced the role of cognition/thinking into psychology, a departure from Watson's original conception. Further developments along this **cognitive** path took place through the work of **Albert Ellis**, **Donald Meichenbaum** (MIKE-en-baum), and **Aaron Beck**.

By the 1970s, BT became a major approach to therapy and gradually its practices become established in diverse countries around the world even though its practices were becoming much more eclectic.

3. THEMES AND CHARACTERISTICS

a) Scientific

B/T is committed to a scientific approach involving PRECISION & EVALUATION. [Be aware that BT regards the methods of the mathematical and physical sciences as being superior to all others and therefore, wishes to use these in psychology. This is one form of scientism.] Hence, various elements of therapy (such as target behaviours, 'treatment goals, and assessment and therapy procedures', p. 6) are precisely defined. Among other benefits, this precision enables other therapists to use a strategy if it becomes evident that it is effective.

BT puts great stress upon empirical validation of procedures, on controlled studies of therapies and therefore, puts little reliance on therapists' own experiences and beliefs, testimonials by clients et cetera.

b) Active

BT is an action focussed therapy rather than a talk therapy. CTs are asked to do things to help them to relieve their problems. This stance contrasts sharply with Rogerian and psychodynamic approaches. CTs are given everyday homework assignments to do as an inherent part of therapy.

Homework is carried out in the natural environment where the problem occurs so that hopefully learning will be transferred into that important domain. The term for this is *in vivo*, in life. Can be used in three ways: 1) with the therapist. Not used often because therapist don't usually have the time to do this with clients; 2) with others at home or school giving information and supplying reinforcers; 3) CTs being their own change agents with the guidance of the therapist.

This last application illustrates a later development in BT which saw the **self-control approach** being used. [One can understand why this wasn't popular in the beginning of BT because the philosophy of BT says that there is no self!] Advantages in this are that change is more likely to be maintained; personal empowerment gained; future problems may be more able to be tackled by CT.

c) Present Focus

Assumption is that present problems are influenced by current conditions. This focus contrasts sharply with psychoanalysis. For the B-therapist procedures are developed that will change the current factors affecting the CT's behaviours.

d) Learning Focus

Not all behaviour is learned in every respect because behaviour is also conditioned by heredity and biology. Nevertheless, most behaviour has facets of it that are learned.

Second, BT endeavours to assist CTs to replace old, maladaptive behaviours with new adaptive behaviours. If something was learned it can be unlearned. Therapists are understood to be teachers.

Learning principles and theories of learning are often called on to explain why BT works.

e) Other Characteristics

(i) individualised

Procedures are tailored to suit particular CT. For example, it's unlikely that reinforcers would be relevant to different age groups or even necessarily same age groups.

(ii) stepwise progression

Systematic desensitisation is a good example of this principle. One moves from the easier and simpler to the harder and more complex.

(iii) treatment packages

Often more than one behaviour therapy procedure is used in what can be called a treatment package. This is believed to increase the effectiveness of the therapy.

(iv) brevity

Tends to be brief by comparison with other therapies. Also varied with type of disorder treated. Phobia may take on average 13 sessions, whereas, obsessive-compulsive disorder 46 sessions.

(v) therapist-client relationship in BT

This relationship is important in all types of therapy. In Rogerian therapy, it is considered a necessary and sufficient condition for effectiveness. In BT it is considered necessary but not sufficient. S & W cite the case of anaesthesia in surgery as being analogous to the TH-CT relationship in BT.

(vi) many varieties/techniques

Numbers of these are listed in Corey (1996) so I won't go over them except to note the extensive nature of the techniques available.

REFERENCES

- Corey, G. (1996). *Theory and practice of counseling and psychotherapy*. (5th ed.). Pacific Grove, CA: Brooks/Cole Publishing Co.
- Green, C. D. (2001). *Introduction to: "Psychology as the Behaviorist Views it" John B. Watson (1913). Classics in the History of Psychology*. Available Internet: (<http://psychclassics.yorku.ca/Watson/intro.htm>) (1st July 2007).
- Jones, S. L., & Butman, R. E. (1991). *Modern psychotherapies: A comprehensive Christian appraisal*. Downers Grove, IL: InterVarsity Press.
- Spiegler, M., & Guevremont, D. (2003). *Contemporary behavior therapy* (4 ed.). Belmont, CA: Wadsworth.