



Professor Richard Brown

Module:

Psychological Foundations of Mental Health

Week 5:

Psychological therapies: From behaviour
modification to behaviour therapy

Topic 1

The First Wave – Behavioural Psychotherapy

Part 1 of 3

Topic list



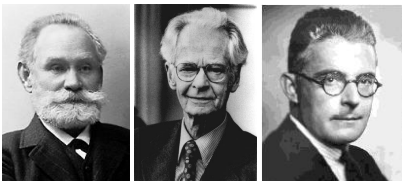
This week, we will be looking at the following topics:

- **Topic 1: The First Wave – Behavioural Psychotherapy**
- Topic 2: The Second Wave - The role of cognition and the emergence of cognitive therapy
- Topic 3: Cognitive therapy in principle and in practice
- Topic 4: Evaluating the efficacy of cognitive therapy

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In this topic...

- *US tradition of behavioural psychotherapy*
- British tradition of behavioural psychotherapy
- Application of psychotherapy approaches

Two Traditions of 20th Century Behavioural Psychotherapy

Their work provided the essential foundation for a whole new behavioural approach to therapy.

Behavioural/first-wave psychotherapy

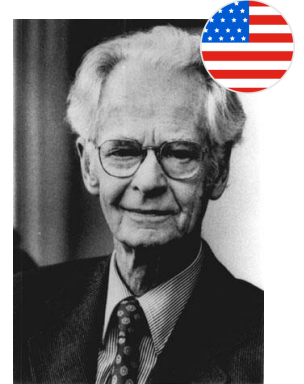
Behaviourism

Learning Theory

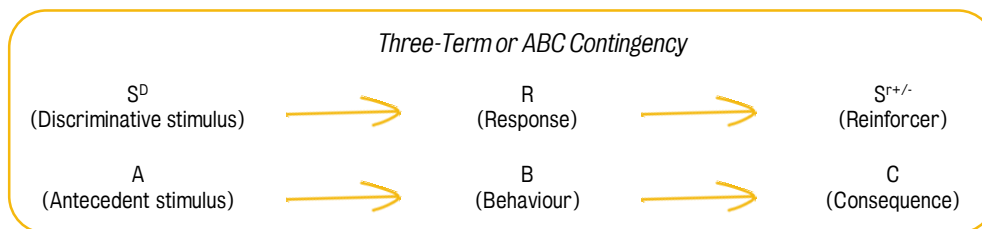


US Tradition

Primary influence	Skinner
Methods	Operant conditioning, reinforcement
Known as	Behaviour modification
Settings	Psychiatric and other long-stay institutions
Targets	Reduction in challenging behaviours (<i>e.g. self harm, aggression, shouting</i>) and encouraging desired behaviours (<i>e.g. feeding, washing</i>)

**B. F. Skinner 1904–1990**

Operant Based Approaches: ABC and Functional Analysis



Specific Stimulus	Behaviour	Specific Consequences
Applied behavioural analysis		Functional Analysis/Assessment
Behaviour has a function		Purpose
Obtain or access something positive		Escape or avoid something negative

Functional Assessment Screening Tool (FAST)

Part I. Social Influences on Behavior

- | | | |
|--|-----|----|
| 1. The behavior usually occurs in your presence or in the presence of others | Yes | No |
| 2. The behavior usually occurs soon after you or others interact with him/her in some way, such as delivering an instruction or reprimand, walking away from (ignoring) the him/her, taking away a "preferred" item, requiring him/her to change activities, talking to someone else in his/her presence, etc. | Yes | No |
| 3. The behavior often is accompanied by other "emotional" responses, such as yelling or crying | Yes | No |
- Complete Part II if you answered "Yes" to item 1, 2, or 3. Skip Part II if you answered "No" to all three items in Part I.*

Part II. Social Reinforcement

- | | | |
|---|-----|----|
| 4. The behavior often occurs when he/she has not received much attention | Yes | No |
| 5. When the behavior occurs, you or others usually respond by interacting with the him/her in some way (e.g., comforting statements, verbal correction or reprimand, response blocking, redirection) | Yes | No |
| 6. (S)he often engages in other annoying behaviors that produce attention | Yes | No |
| 7. (S)he frequently approaches you or others and/or initiates social interaction | Yes | No |
| 8. The behavior rarely occurs when you give him/her lots of attention | Yes | No |
| 9. The behavior often occurs when you take a particular item away from him/her or when you terminate a preferred leisure activity (If "Yes," identify: _____) | Yes | No |
| 10. The behavior often occurs when you inform the person that (s)he cannot have a certain item or cannot engage in a particular activity. (If "Yes," identify: _____) | Yes | No |
| 11. When the behavior occurs, you often respond by giving him/her a specific item, such as a favorite toy, food, or some other item. (If "Yes," identify: _____) | Yes | No |
| 12. (S)he often engages in other annoying behaviors that produce access to preferred items or activities. | Yes | No |
| 13. The behavior rarely occurs during training activities or when you place other types of demands on him/her. (If "Yes," identify the activities: _____ self-care _____ academic _____ work _____ other) | Yes | No |

Adapted from the Florida Center on Self-Injury

Selection of items from "FAST"

Iwata, DeLeon & Roscoe (2013)

ABC Charts (1)

Functional analysis is based on:

Careful direct
observation

Record keeping using
ABC charts

Requires careful training

Antecedent

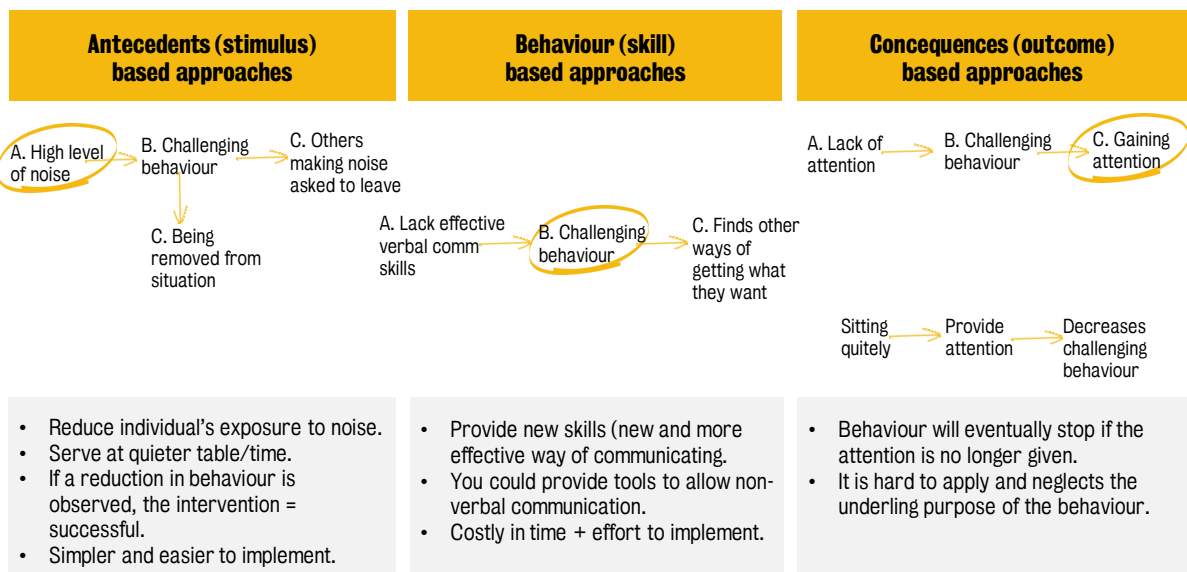
Behaviour

Consequence

ABC Charts (2)

Antecedent	Behaviour	Consequence
Patients in groups at tables waiting for lunch to be served. X not served immediately.	X shouts continuously and attempts to lean across the table to the food.	Care assistant – quickly takes food from other patient and gives to X. X settles and starts to eat.
Patients in group room watching TV. Therapist comes into room to get ready for group session. Turns off TV.	X starts self-harming, hitting head.	Therapist attempts to settle and calm X. Turn on TV. X settles, staff member leaves X to continue setting up.

Modifying Behaviour



An example of the ABC approach

Agitation in dementia:

Aggression

Swearing

Screaming

Refusing to eat

Past: Sedating drugs

Future: Behavioural approaches including functional analysis.

'Tool kit' approach care-home staff can be trained to deliver

Treatment routes for exploring agitation (TREA) (Cohen Mansfield, 2000)

Behaviour

Verbal agitation

Cause?

Possible antecedent

Is it a physical pain or discomfort?

Need for social contact?

Need for stimulation? Boredom?

Hallucinations?

Depressed? Need higher levels of reinforcing stimuli?

Misinterpretation of the situation?

Intervention

New consequence

Medical treatment or nursing intervention

Try social interaction real or taped

Identify meaningful activities

Check vision/hearing try using familiar objects or people

Offer choices provide tasks which allow for control

Improve communication transition to situation cues

Cohen-Mansfield (2000)

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The TREA approach (1)

The TREA approach has been shown to be effective at reducing agitation in clinical trials

12 nursing homes



Allocated the TREA approach



Continued with standard care

10 days of individualised treatment...

...during the **4 hours** of greatest observed agitation.

Cohen-Mansfield et al. (2007)

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The TREA approach (2)

Greater reduction in mean agitation in homes using the TREA methods.

Increased ratings of pleasure

Increased interest in activities

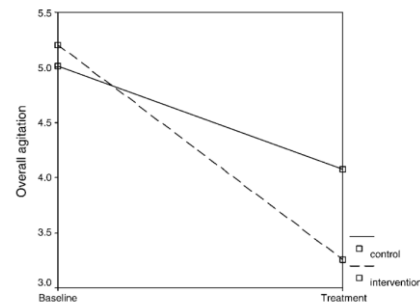


Table 3. Changes in Outcome Variables by Time and by Group: Results of Two-Way Repeated-Measures ANCOVAs

Dependent Variable	Control Group Mean (SD)		Intervention Group Mean (SD)		Interaction F Value
	Baseline	Treatment	Baseline	Treatment	
Primary outcome—observed agitation					
Overall agitation (ABMI)	5.05 (3.36)	4.10 (3.47)	5.17 (3.75)	3.23 (3.16)	10.223*
Secondary outcome—affect					
Pleasure	1.20 (.24)	1.28 (.34)	1.30 (.30)	1.65 (.49)	24.216**
Interest	2.56 (.66)	2.41 (.75)	2.61 (.68)	2.89 (.70)	20.662**
Negative affect	1.12 (.16)	1.11 (.19)	1.12 (.17)	1.08 (.10)	2.173

Notes: * $p \leq .01$; ** $p \leq .001$.

ANCOVA = analysis of covariance; ABMI = Agitation Behavior Mapping Instrument; SD = standard deviation.

Cohen-Mansfield et al. (2007)

Finding a reinforcer – using Premack's principle (1)

Operant approaches can struggle, if...

No effective reinforcer, the person may refuse a typical reinforcer, or it may not be valued.

Reinforcers can only be considered such if behaviour changes as a result of their pairing with a particular response.

Premack's Principle.

A behaviour, chosen frequently, is itself, reinforcing.

Frequently chosen behaviour can be used as a reinforcer to alter another behaviour.

The basic principle is widely used without us realising:

"You have to eat your cabbage before you can watch TV."

Using high frequency preferred behaviour...



...to increase low frequency less preferred behaviour.



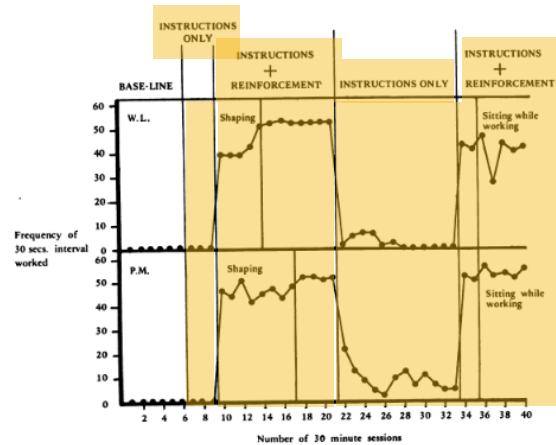
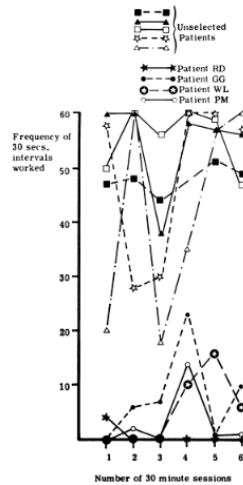
Finding a reinforcer – using Premack's principle (2)

Extreme inactivity
common in
Schizophrenia

Negative symptoms

Application of
Premack's principle

Useful when reinforcers
hard to identify



William Mitchell & Bertram Stoffelmayr (1975)

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Token Economies (1)



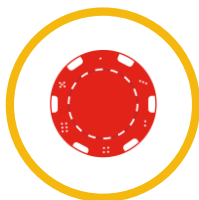
Contingency management based on the principle of secondary reinforcement

What is money?

- A piece of paper or metal
- Figures on a bank statement
- No intrinsic value
- Can motivate and reinforce behaviour

Secondary reinforcers can be considered tokens

Allow us to acquire an outcome and achieve a valued purpose



Benefits of tokens as reinforcers

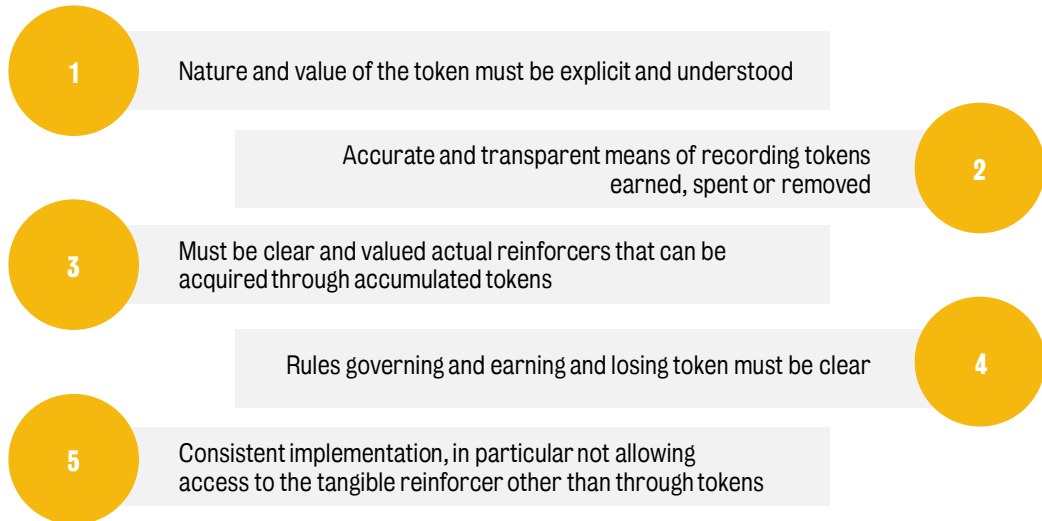
- Easier to control and manage
- Easier to provide at time of behaviour
- Easily scalable
- Resistant to satiety effect
- Can be removed as well as awarded (response cost)

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Token Economies (2)

Five basic components



An example of token economy in mental health settings (1)

Gained popularity from the 1970s

Learning disabilities

Neurodevelopment disorders

Addiction & substance misuse

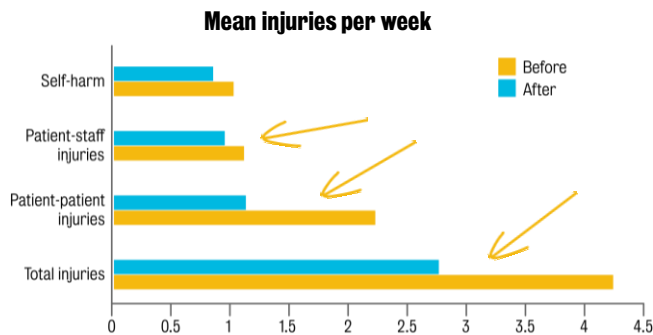
Reviewed the use of token economies in long-stay psychiatric hospitals.

Token systems were generally successful in increasing adaptive behaviour

An example of token economy in mental health settings (2)

Assaults by patients can be a significant problem in acute hospitals with extremely ill/distressed people with severe mental health problems

Assaults 12 months before token system v 2 year after introduction



- Ink stamps on a record sheet or poker chips
- Could be traded for leave passes, extra smoking breaks or trips to the cinema
- Awarded for: being on time, improved self care, involvement in social activities
- Removed for: smoking in the room, violence against another person or property

LePage et al. (2003)

US operant tradition



Over the decades their use has been confined to rather specific setting typically as part of a wider intervention strategy.

At the same time, controversial approaches such as aversion therapy – that used punishment to change behaviour – have effectively died out.

Person centred approach to care

The behaviour change being sought is something that is for the patient's own benefit:

- Improving the quality of their life.
- Reducing something that is causing them harm or potential harm.
- The focus is on the person, not the behaviour.