

## Chapter 4 Cognitive Behavioral Approaches




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## Rational Emotive Behavioral Therapy




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## Rational Emotive Behavioral Therapy (REBT)

REBT (1955) Albert Ellis

- Action & Result Oriented
- Teaches how to identify self-defeating thoughts
- Replaces thoughts w/ life enhancing ones

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## ABC's of RET



A B C's of personality formation

A = activating event

B = beliefs/ behaviors

C = consequences

D = disputing irrational beliefs

E = effects of challenging those beliefs

F = feelings

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## Teachings

- How to use the ABC model
- Discriminate between rational and irrational beliefs
- Distinguishing healthy negative emotions from unhealthy emotions
- Utilize a variety of means modifying the irrational beliefs to support their emotional & behavioral problems

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## Cognitive Behavioral & Emotive Techniques

- Actively disputing irrational beliefs throughout the day
- Bibliotherapy
- Role Playing new ways of living
- Imagery Exercises
- Practicing new behaviors through traditional behavioral techniques
  - Conditioning
  - Modeling
  - Assertiveness training

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## Cognitive Behavioral & Emotive Techniques

- Homework assignments
- Challenge "Mustabotories"
- Brief 10-12 sessions
- Action oriented
- Quickly identify faulty dysfunctional beliefs
- Give skills to facilitate change

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## Cognitive Therapy




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## Techniques

- Changes clients inaccurate perception of self & environment
- Uncover faulty beliefs
- Believe thoughts can be considered behaviors, which can be modified
- Dispute thoughts
- Modify & experiment with new behaviors
- Identify cognitive schemas
- Help uncover the moment to moment automatic thoughts that fuel the continuation of the schema
- Helps client to discover cognitive errors

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## Techniques

- Develops therapeutic alliance by careful listening & collaborating
- Develops plan for practicing new behaviors and thoughts
- Focuses on coping
- Homework assignments

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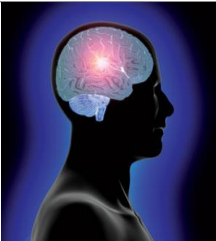
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## Behavioral Therapy




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## Learning

- I. Classical Conditioning (Pavlovian or Respondent Conditioning)
- II. Operant Conditioning (Instrumental Conditioning)
- III. Cognitive Learning ( Modeling or Social Learning Theory)

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# Classical Conditioning

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## 1. Classical Conditioning

- A systematic procedure through which associations and responses to specific stimuli are learned
  - Stimulus: An event
  - Response: Organisms reaction to the stimulus
- One of the simplest forms of learning

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## Basics of Classical Conditioning

Reflexes: An automatic behavior occurs involuntarily in response to a stimulus

- Occurs without prior learning
- Examples:
  - Knee jerk reflex
  - Salivating when food is in the mouth
  - Flinching in response to a loud sound

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## Ivan Pavlov (1849-1936)

Studied digestion in dogs

Normally, dogs salivate when food is placed in their mouths

Noticed that eventually the dogs began to salivate *before* they got the food

Pavlov started studying how this happened

Performed the 1<sup>st</sup> experiment on classical conditioning (1927)

Won the Noble Prize




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## Classical Conditioning

An originally neutral stimulus through repeated pairings with a stimulus that

naturally produces a response, comes to elicit a similar or identical response

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## Terms

### 1. Unconditioned Stimulus (US)

- The stimulus that automatically produces a response
- Unlearned
- E.g., Food

### 2. Unconditioned Response (UR)

- Automatic, involuntary response to the unconditioned stimulus
- E.g., Salivation (reflexive behavior)

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## Terms

### 3. Conditioned Stimulus (CS)

- A neutral stimulus that is repeatedly presented with the unconditioned stimulus
- E.g., Bell

### 4. Conditioned Response (CR)

- The response to the conditioned stimulus
- E.g., Salivation

## Classical Conditioning

- Conditioning does not occur immediately
- Occurs gradually over many repeated pairings of the conditioned and unconditioned stimuli
- This process, through which the conditioned stimulus becomes associated with a learned response is called an acquisition process

## Procedure

At first:

Unconditioned Stimulus: Food → Unconditioned Response: Salivation

Neutral Stimulus: BELL → Response: NOTHING

## Procedure



During training:

Conditioned Stimulus: BELL → Unconditioned Stimulus: Food → Unconditioned Response: Salivation

After training:

Conditioned Stimulus: BELL → Conditioned Response: Salivation

## Classical Conditioning in Humans

### Little Albert



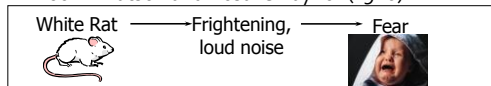
This type of learning is probably the source for most fear and anxiety in children

Today, unethical because Watson and Rayer did not attempt to undo effects of Little Albert's conditioning

## Classical Conditioning in Humans

### Little Albert

– John Watson and Rosalie Raynor (1920)

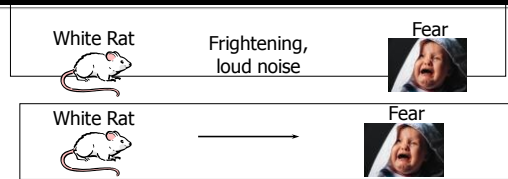


– After many pairings:





## Little Albert



What was the US?

- Noise

What was the UR?

- Fear in response to the loud noise

What was the CS?

- White Rat

What was the CR?

- Fear in response to the white rat

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## Extinction

Withholding the UC and presenting the CS alone

This procedure gradually decreases the probability that the CR will occur

UC must be paired with a NS close enough in time for the 2 stimuli to become associated

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## Extinction

Example:

Little Albert repeatedly sees the white rat without hearing the loud noise

- He will eventually stop fearing the white rat
- His fear response is extinguished

Conditioned responses do not always stay extinguished, however

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## Spontaneous Recovery

- When an extinguished conditioned response reappears
- Example:
  - After not seeing a white rat for 2 days, Little Albert sees one and feels afraid
- Demonstrates learned response not completely forgotten
- However, the response is usually weaker than it was before extinction occurred

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## Stimulus Generalization

- When a conditioned response occurs in response to a stimulus similar to the conditioned stimulus
- Example: Little Albert also shows fear to a white rabbit



- Probably explains how some phobias develop

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## Stimulus Generalization

An organism learns to respond only to the specific conditioned stimulus

- Example: Little Albert does not show fear to a brown rat

When discrimination is difficult, frustration and aggression result

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## Stimulus Discrimination

- Process by which an organism learns to respond selectively to a specific stimulus but not to another similar stimulus

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## Taste Aversion



- Aka: The Garcia Effect
  - Classical conditioning avoidance of particular foods/beverages because of learned association with nausea
  - May develop after a single trial

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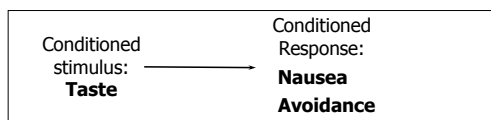
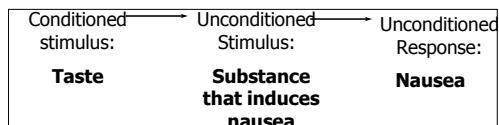
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## How is this Classical Conditioning?




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## The Garcia Effect Findings

- Conditioned taste aversion could occur even if nausea was induced several hours after food or drink was consumed
- Avoidance responses do not develop for other stimuli- lights, sound
- Implications for chemotherapy patients

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## Systematic Desensitization

- Unlearning fear through extinction
- Therapy technique in which clients are placed in comfortable (non fear-provoking) situations and are taught deep relaxation techniques
- Fear-provoking stimulus is then gradually introduced, so that anxiety and fear response is extinguished

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## Operant Conditioning

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## II. Operant Conditioning

- Learning in which the likelihood that a behavior will recur is affected by the delivery of reinforcement or punishment as a consequence of behavior
- Focuses on the consequences of behavior
- Sees the organism as actively operating on the environment
- Differences from classical conditioning:
  - Conditioned behavior is voluntary, not reflexive
  - Consequence follows, rather than coexisting with or preceding, a behavior

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## E. L. Thorndike (1874 -1949)

- Placed hungry cats into "puzzle" boxes
- Cats could escape and receive food if they pressed a lever
- Cats quickly learned to perform this instrumental behavior




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## Skinner Box

Much of the research on operant conditioning is performed with a Skinner box (operant chamber)

- A box containing a responding mechanism (a lever or bar that an animal can press)
- A consequence is delivered to the animal following a desired response

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## The Skinner Box

### Typical Procedure

- Hungry animal is placed in the Skinner box
- The animal wanders around randomly emitting behaviors (E.g., sniffing, walking back and forth, chewing, etc.)
- As soon as the animal touches the lever, a food pellet is delivered
- The animal eventually learns that the consequence of pressing the lever is receiving food

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## Shaping

Teaching an organism a complex response often involves **shaping**

- The selective reinforcement of behaviors that gradually approach (approximate) a desired response
- Sometimes called the “method of successive approximations”

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## B.F. Skinner (1904-1990)

Like Thorndike, acknowledged that behavior happens first, then a consequence follows

Behavior can result in 1 of 3 possible consequences:

- Behavior is reinforced, which increases the probability of it's recurrence
- Behavior punished, which decreases the probability of it's recurrence
- Behavior is ignored, which has no effect




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## Positive Reinforcement

Think of it as adding something in order to increase a response. For example, adding a treat will increase the response of sitting; adding praise will increase the chances of your child cleaning his or her room. The most common types of positive reinforcement or praise and rewards, and most of us have experienced this as both the giver and receiver.

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## Negative Reinforcement

Think of negative reinforcement as taking something negative away in order to increase a response. Imagine a teenager who is nagged by his mother to take out the garbage week after week. After complaining to his friends about the nagging, he finally one day performs the task and to his amazement, the nagging stops. The elimination of this negative stimulus is reinforcing and will likely increase the chances that he will take out the garbage next week.

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## Punishment

Any consequence of behavior that decreases the probability the behavior will recur

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## Positive Punishment

Undesirable stimulus is presented to an organism

- Example:
  - Getting yelled at for hitting your sister

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## Negative Punishment

Desirable stimulus is removed

- Example:
  - Losing your car after getting into a wreck

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## Limitations of Punishment

Physical punishments can lead to aggression

- Children can also learn to imitate aggression from physical punishments
- Children may demonstrate aggression toward their punisher or, more generally, to others
- Physical punishment is related to delinquency

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## Limitations of Punishment

- Ignoring maladaptive behaviors can be just as effective as punishment
- Disciplinary techniques that give a child a sense of control tend to be most effective
  - Teach the child how to avoid punishment in the future
- Inconsistent punishment causes confusion about what behaviors are appropriate
  - Can lead to **learned helplessness** (doing nothing)
    - One explanation for depression

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## Punishment PLUS Reinforcement

An effective way of controlling behavior is to punish the undesirable behavior while reinforcing a desirable one

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## Cognitive Learning

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### III. Cognitive Learning

- Observational Learning, Modeling, Social Learning Theory
- Learning that occurs as a result of watching others
  - Albert Bandura
    - New responses are learned by observing the behavior of a model
    - The behavior is then imitated

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### Bandura

- Showed that children played more aggressively after observing films with aggressive content
- Most aggressive children had seen an animated film
  - Observational learning can occur without being reinforced

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### TECHNIQUES

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## Modeling

- Client observes behaviors in clinical setting that are practiced at home, community etc.
- Ex: Assertiveness training

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## Operant Conditioning

- Extinguishing unwanted behavior and rewarding desirable behaviors

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## Relaxation

- Learning how to calm self in increments to decrease anxiety or other unwanted feelings

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## Systematic Desensitization

- Hierarchy used to view feared object with relaxation techniques to reduce the fear response

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## Flooding & Implosion

- Both involve exposure to extensive amounts of fearful stimuli with the assumption that prolonged exposure will extinguish the feared response

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## Self Management Techniques

- Behavioral techniques are learned & client practice on their own

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