# **Behavior therapy- Systematic Desensitization**



COURSE: CLINICAL ASSESSMENT AND INTERVENTION Paper VII (PGDCP; SEM II); Unit V

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#### **BEHAVIOR THERAPY**

Behavior therapy is the systematic application of principles of learning to the analysis and treatment of disorders of behavior. The rationale adopted by practioner of behavior therapy is that neurotic behavior and other types of disorders are predominantly acquired and therefore should be subject to established laws of learning. Knowledge regarding the learning process concerns not only the acquisition of new behavior patterns but the reduction or elimination of existing behavior patterns.

Acc. To Reber (1987): Behavior therapy is that type of psychotherapy that seeks to change maladaptive or abnormal behavior patterns by the use of extension and inhibitory process and positive and negative reinforces in classical and operant conditioning situation.

Thus behavior theorists seeks principles of learning, the process by which these behaviors change in response to the environment.

Many learned behaviors are constructive and adaptive. They help people to cope with daily challenges and to lead happy, productive lives. However, abnormal and undesirable behaviors also can be learned.

behaviorists has pointed three principles of conditioning through which a behavior can be learned:

□ classical conditioning,

Doperant conditioning(or instrumental) conditioning, and

☐modeling.

In behavior therapy abnormal behaviors are modified by means of conditioning.

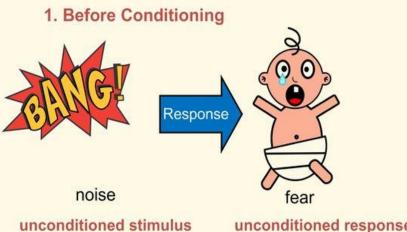
### **CLASSICAL CONDITIONING**

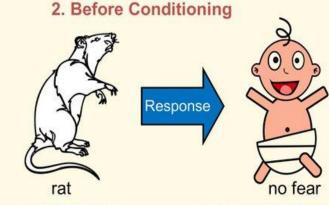
Classical conditioning is a process of learning by temporal association. When two events repeatedly occur close together in time, they become fused in a person's mind, and before long the person responds in the same way to both events. If one event elicits a response of joy, the other brings joy as well, if one event brings feeling of relief, so does the other.

According to behaviorists, many human behavior are acquired through classical conditioning.

The classical conditioning of abnormal behavior- Abnormal behaviors, too can be acquired by classical conditioning.

## The Behavioural Approach to explaining **Phobias - Classical Conditioning**

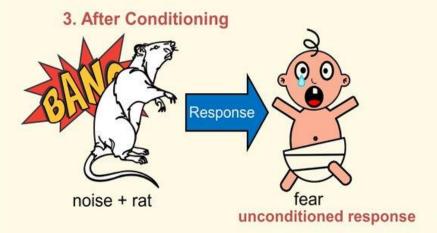


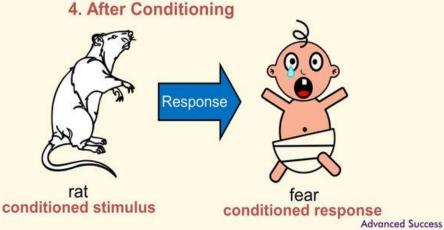


unconditioned response

neutral stimulus

no conditioned response





# Dentist Phobia



#### Classical Conditioning – phobia develops

Before Conditioning	NS UCS pain from injection	<ul><li>→ No Response</li><li>→ UCR</li><li>fear: due to pain from injection</li></ul>
During	NS + UCS	→ UCR
Conditioning	dentist pain	fear: due to pain from injection
After	CS	→ CR
Conditioning	visit to dentist	fear: due to visit to dentist

#### Operant conditioning – phobia maintained

The avoidance of the unpleasant injection acts as a negative reinforcer the strengthens the likely hood of that behaviour being repeated.

#### **Exposure-based Treatments (Pavlovian Conditioning Methods)**

The assumption behind behavior therapies based on Pavlovian conditioning is that abnormal behavior is due to inappropriate classically conditioned emotions, especially fear and anxiety. These emotions then motivate avoidance and other behaviors that are rewarded by anxiety reductions. Since the Pavlovian methods share the feature of exposing the client in client in various ways to the feared object, these methods are now called expose-based treatment. It is also argued that these methods do not work because of classical conditioning but rather, they work because they increase the individual's sense of coping and mastering.

# **Treatment based on Classical Conditioning**

Behavioral therapist first aims to identify the behaviors that are causing the client's problems. It then tries to manipulate and replace them with more appropriate ones. The therapist's attitude towards the client is that of teacher rather than healer. Classical conditioning treatments are intended to change clients' dysfunctional reactions to stimuli.

## **Technique**

>Systematic desensitization

# Techniques of behavior therapy

#### Desensitization

#### SYSTEMATIC DESENSITIZATION

This is the best known and most widely used application of Wolpe's reciprocal inhibition principle for the treatment of phobic reactions. It is based on the simple principle that one cannot be both relaxed and anxious at the same time. Consequently, if increasingly more anxiety-provoking stimuli are experienced while the patient is in a deeply relaxed state, the relaxation response will be substituted for the anxiety response. He will thus be desensitized to the original anxiety-inducing stimuli.

Therapy starts with one or a few interviews and the administration of some personality questionnaires, mainly intended to discover the patient's major sources of anxiety. Before desensitization proper begins, the patient is first trained in relaxation and an anxiety hierarchy is created. The patient is taught the methods of progressive deep relaxation. In the desensitization sessions, the patient is first asked to visualize the least intense item and simultaneously to relax completely. The therapist describes the scene and for some ten or fifteen seconds the patient imagines himself in it. As long as the tension produced is less strong than the relaxation response, relaxation will dominate. Thus a patient imagines the scene a number of times, the amount of anxiety is successfully reduced as no ill effects are experienced. After some minutes of relaxation, the therapist moves to the next disturbed stimulus on the hierarchy, and the procedure is repeated. If at any point, the image produces too great rush of anxiety, the therapist moves back to the lower level, until the patient is ready to start upward again. After several sessions, the patient should be able to visualize stimuli at the highest level without anxiety being aroused.

chology Notes Headquarter Step 1: Build a hierarchy of the anxiety-arousing stimuli including the degree of fear experienced from 5 to 100 The client lists all anxiety arousing stimuli for example-1. Looking at a spider. 2. Holding a spider in ands. Step 2: Train the client in deep muscle relaxation Relaxation techniques taught to client Step 3: Client works through hierarchy while using relaxation techniques Talks about anxiety of spiders and practices relaxation techniques Step 4: (used in some cases) Client confronts real fear Client is presented with a real spider and holds it in his/her hands

#### Artifact #2

This shows the steps that should be taken when trying to help someone over come a fear, also known as systematic desensitization.



#### SYSTEMATIC DESENSITIZATION

Systematic desensitization is indicated in the cases of clearly identifiable anxiety provoking stimulus, such as

- **Phobias**
- >OCD
- > Sexual Disorders
- **➢Other Anxiety Disorders**

## Procedure

Systematic desensitization consists of three steps

- > Relaxation Training
- **→** Hierarchy construction
- > Desensitization of stimulus

# **Relaxation Training**

This is the first step of systematic desensitization. Relaxation produces physiological effects opposite to those of anxiety. The signs of relation are

- a. Physiological sign- Slow heart rate, increased peripheral blood flow, increased peripheral temperature, pupil constriction, neuromuscular stability, decreased oxygen consumption.
- b. Cognition signs- altered state of consciousness, heightened concentration on single mental image.
- c. Behavior change- lack of attention and concern for the environmental stimuli, no verbal interaction, no voluntary change in the position.

# Relaxation

## **Techniques** used for relaxation are

- a. Jacobson progressive muscle relation (JPMR)
- --Most often used relaxation training, developed by the psychiatrist Edmund Jacobson.
- --In this client must learn to relax through deep muscle relaxation training.
- --Patients relax major muscle group in a fixed order, beginning with the small muscle group of the feet and working cephal head or vice-versa.

#### **Procedure**

□ Make the patient in a comfortable position
□ Provide light or soft music/ pleasant visual cues/quiet room
□ Give a brief explanation about the progressive muscle relaxation.
□ Instruct the client to tense each muscle group approximately for 10 sec.
□ Explain the tension of the muscle and uncomfortable the body part feels.
□ Ask the client to relax each muscle.
□ Make the client feel difference between both the situation.

## **Relaxation Techniques**

## b. Hypnosis

Some clinicians use hypnosis to facilitate the relaxation.

## c. Mental imaginary

It is relaxation method in which patient are instructed to image themselves in a place associated with the pleasant relaxed memories.

Such images allow the clients to enter a relaxed state of experience, the relaxation response.

# **Hierarchy Construction**

when constructing a hierarchy, clinician determine all the conditions that elicit anxiety, and then client create a hierarchy list consisting of scenes in order of increasing anxiety.

#### Example

Behavior	Fear rating
Think about a spider.	10
Look at a photo of a spider.	25
Look at a real spider in a closed box.	50
Hold the box with the spider.	60
Let a spider crawl on your desk.	70
Let a spider crawl on your shoe.	80
Let a spider crawl on your pants leg.	90
Let a spider crawl on your sleeve.	95
Let a spider crawl on your bare arm.	100

## **Desensitization**

Desensitization of the stimulus is the final step, patients proceed systematically through the list from the least to the most anxiety provoking scene while in deeply relaxed state.

Under the guidance of the therapist the client begins the item on the list that causes minimal fear and look at it, thinks about it, or actually confronts it, all while remaining in a relaxed state.

The idea is that the phobic object or the situation is conditioned stimulus that the client has learned to fear because it was originally paired with a real fearful stimulus by pairing the old conditioned stimulus a stimulus with a new relaxation response that is compatible with the emotions and the physical arousal associated with the fear, the person's fear is reduced and relieved the person then proceeds to the next item on the hierarchy until the phobia is done.

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Google images.

# Thank you for your Attention