



Phobias

1. Symptoms

What are the symptoms?

2. Mechanism

Why does it happen?

3. Treatment

How is it treated?

Types of Phobia

1. Phobia about physical space

Acrophobia, claustrophobia,
agoraphobia

2. Phobia about substances

verminophobia ≙ misophobia
aichmophobia, zoophobia

3. Phobia about interpersonal situations

Social phobia

Phobias in DSM-IV

Specific Phobia

Animals-related (Animals, insects)

Natural environment-related (Storm, height, water)

Blood-, injection-, lesion-related

Situation-related (vehicles, elevator, airplane,
closed space)

Others (diseases)

Social Phobia

Agoraphobia



Duality of Acrophobia

Maladaptive aspect

fear of heights, unable to work on high floors

Adaptive aspect

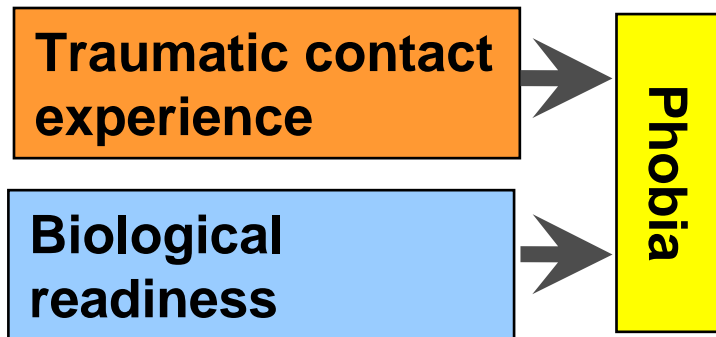
without acrophobia, one cannot live (Acrophobia is necessary)

Acrophobia per-se is not abnormal.

Uncontrollable acrophobia is a problem.



Predisposing Stress Model for Phobia





Watson's Learning Theory of Phobia

Little Albert experiment

- 1. Albert plays with a white rabbit.**
- 2. Show him a white rat with a big hammering noise**
- 3. Albert tries to run away when he sees a white rat.**
- 4. Albert tries to run away upon seeing a white rabbit or a white-bearded Santa Claus' face**
(Phobia is a result of inappropriate learning)



Pavlov's Classical Conditioning Paradigm

1. Eat ume (Japanese apricot) (UCS) => salivation (UCR)
2. Eat ume (UCS) => salivation (UCR)
Look at ume (CS)
3. Look at ume (CS) => salivation (CR)

UnConditioned

Conditioned

Stimulus

Response

Little Albert's Learning of Fear

1. Loud sound (UCS) => Fear response (UCR)
2. Loud sound (UCS) => Fear response (UCR)
White rat (CS)
3. White rat (CS) => Fear response (CR)

Children's fear of doctor's white coat

“Loud sound” => “Injection”

“White rat” => “Doctor's white coat”



● Biological Readiness (Seligman 1970)

	Learning theory Learned fear	Biological readiness Close to innate fear (?)
1. Target	Arbitrary (Anything could be a target)	Limited (No fear of hammer)
2. Presentation	Necessary several times	Once
3. Resistance to extinction	Low (easily cured)	High (difficult to cure)
4. Mechanism	Classical conditioning Unprepared learning	Prepared learning



The Case of Peter (age 2) Jones **Phobia about white rats and rabbits**

1. Classical conditioning

Shown him a rabbit four meters away from him while giving him snacks and hugging him. Once he got used to it, let the rabbit come a meter closer.

2. Operant Conditioning: The Experimenter praised Peter when he approached the rabbit.

3. Observational Learning: Showed him other children playing with the rabbit with no fear.

As a result, Peter gradually became able to be close to the rabbit, and eventually to play with it, touching it with his hands.



Systematic Desensitization Therapy (Wolpe)

1. Creation of Anxiety Hierarchy
2. Muscle relaxation training (Jacobson method)

Arms, face, shoulders, abdomen,
legs, whole body,
and muscle relaxation

3. Systematic Desensitization

Relax the whole body

Imagine slightly anxious situations

-> toward more anxious situations

Anxiety decreases over a few weeks
or months

Anxiety in real situations decreases



Virtual Reality Exposure Method



(Tokyo Cyber Clinic)

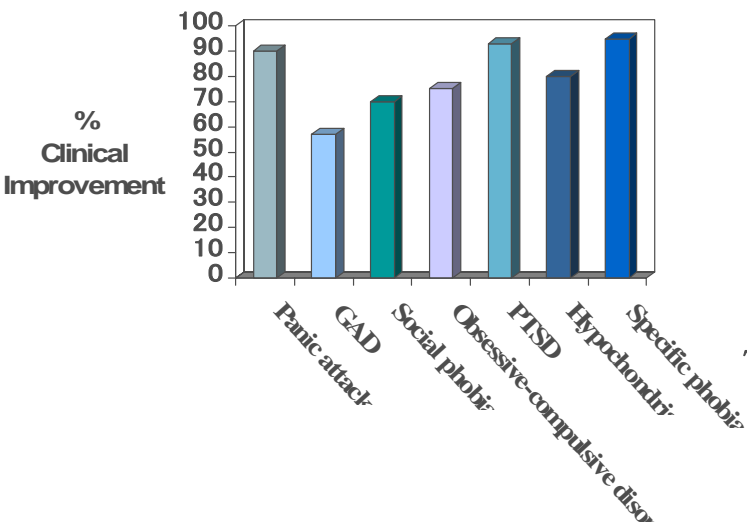


Anxiety Hierarchy

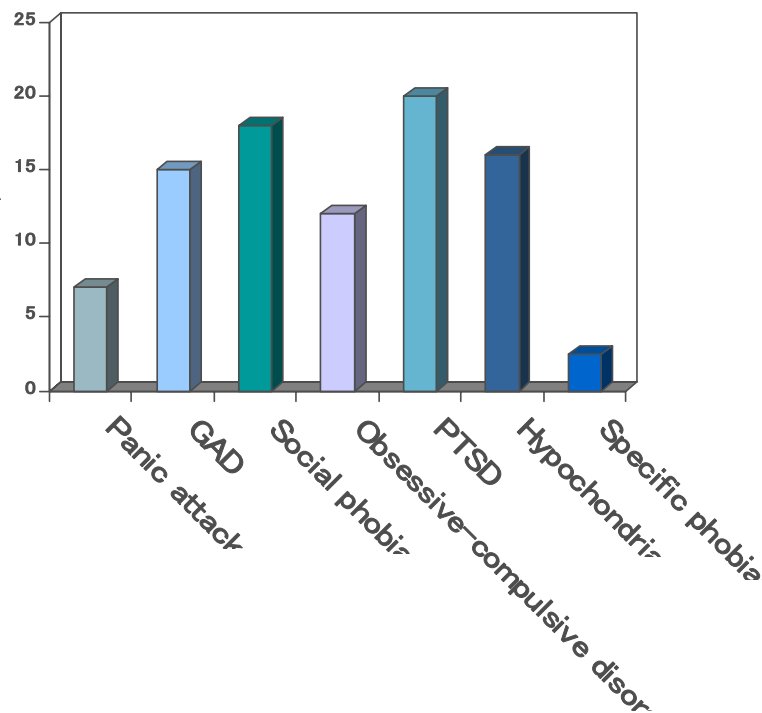
Image of Anxious Situation	Before	Early	Late	After
	Treatment	Stage	Stage	Treatment
A. Hear the word “injection”	20	0	0	0
B. Hear a story from somebody about injection	30	0	0	0
C. Look at a picture of a syringe	50	10	0	0
D. Look at a picture of a person getting an injection	60	30	0	0
E. Watch somebody getting an injection	70	40	0	0
F. Look at a syringe	80	40	10	0
G. A syringe comes close to the patient’s mouth	90	50	20	0
H. Get an injection	100	60	40	0



Effects of Cognitive Behavioral Therapy for Anxiety Disorder



Time required for treatment



Time required for the Cognitive Behavioral Therapy for Anxiety Disorder

Method-Symptom Interaction (Shapiro & Shapiro (1982))

