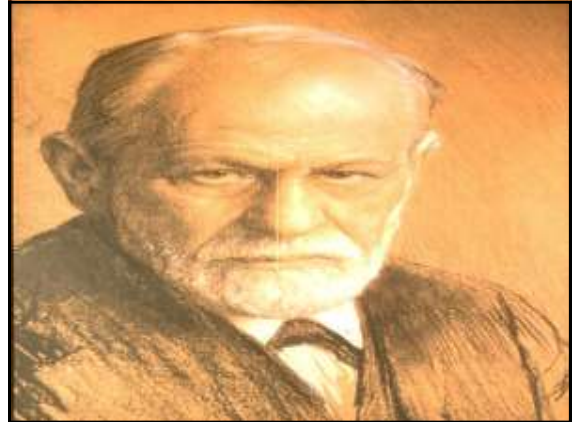


Anxiety

*Fear Lives in the Hearts of Men and Women and
Danger is a Ubiquitous Human Experience*



Freud's Attempt at Definition

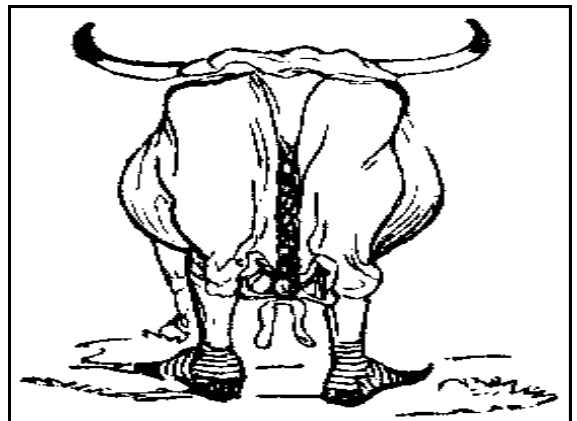
- "The deflection of somatic sexual excitation from the psychical field, and in an abnormal use of it, due to this deflection" 1895
- "Something highly composite that includes particular motor innervations or discharges and certain feelings" 1917
- "A certain ambiguity and indefiniteness in the term will not have escaped you" 1917

Other Attempts

- Sidman (1964)
 - "Anxiety is almost impossible to define"
- Levitt (1967)
 - "The range of possible definitions is, in principle, unlimited and in practice, very broad"
- McNaughton (1989)
 - "Anxiety is but one label for many processes and no agreement as to its definition exists (or is likely to exist)"
- Harre & Lamb (1986); Wolman, 1973); Campbell (1996); Kutash (1996)
 - Positions differ not only across definitions but actually within them
- Barlow (2002)

My Definition

- "Negatively reinforced behavior emitted in the presence of events that evoke or elicit the biology of stress or fear but that pose minimal risk of harm."



Ubiquitous in Psychology, Psychiatry, and Culture at Large

- Central to all psychopathology (Freud)
- 12 Distinct diagnoses (APA)
- Eponymous journals (e.g., *Anxiety*, *Journal of Anxiety*)
- Lifetime prevalence 29%
- 126,151 published documents as of 2012
- Central to daily human life

Obstacles to Complete Understanding

- Imprecision of term
- Metaphorical basis of term
- Ontological problems with term

Metaphorical Basis of the Term ("As if")

- Skeat (1963); Sarbin (1964; 1968)
 - Anguissie—old French
 - To choke
- OED (1971)
 - Anxius—Latin—to strangle
- American Heritage (1992)
 - Angh—Old English—tight or constricted



Ontological Confusion

- Category Error
- Circular Reification



Anxiety as "Category"

- Specific members
 - Conditioned suppression
 - Conditioned activation
- General members
 - Mental events
 - Physiological events
 - Motoric movements



Anxiety

- Fear based avoidance of objects, activities or events that are not inherently harmful.
- Synonyms: Fear, apprehension, uncertainty, uneasiness, foreboding, distress, worry, disquiet, dread, jitters, heebie-jeebies, fretfulness, sitting on pins and needles, cold sweat, nervousness
- For an anxiety disorder—add impairment

Signs of Maladaptive Anxiety

- Excessive fear-based avoidance of benign objects or events
- Excessive emotional reaction
- Excessive need for control
- Worst case scenarioizing
- Unresponsive to reason
- High frequency of episodes



Downside of Avoidance

1. Reinforces notions of danger and prevents learning acceptance
2. Reduces ability to face other challenges
3. Reduces confidence which in turn reduces ability to face other challenges
4. Shrinks life



Select Anxiety Disorders

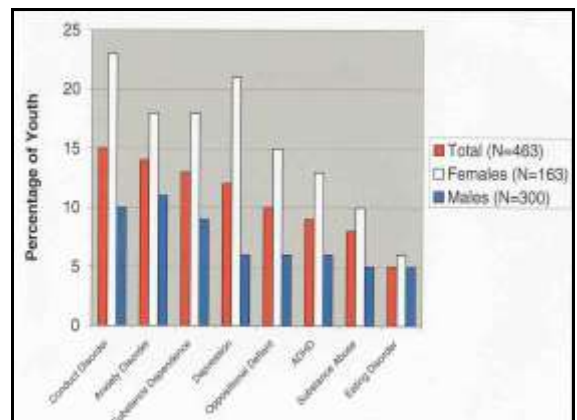
- Separation-Anxiety Disorder
- Specific Phobia
- Social Phobia
- Panic Disorder
- Agoraphobia
- Generalized Anxiety Disorder
- Obsessive-Compulsive Disorder
- Post-Traumatic Stress Disorder

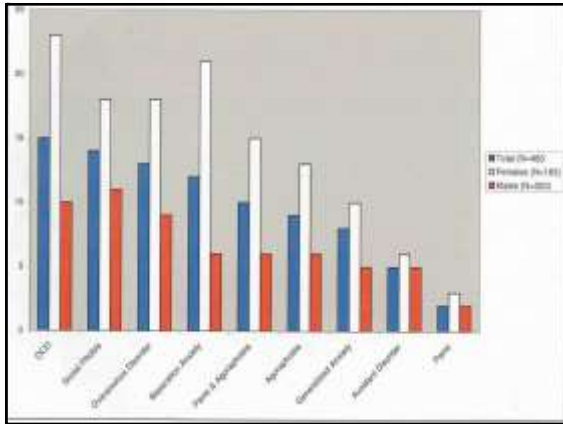


The Computerized Diagnostic Interview Schedule for Children (C-DISC)

Boys Town

The Computerized Diagnostic Interview Schedule for Children (C-DISC)





Effective Treatment

- Exposure and response prevention
- Escape extinction
- Systematic desensitization
- Behavioral and emotional inoculation



Effective Treatment

Multiple Examples









Effective Treatment

Actual Examples

Obsessive Compulsive Disorder and Tourette's Syndrome

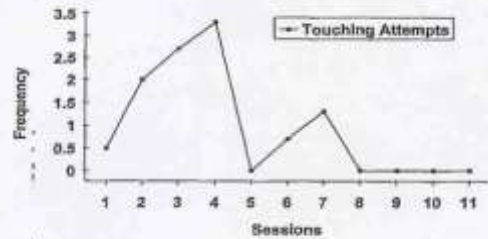


Fig. 1 Touching attempts across clinic sessions.

Ditto

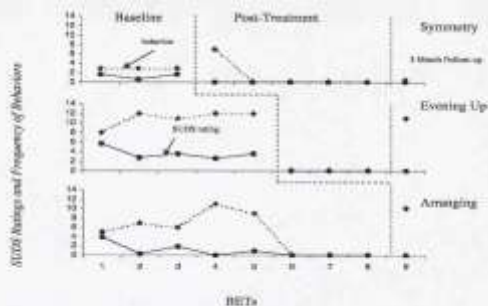
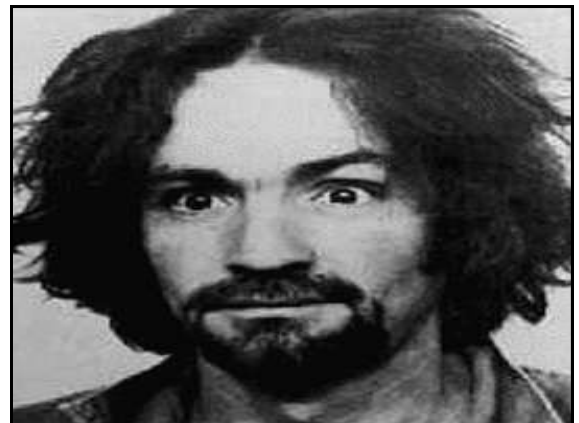


Figure 1. Disorder ratings and frequency of behavior during home behavioral exposure tests.



Clinical Description

- Above average IQ
- Suspicious of adults
- Anxious in all social situations, especially school
- Pervasive fear of public failure
- "Habitually resorts to avoidance or escape strategies to avoid embarrassment"
- Very controlling



Social Phobia and Conduct Disorder

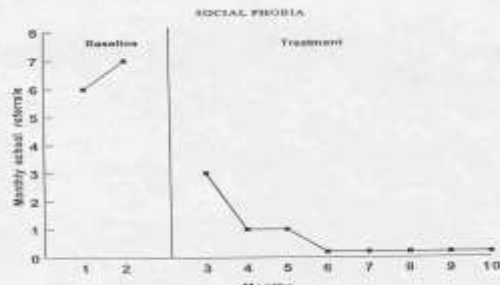


Figure 1. Monthly school absences before and after treatment.

Generalized Anxiety and Habit Disorder

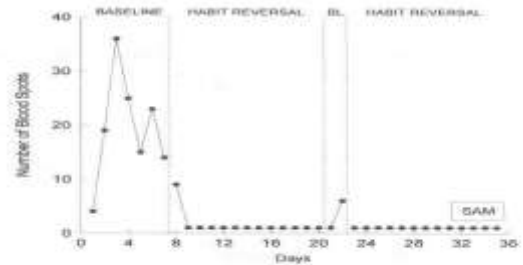
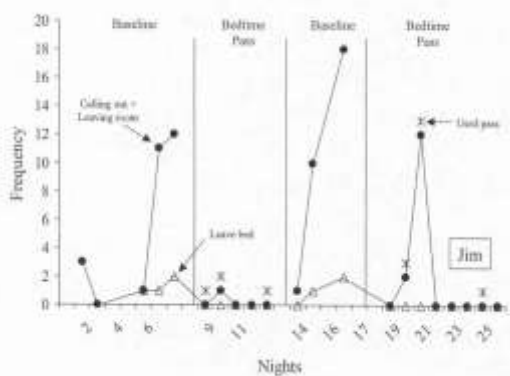
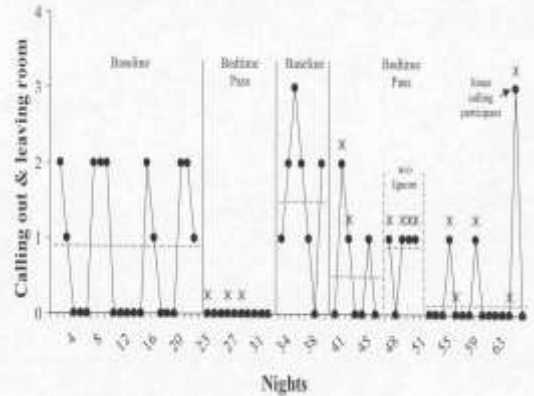
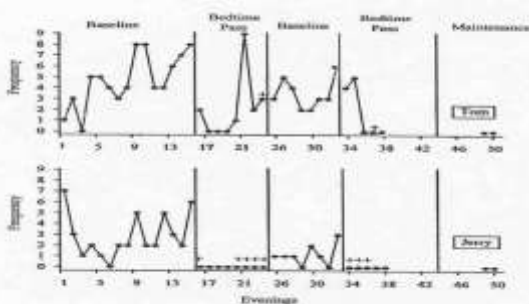
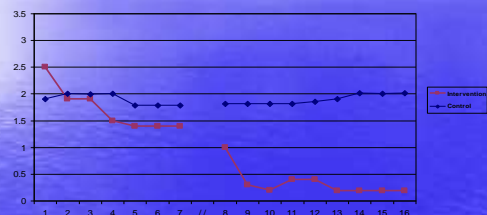


Figure 1. The number of blood spots counted on daily handkerchiefs across conditions.

Fear and Avoidance of Bedtime Expectations (e.g., being alone in the dark)



Moore, Friman, Fruzzetti, & MacAleese



ASD Anxiety Prevalence

- Prevalence Estimates
 - 40% Youth 18 and younger
- Caveat
 - Overlap Between ASD and Anxiety

Prevalence Estimates ASD/Non ASD

- | ASD | Non ASD |
|--|---|
| • Separation anxiety disorder <ul style="list-style-type: none"> – 10% | • Separation anxiety disorder <ul style="list-style-type: none"> – 5% |
| • Generalized anxiety disorder <ul style="list-style-type: none"> – 20% | • Generalized anxiety disorder <ul style="list-style-type: none"> – 5% |
| • Specific phobia <ul style="list-style-type: none"> – 30% | • Specific phobia <ul style="list-style-type: none"> – 12% |
| • Social anxiety disorder <ul style="list-style-type: none"> – 40% | • Social anxiety disorder <ul style="list-style-type: none"> – 12% |

Developmental Implications of ASD and Anxiety

- Secure attachment
- Interactive play
- Learning interpersonal boundaries
- Learning formal social roles and rules



Fear and Non-fear Based Avoidance

- Avoidance is the cardinal behavioral component of anxiety
- Avoidance is a cardinal behavioral component of ASD
- Not all avoidance is fear based



The Fear-based Stress Response

- Prepares body for action
- Bodily
 - Release stress hormones
 - Obtain fuel
 - Metabolize
 - Distribute
- Behaviorally
 - Narrowing focus
 - Narrowing behavioral range
 - Inflexible responding
 - Options
 - Fight
 - Flight
 - Manage



Signs of Anxiety in Social Interactions

- Bossiness
- Scripting
- Frustration at shifts in play
- Interrupting the play of others
- Avoiding play altogether



Signs of Anxiety in the Play of Young ASD Children

- Excessive repetitive ordering
 - Lining up, sorting, stacking, knocking over
- Excessive repetitive movement of objects
- Excessive repetitive body movements
- Excessive echolalia
- Excessive emotional reactions to thwarting



Signs of Anxiety in Elementary School Aged ASD Children

- Excessive need for control
 - Correcting, bargaining, arguing, taking over play
- Deficient participation
 - Avoidance, escape
- Heightened emotional reactions



Signs of Anxiety in ASD Adolescents

- Fear based social confusion
 - Bantering, teasing, joking
- Low distress tolerance
 - Easily frustrated and overwhelmed
 - Depression
- Excessive dependence on adults
- Excessive emotional reactions



Signs of Parent and Caretaker Anxiety

- Helicoptering
- Cocooning
- Low distress tolerance



Unintentional Anxiety Signals

- Questioning
- Checking
- Overprotection
- Reducing independence
- Enabling avoidance
- Attention to fear



Dilemmas for Parents and Caregivers

- Encourage participation, exposure, and bravery
- Allow avoidance or withdrawal
 - Noise
 - Homework
 - Animals
 - Foods
 - Play dates
 - Competition
 - Outings
 - Perfectionism
 - Compulsions
 - Change



Dilemmas for Professionals

- Encourage participation, exposure, and bravery
- Allow avoidance or withdrawal
 - Play time
 - Competition
 - School assemblies
 - Field trips
 - Perfectionism



Strategies for Parents and Caregivers

1. Praise and attend to brave behavior; ignore more non brave behavior
2. Model brave behavior and use role reversal
3. Allocate responsibility; encourage independence; allow mistakes
4. Emotional coaching
5. Set reachable goals and use proportional rewards
6. Create opportunities for change
7. Schedule worry time
8. Incorporate intense or unusual interests
9. Exposure, extinction, desensitization

Strategies for Professionals

- Medication
 - Medication education
 - Symptom related medication tracking
- Cognitive behavior therapy
 - Health education
 - Demystification
 - Externalization
 - Relaxation skills
 - Cognitive restructuring (i.e., modifying rule governed behavior)
 - Exposure treatments

Medication

- Three primary types
 - Benzodiazepines
 - Valium, Xanax, Klonopin
 - Antidepressants
 - Prozac, Zoloft, Paxil
 - Beta blockers
 - Inderal, Tenormin



Health Education

- What is anxiety?



Externalization

- To name it is to tame it
- Give it a name
 - Goofy
 - Disparaging
 - Insulting
 - Sarcastic



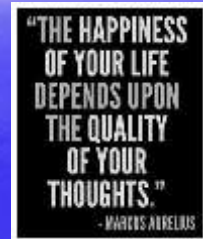
Relaxation

- Progressive muscle relaxation
- Focused breathing
- Meditative practices
- Mindfulness



Cognitive Restructuring

- Targets irrational thinking
 - All or nothing
 - Magical thinking
 - Filtering
 - Overgeneralization
 - Magnification
 - Emotional reasoning



Attractive Packaging

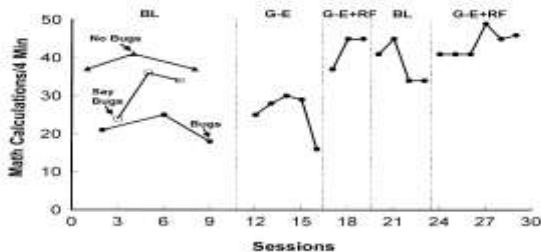


Exposure Based Treatments

- Exposure and response prevention
- Systematic desensitization
- Escape extinction
- Behavioral and emotional inoculation



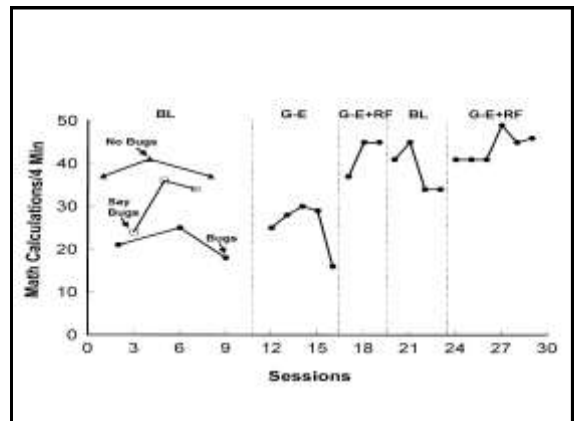
Insect Phobia





Initial Graduated Exposure Steps

- Holding jar with crickets
- Touching cricket with foot
- Close eyes for 60 sec in room with crickets
- Pick up cricket with tissue
- Pick up cricket with gloved hand
- Hold a cricket for 20 sec with bare hand
- Allow cricket to crawl on pants leg
- Allow cricket to crawl on bare arm
- Hold cricket in each hand for 20 sec



Typical Treatment

- Demystify (detoxify)
- Give it a name (externalize it)
- Establish Fear Hierarchy (graduated exposure)
- Establish Exposure Incentives
- Revise PCI
 - Minimize helicopter parenting
 - Modify conversations—not how awful, how unlikely
 - Schedule worry time
- Relaxation skills
- Breathing skills
- Social Validity mumbo jumbo

