

# *Anxiety*

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



# Anxiety: A Universal Concern



# Why So Little Interest from Behavior Analysts?

Imprecise term  
Metaphorical  
Categorical error





# Imprecise Term

- Difficult to Define
  - Freud (1917)
  - Sidman (1964)
  - Levitt (1967)
  - McNaughton (1989)
  - Barlow (2002)
  - Friman (2007)



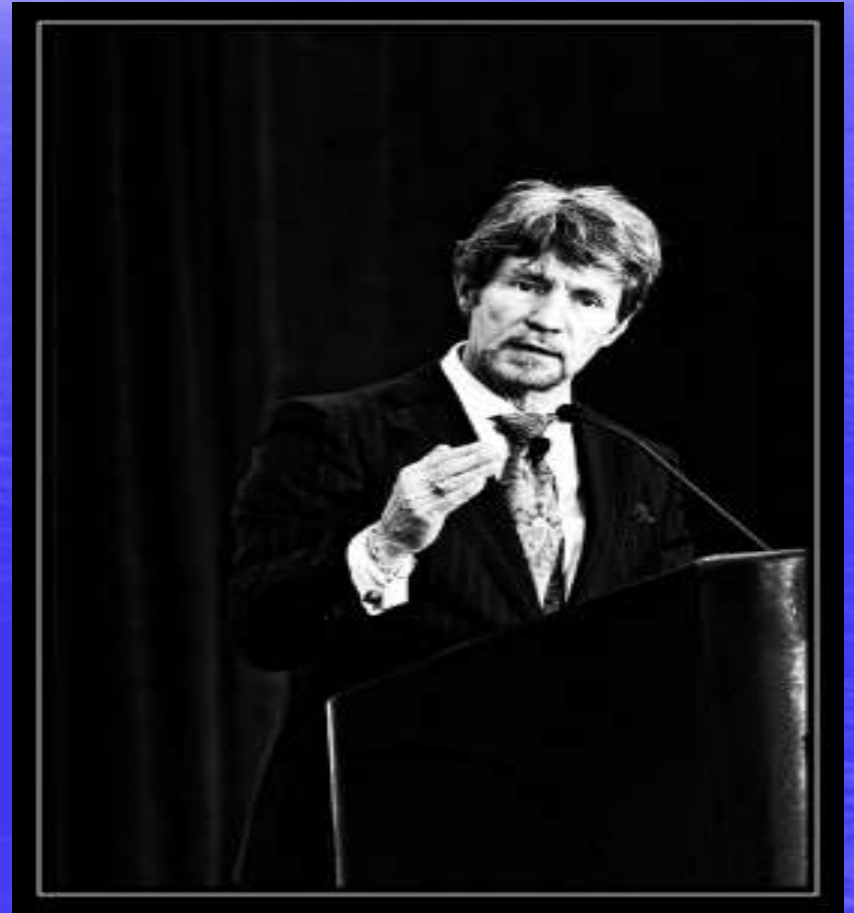
# A Behavior Analytic Definition

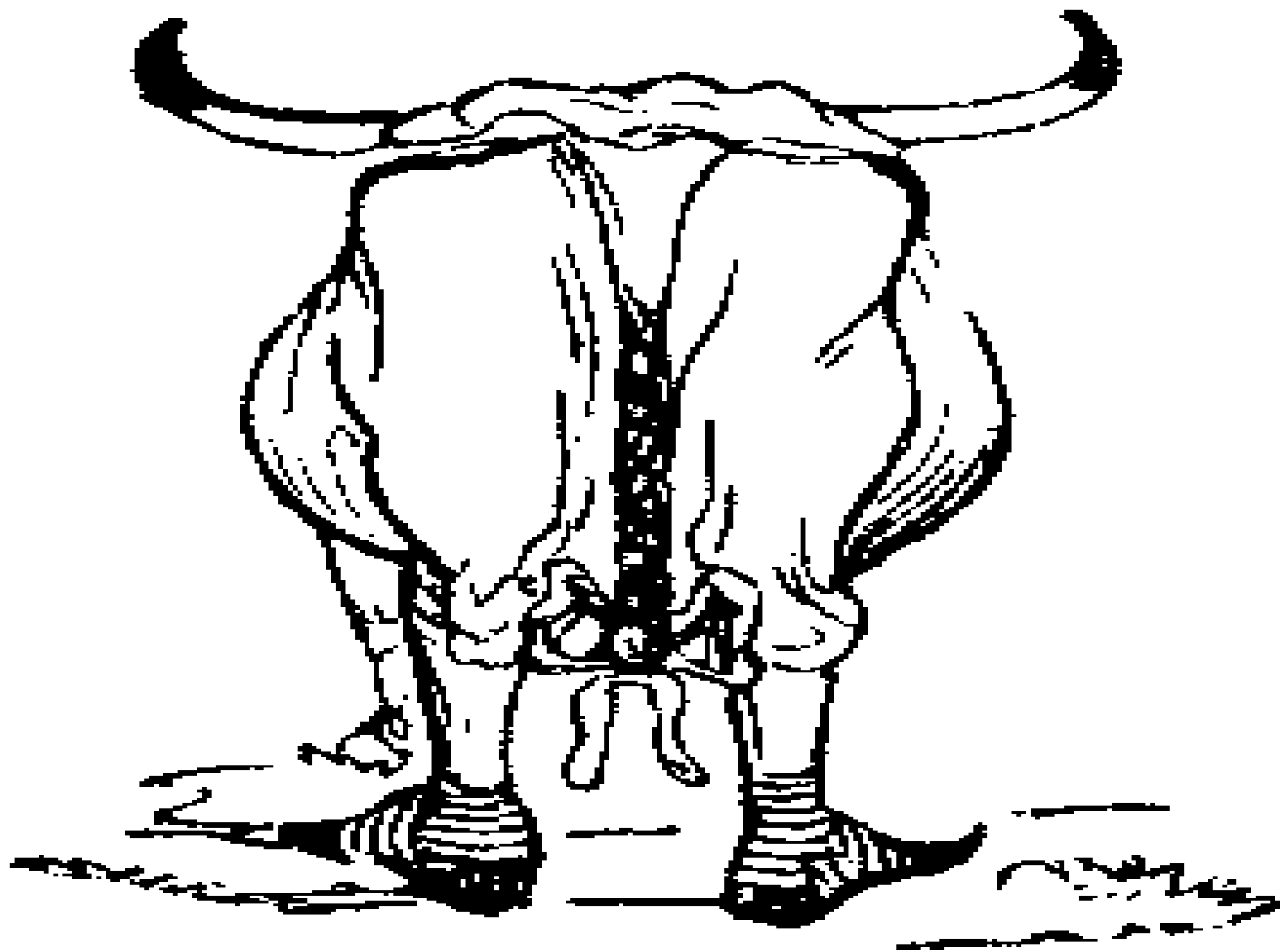
- Negatively reinforced behavior emitted in the presence of events that evoke or elicit the biology of stress or fear but that pose minimal risk of harm.



# My definition

Fear of stuff  
that is really  
unlikely to hurt  
you.







# Metaphorical Basis





# Categorical Errors



# Anxiety as “Category”

- Specific
  - Conditioned suppression
  - Conditioned activation
- General
  - Mental
  - Physiological
  - motoric



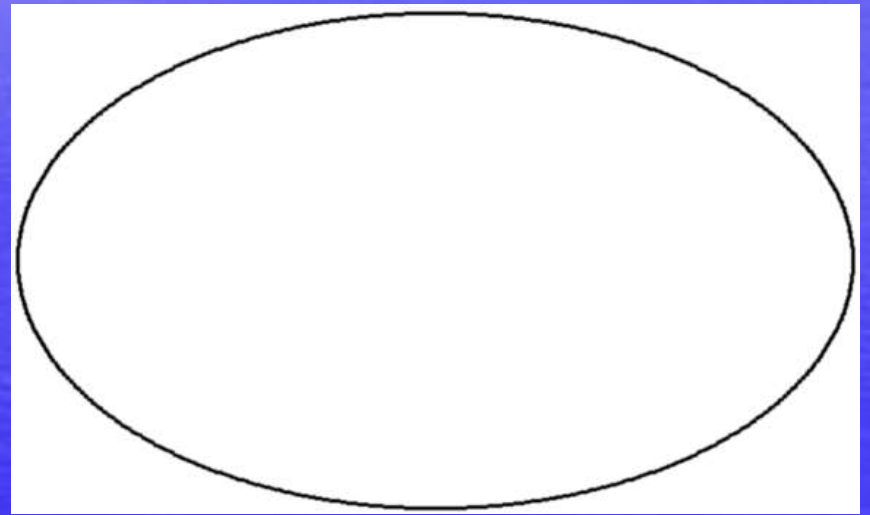
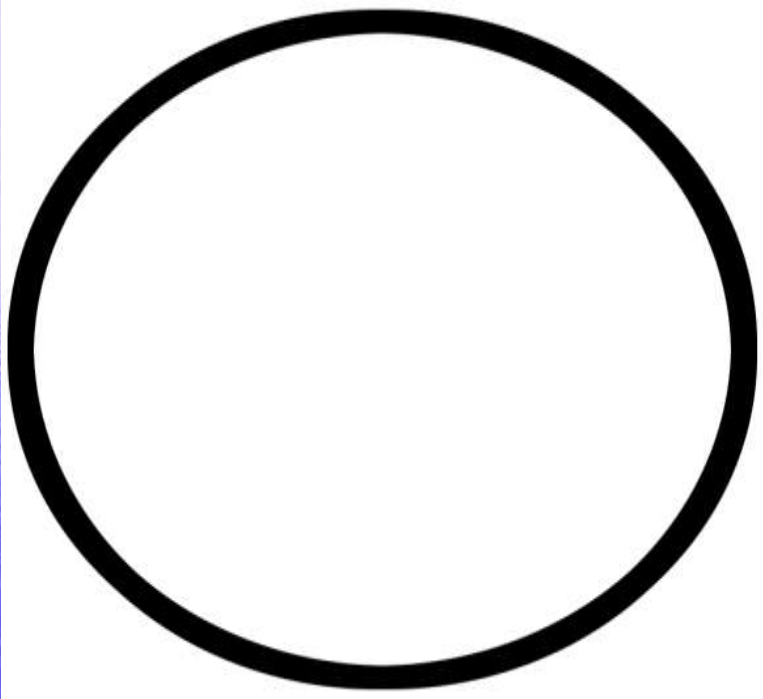
# Some Common Occasions for Anxiety

1. Impossibility of escape
2. Anticipation of punishment
3. Separation from support





# Pavlov's Contribution



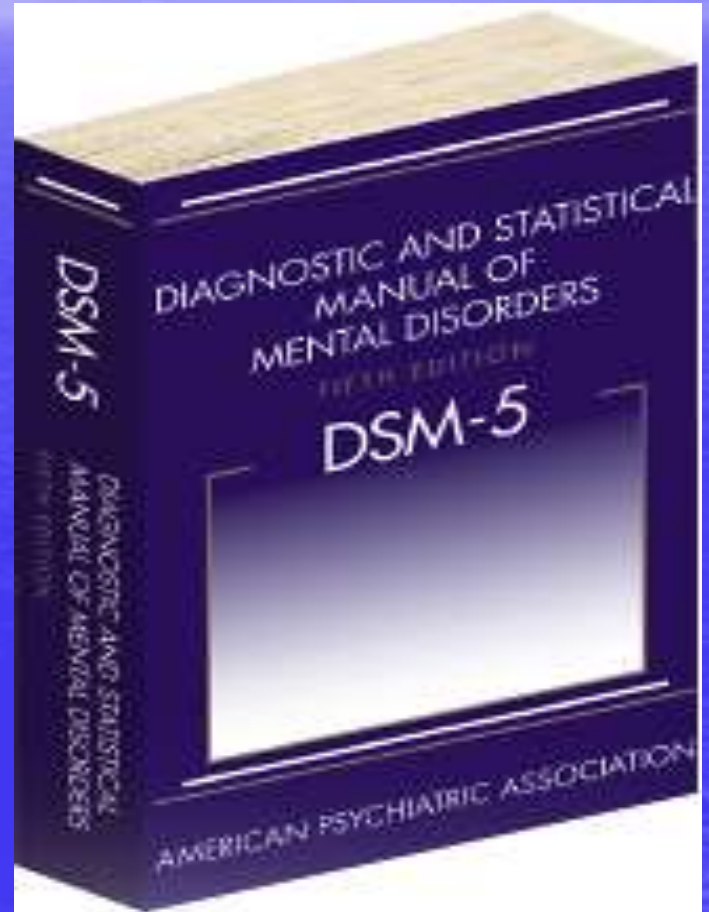
# Signs of Clinical Anxiety

- Impairment
  - Excessive:
    - Avoidance
    - Emotion
    - Catastrophizing
    - Need for control
- Unresponsive to reason
- High frequency



# Select Anxiety Disorders

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





# Downside of Avoidance

1. Reinforces notions of danger
2. Generalizes
3. Shrinks life



# 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 Threat-based Stress Response

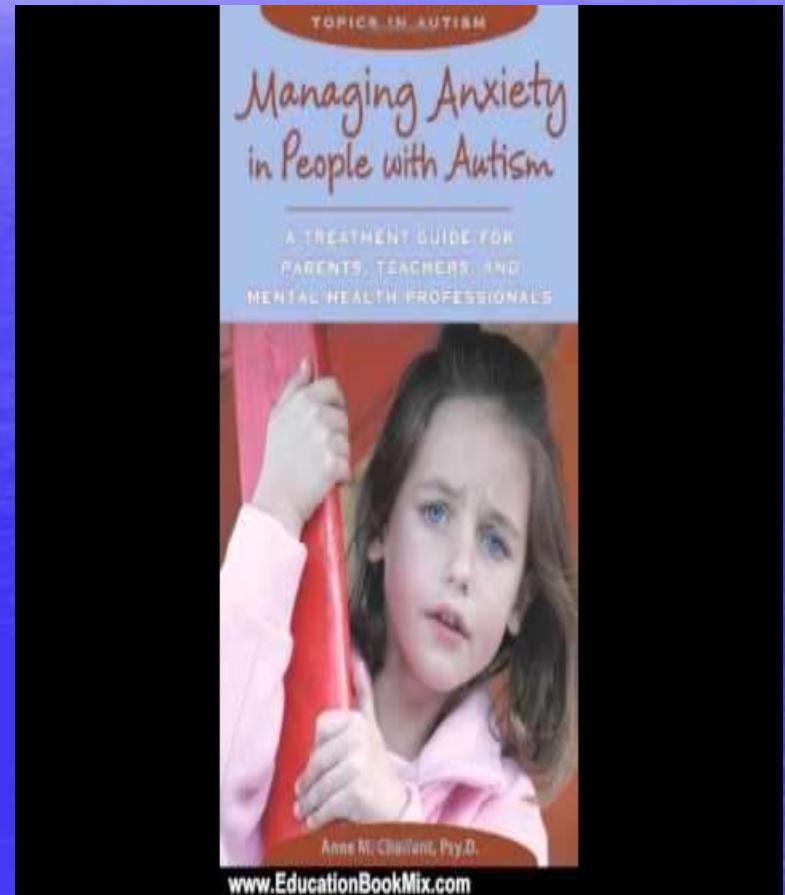
- Prepares body for action
- Bodily
  - Release stress hormones
  - Obtain fuel
  - Metabolize
  - Distribute





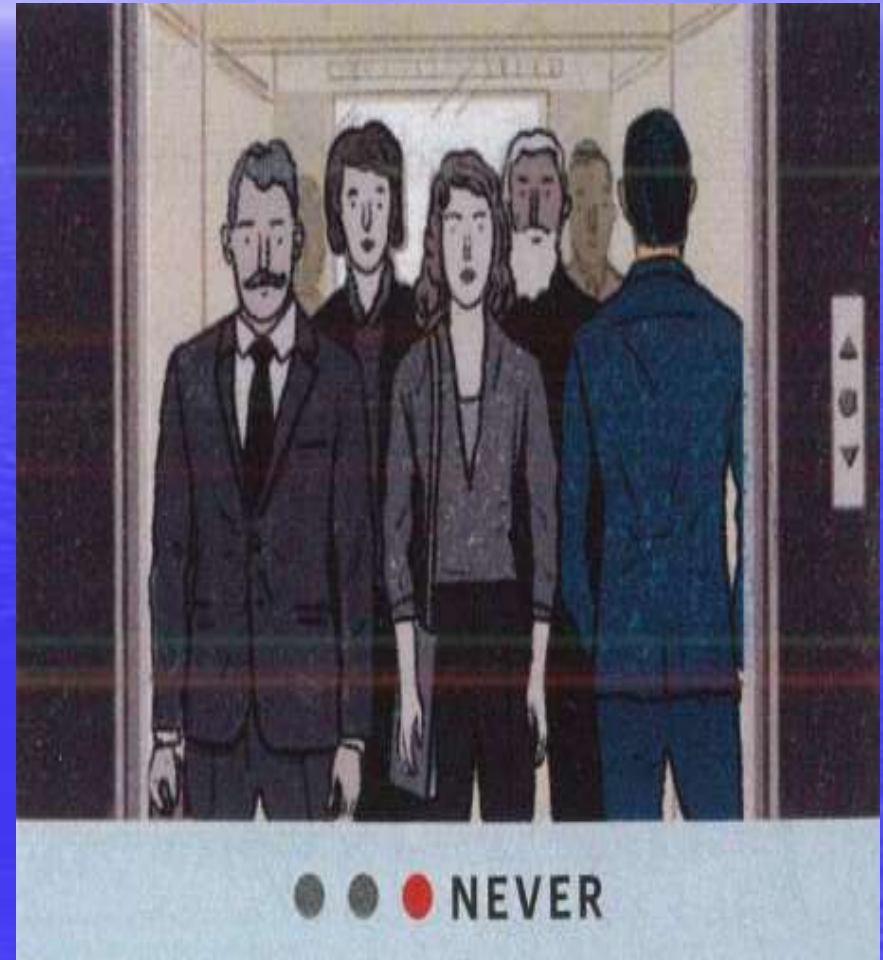
# Prevalence of Anxiety in the ASD Population

- Prevalence 40%
- Overlap Between ASD and Anxiety



# Developmental Implications of ASD and Anxiety

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





# 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:**
  - ordering
  - movement of objects
  - body movements
  - echolalia
  - emotional reactions



# Signs of Anxiety in Elementary School Aged ASD Children

- Excessive
  - Need for control
    - Correcting, bargaining, arguing, taking over play
  - Social avoidance
  - Emotional reactions





# Signs of Anxiety in ASD Adolescents

- Social confusion
- Low distress tolerance
- Dependence on adults
- Excessive emotional reactions





# Parent and Caretaker Anxiety

- Helicoptering
- Cocooning
- Low distress tolerance



# Unintentional Danger/Anxiety Signals

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



# Dilemmas for Parents and Caregivers

- Encourage participation, exposure, and bravery or...
- Allow avoidance or withdrawal





# Dilemmas for Professionals

- Encourage participation, exposure, and bravery or...
- Allow avoidance or withdrawal



# 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
- Behavioral treatment





# Medication

- Three primary types
  - Benzodiazepines
  - Antidepressants
  - Beta blockers



# Behavioral Treatment

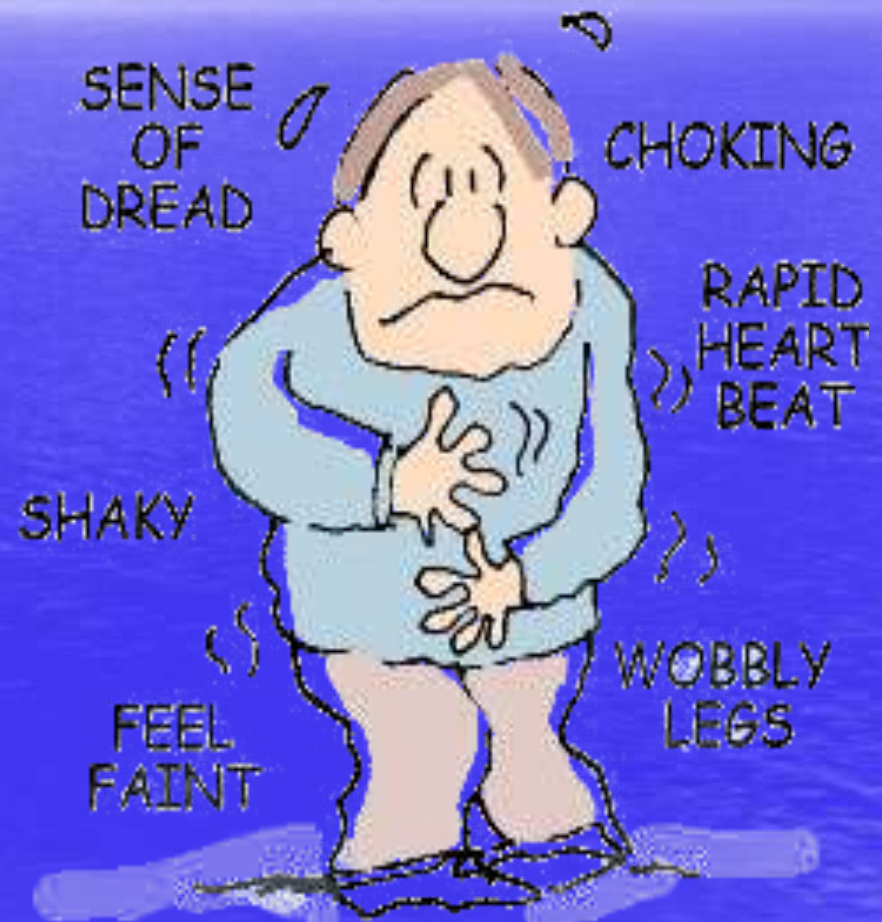
Health education  
Externalization  
Relaxation  
Irrational thinking  
Escape extinction  
Incentives





# Health Education

- What is anxiety?





# Externalization

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



# Relaxation

- 4 X 4 X 4 X4
- Progressive muscle relaxation
- Focused breathing
- Meditative practices
- Mindfulness



# Target Irrational Thinking

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

**“THE HAPPINESS  
OF YOUR LIFE  
DEPENDS UPON  
THE QUALITY  
OF YOUR  
THOUGHTS.”**

**- MARCUS AURELIUS**



# Incentives

Grab bag  
Dot to dot  
Points  
Privileges  
Praise  
Etc.



# Exposure Based Treatments

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



# Exposure Treatment

Real Life Examples

















































# Effective Treatment

Actual Examples

# Obsessive Compulsive Disorder and Tourette's Syndrome

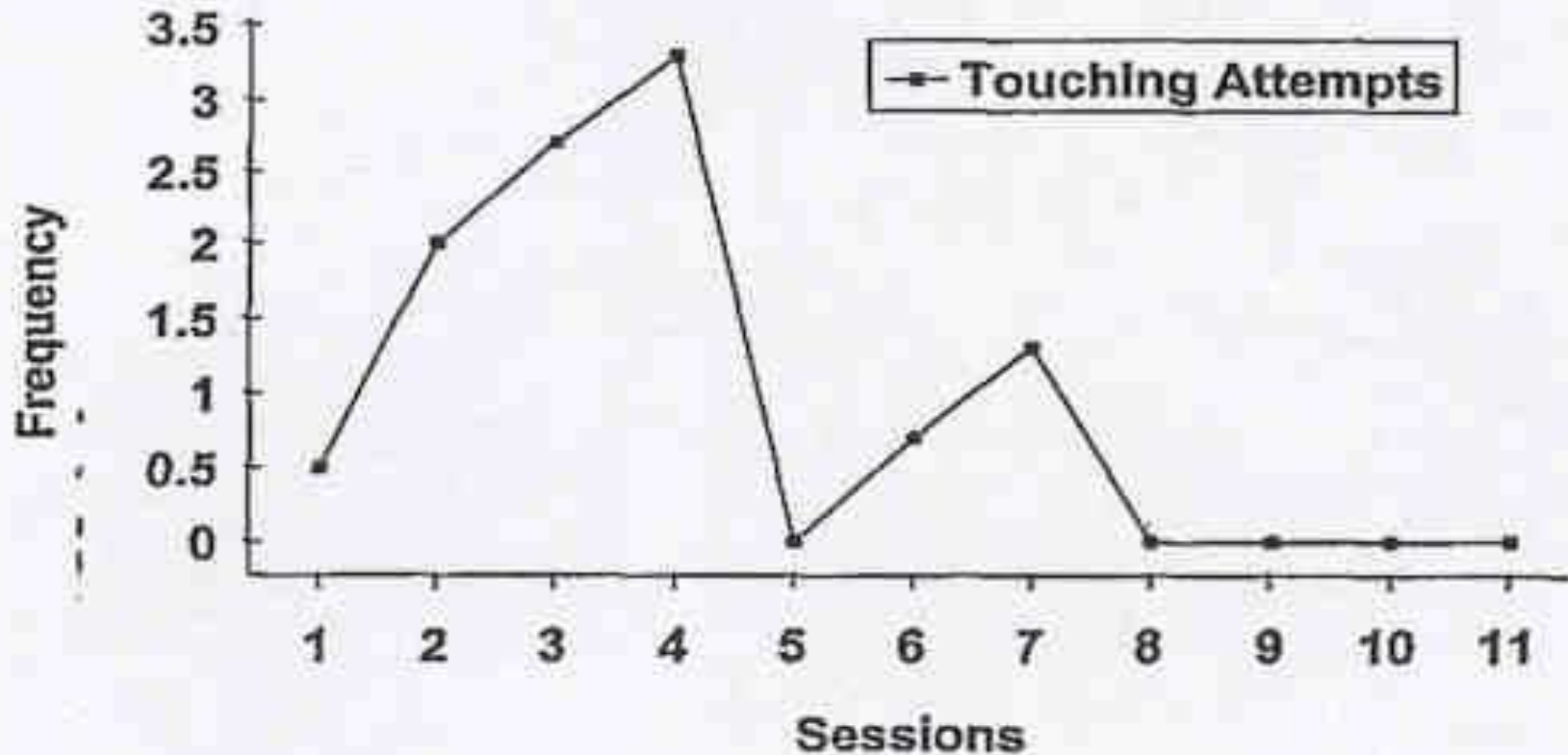


Fig. 1 Touching attempts across clinic sessions.

# Ditto

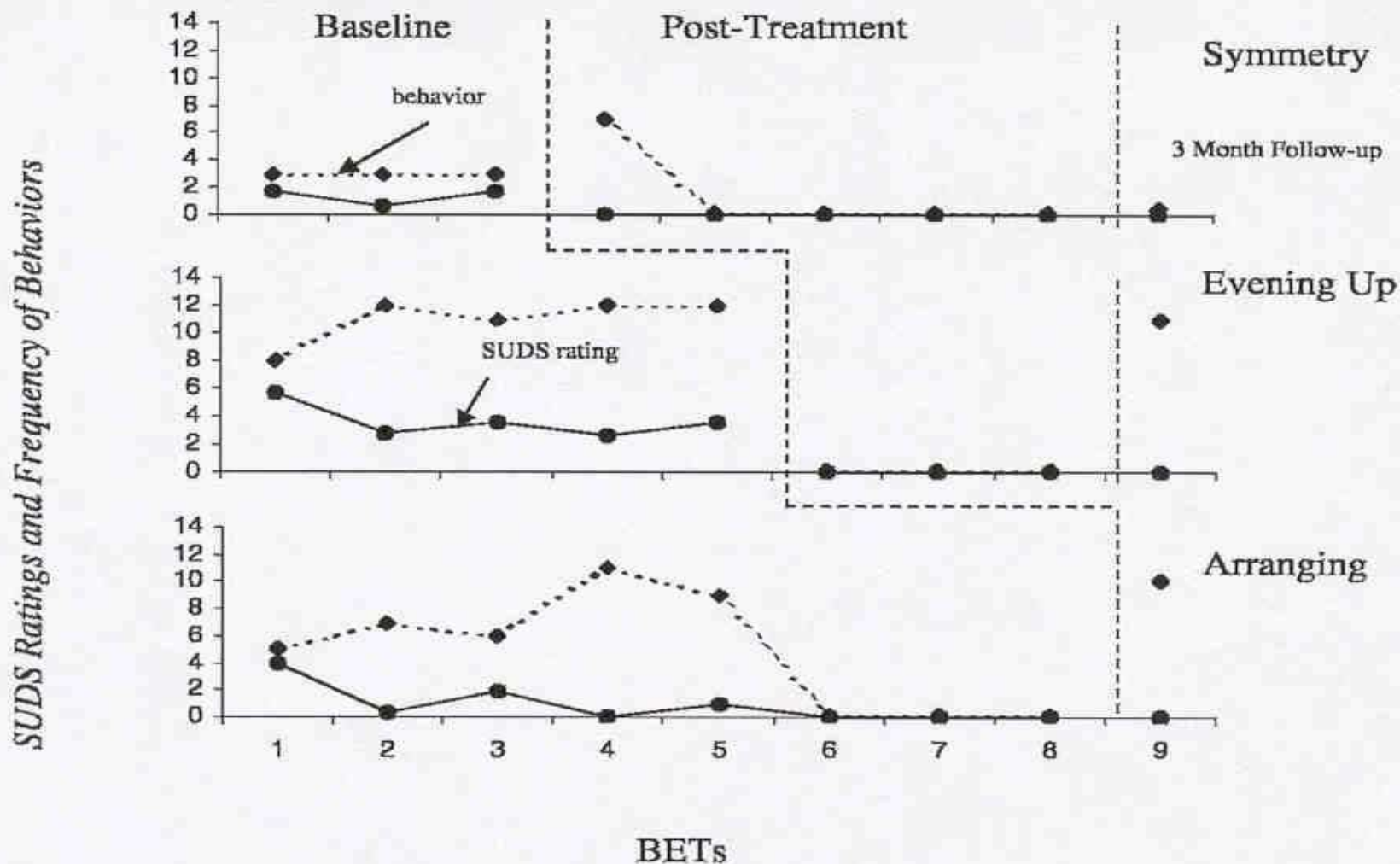


Figure 1. Discomfort ratings and frequency of behaviors during home behavioral exposure tests.





# Clinical Description

- Above average IQ
- Suspicious of adults
- Socially anxious
- Pervasive fear of public failure
- Uncomfortable with attention
- Controlling; manipulative







# Social Phobia and Conduct Disorder

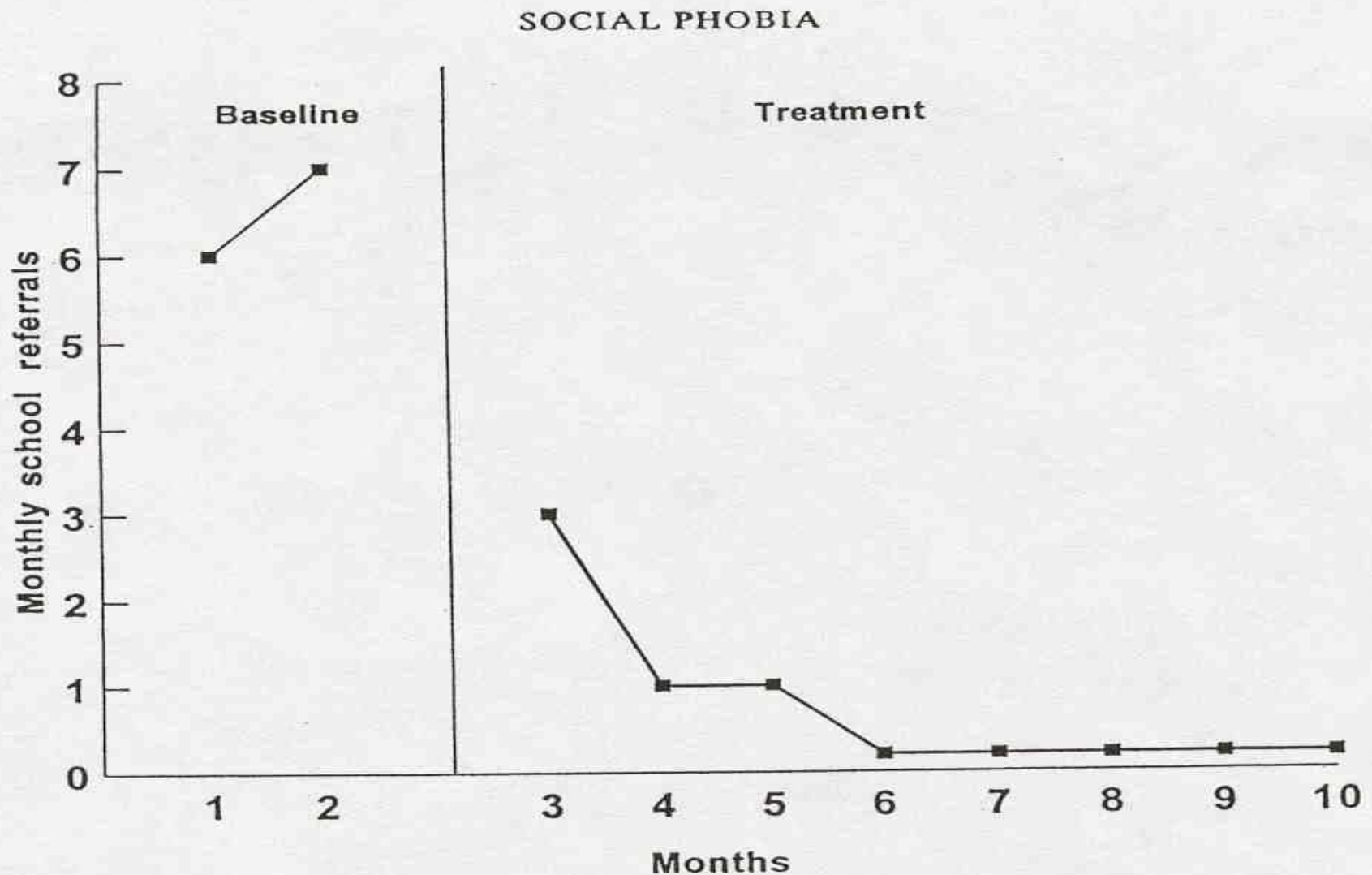
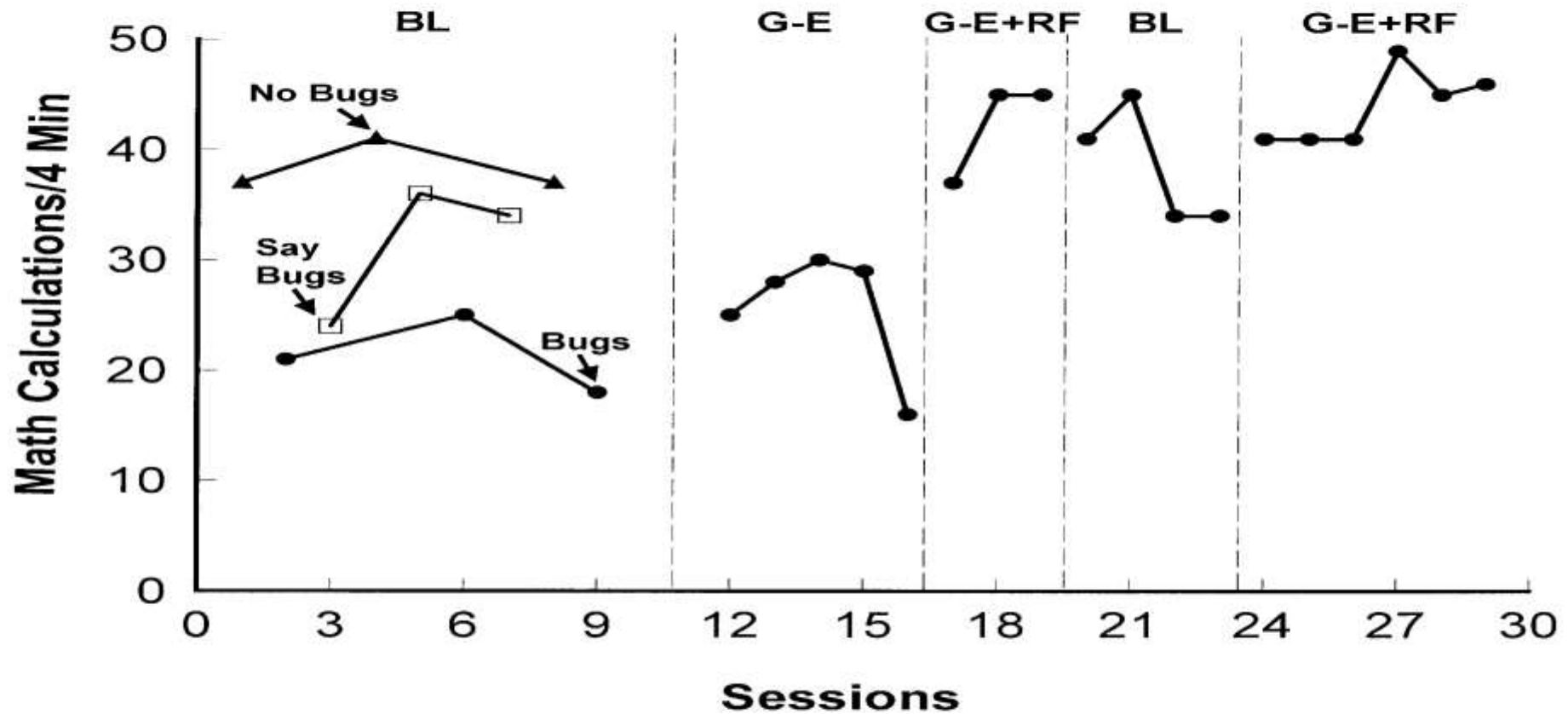


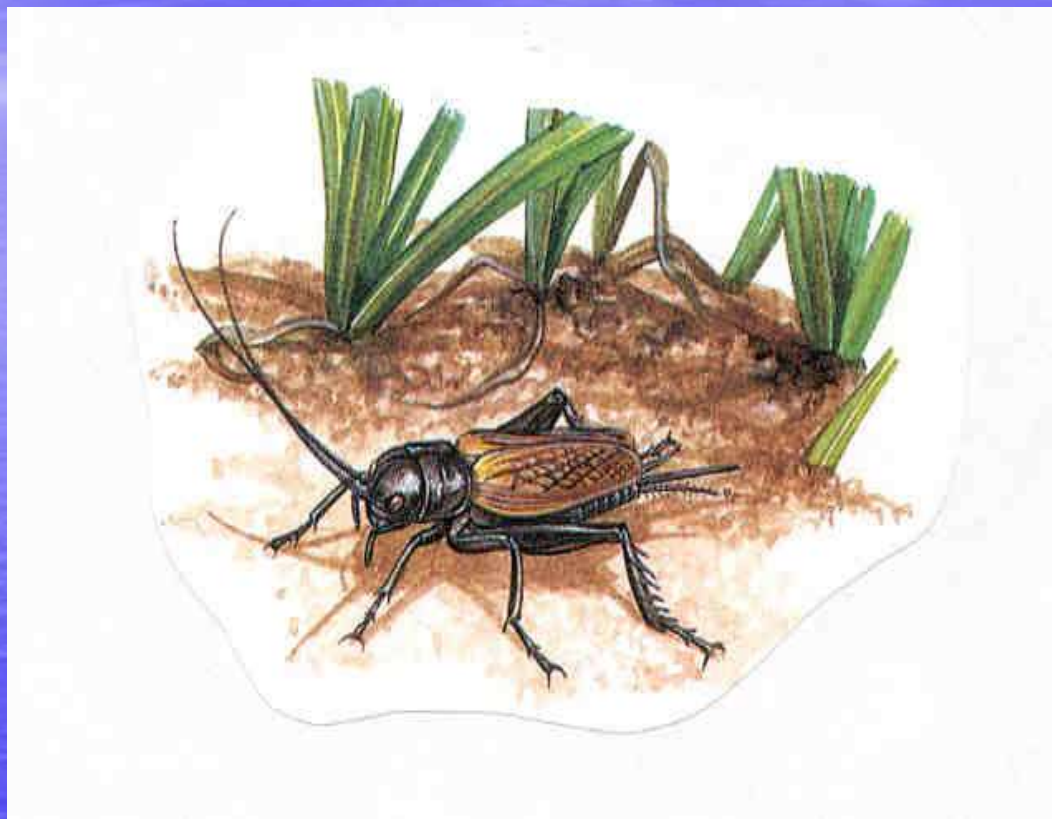
Figure 1. Monthly school referrals before and after treatment.

# Insect Phobia



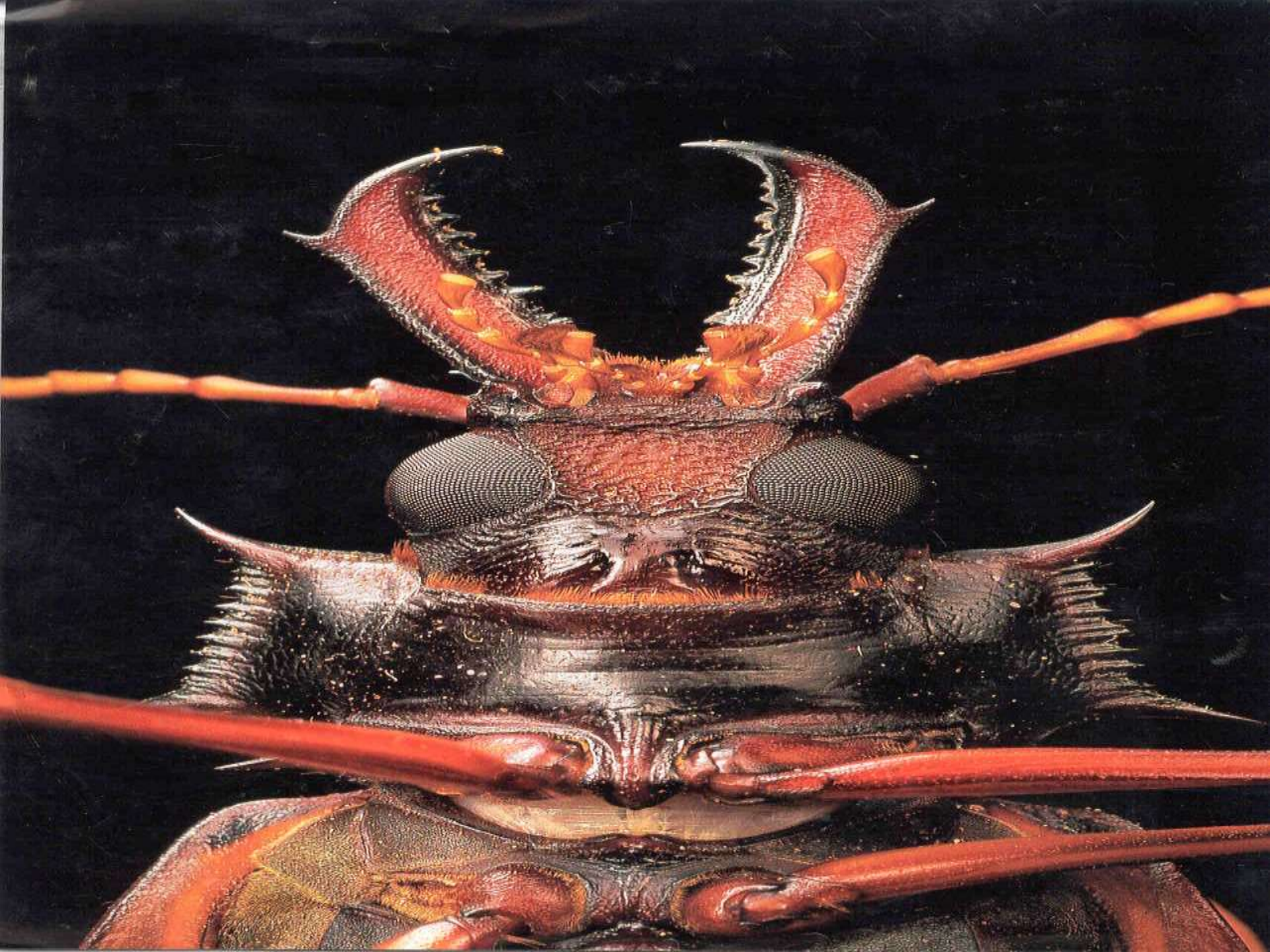










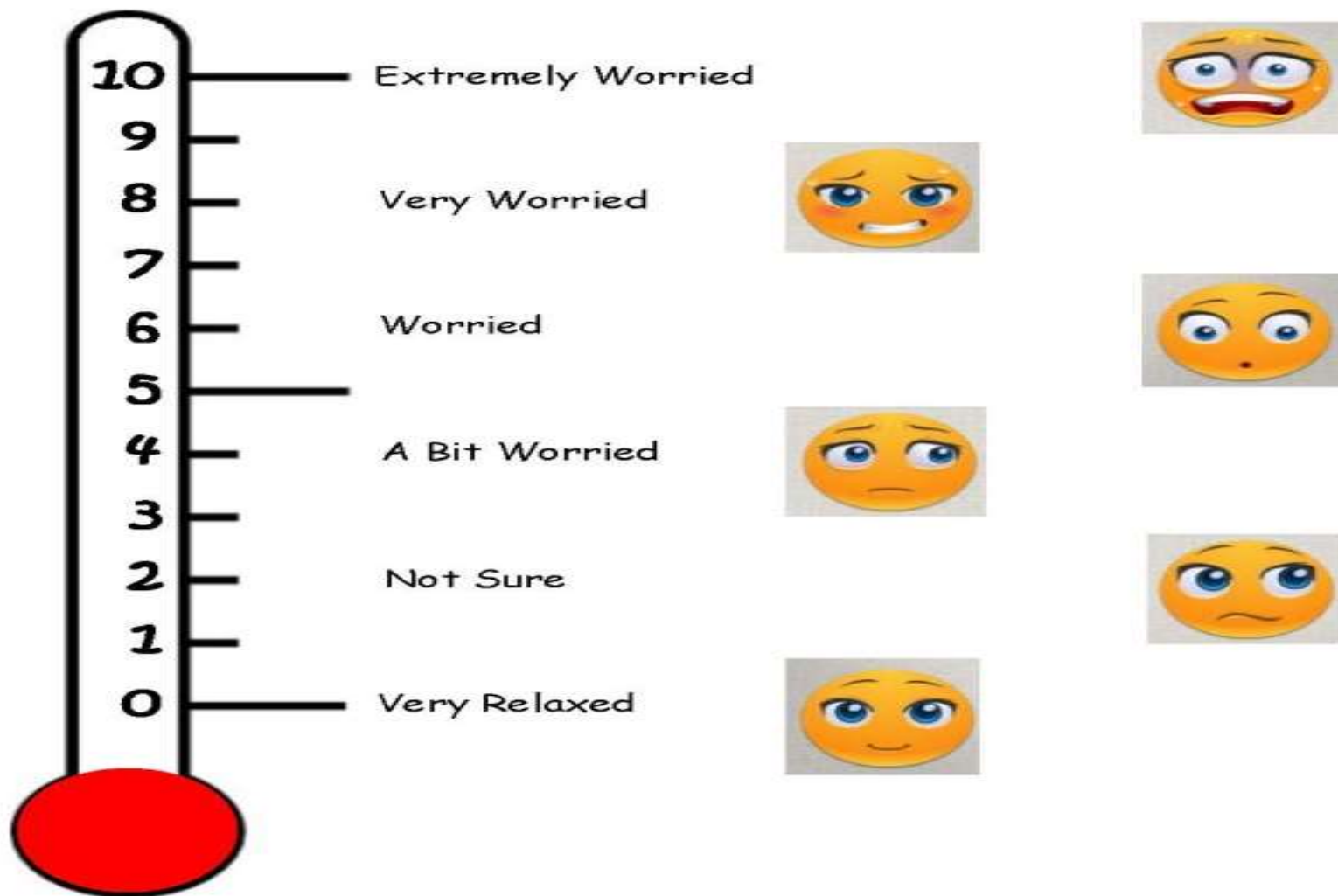


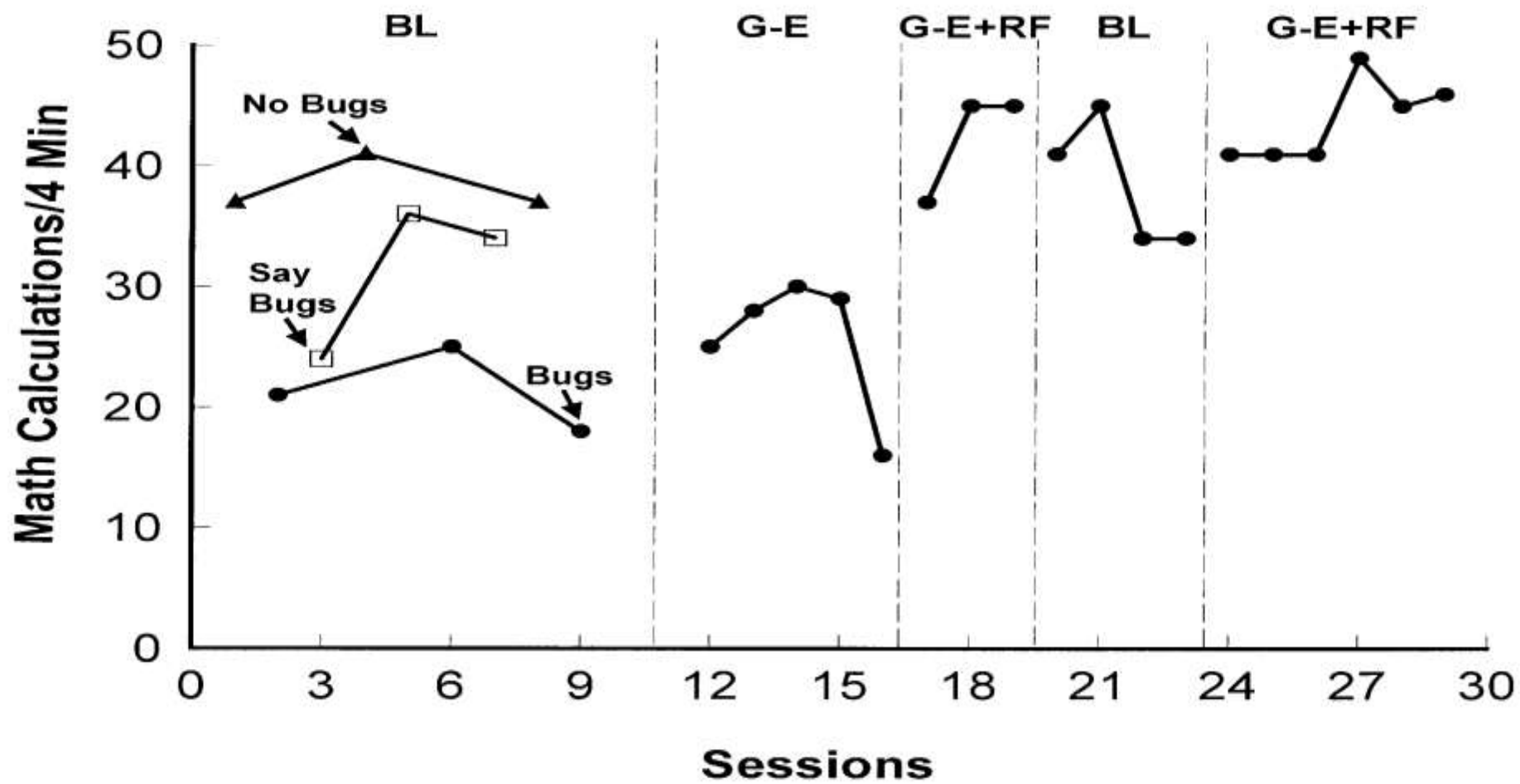


# Initial Graduated Exposure Steps

- 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

# The Worry Scale







# Typical Treatment

- Demystify
- Change parenting/caregiving
- Name it
- Exposure steps
- Incentives
- Relaxation
- Breathing skills
- Sell it

