

# *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 basis
- Categorical error



# Imprecise Term

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





# Colloquial Definition

- Fear based avoidance of objects, activities or events that are not harmful.



# 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.



# Anxiety as “Category”

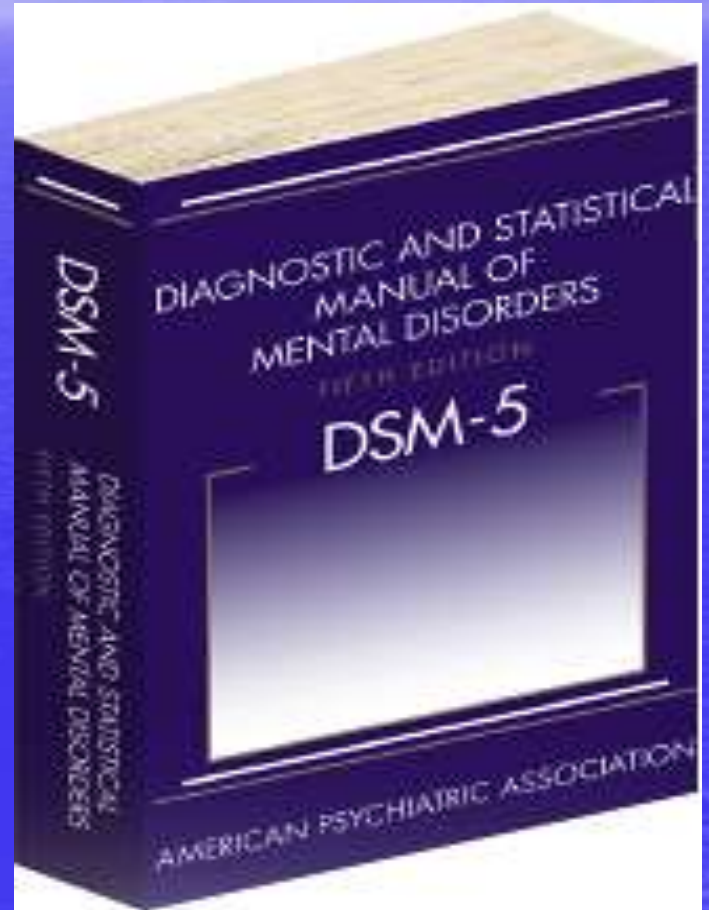
- Specific
  - Conditioned suppression
  - Conditioned activation
- General
  - Mental
  - Physiological
  - motoric





# Select Anxiety Disorders

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





# 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
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

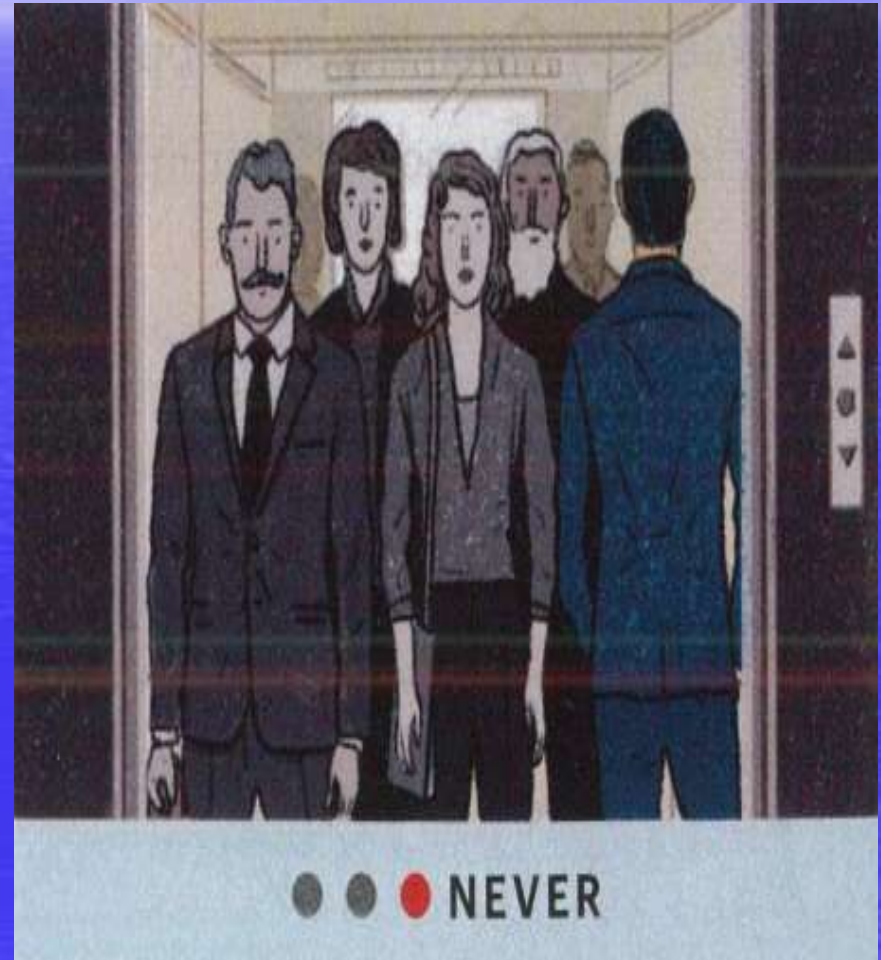
- Prevalence 40%
- Overlap Between ASD and Anxiety





# 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 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 acceptance
5. Set reachable goals
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





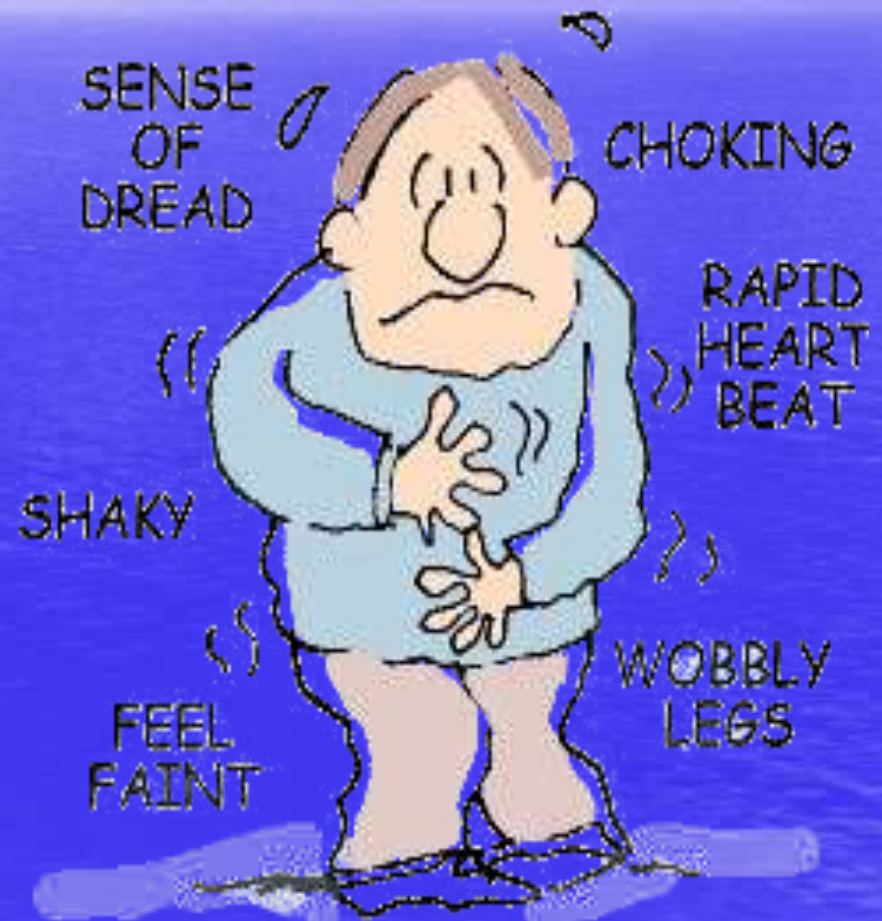
# Medication

- Three primary types
  - Benzodiazepines
  - Antidepressants
  - Beta blockers



# 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





# 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**

# Exposure Based Treatments

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





# Exposure Treatment

Real Life Examples

# Effective Treatment

Actual Examples



# Obsessive Compulsive Disorder and Tourette's Syndrome

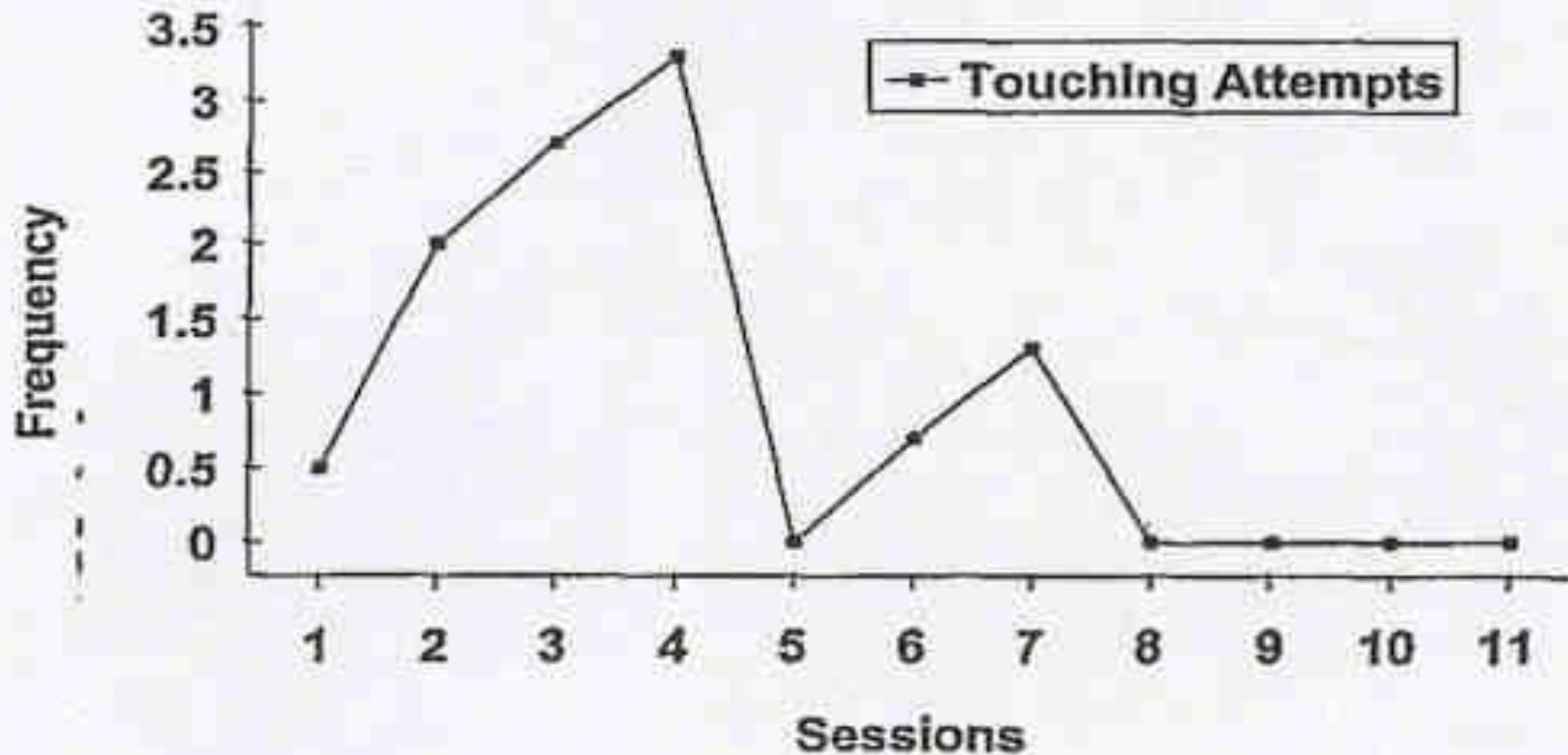


Fig. 1 Touching attempts across clinic sessions.

# Ditto

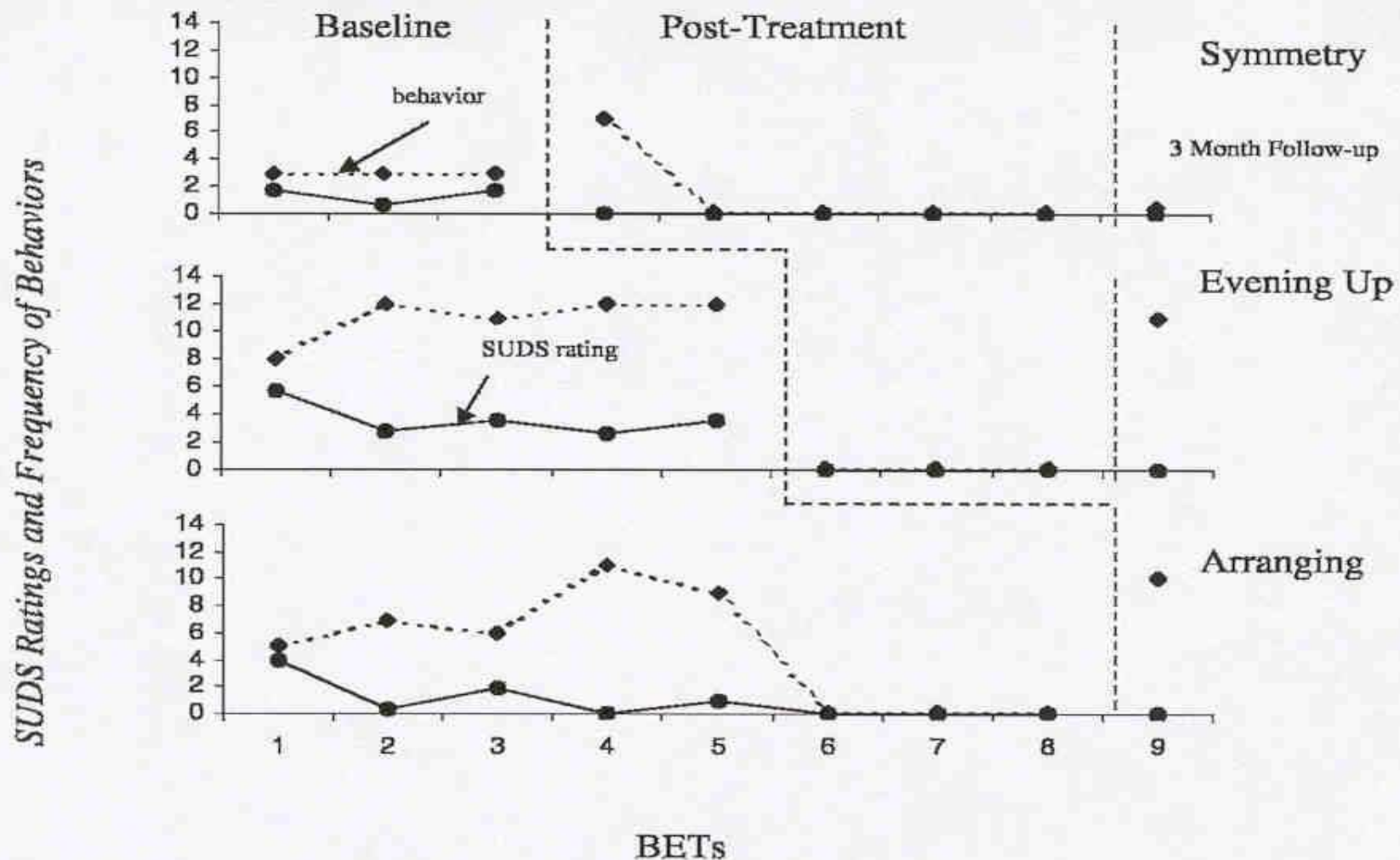


Figure 1. Discomfort ratings and frequency of behaviors during home behavioral exposure tests.



# Social Phobia and Conduct Disorder

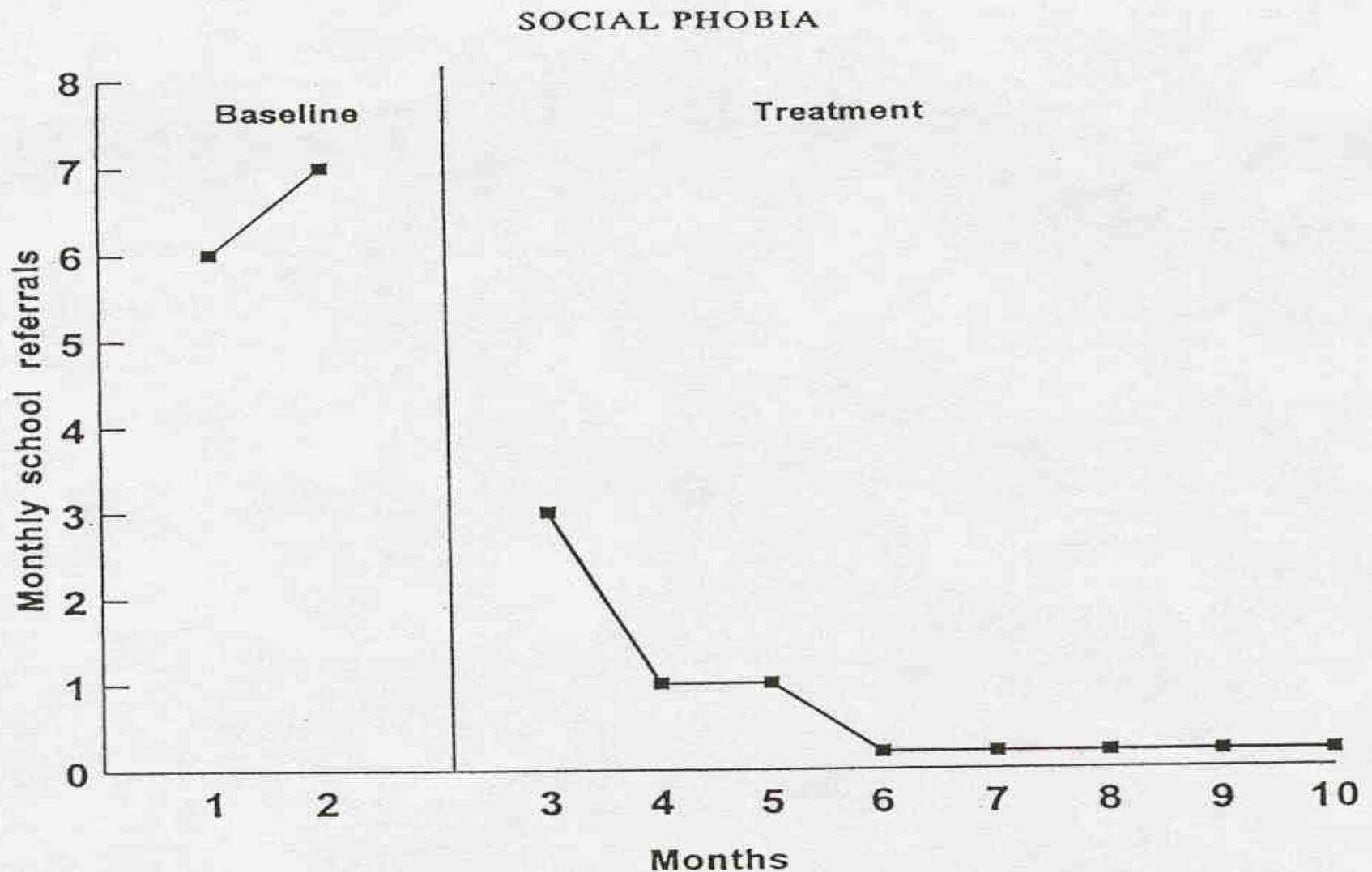


Figure 1. Monthly school referrals before and after treatment.

# Generalized Anxiety and Habit Disorder

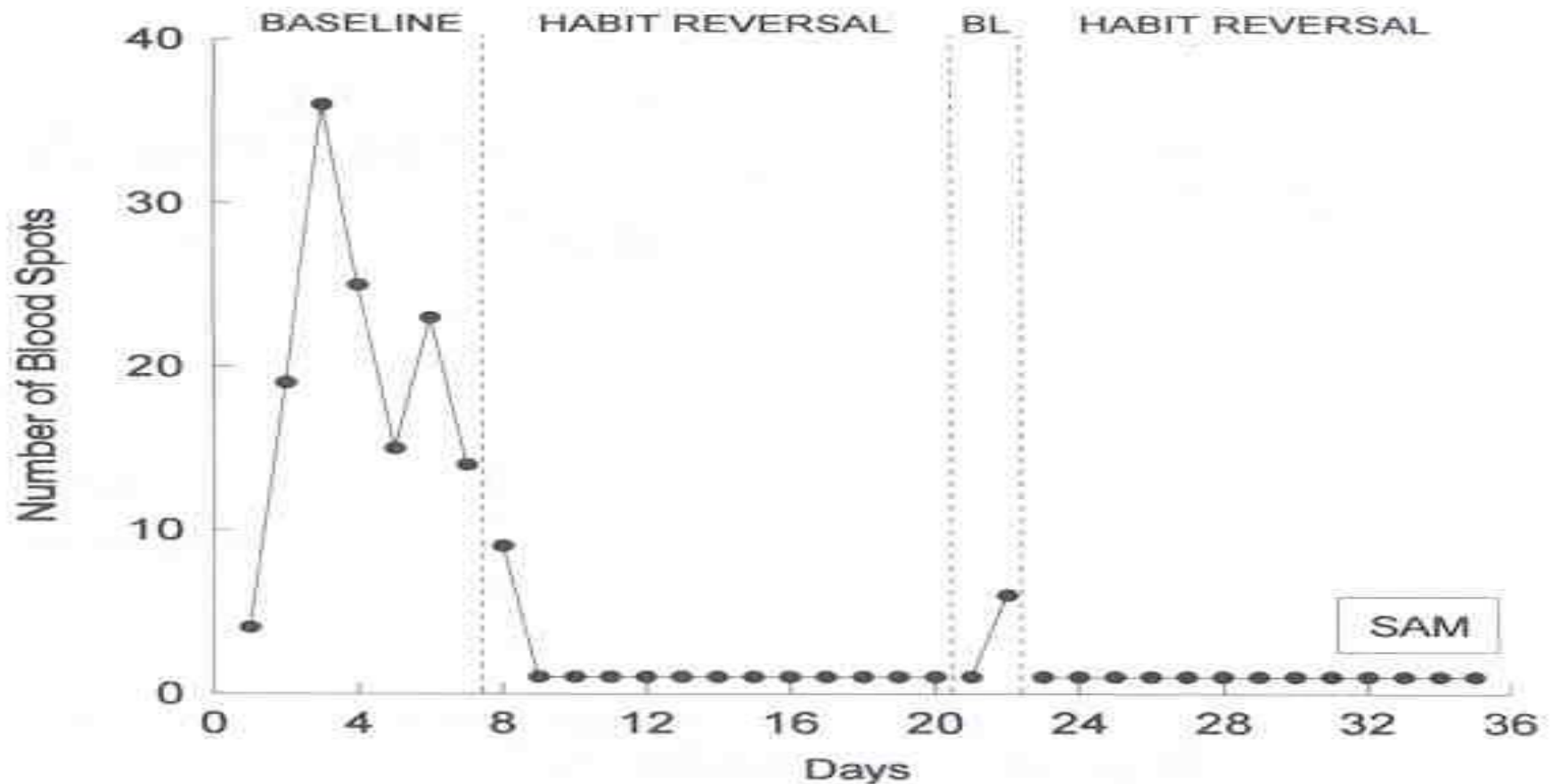
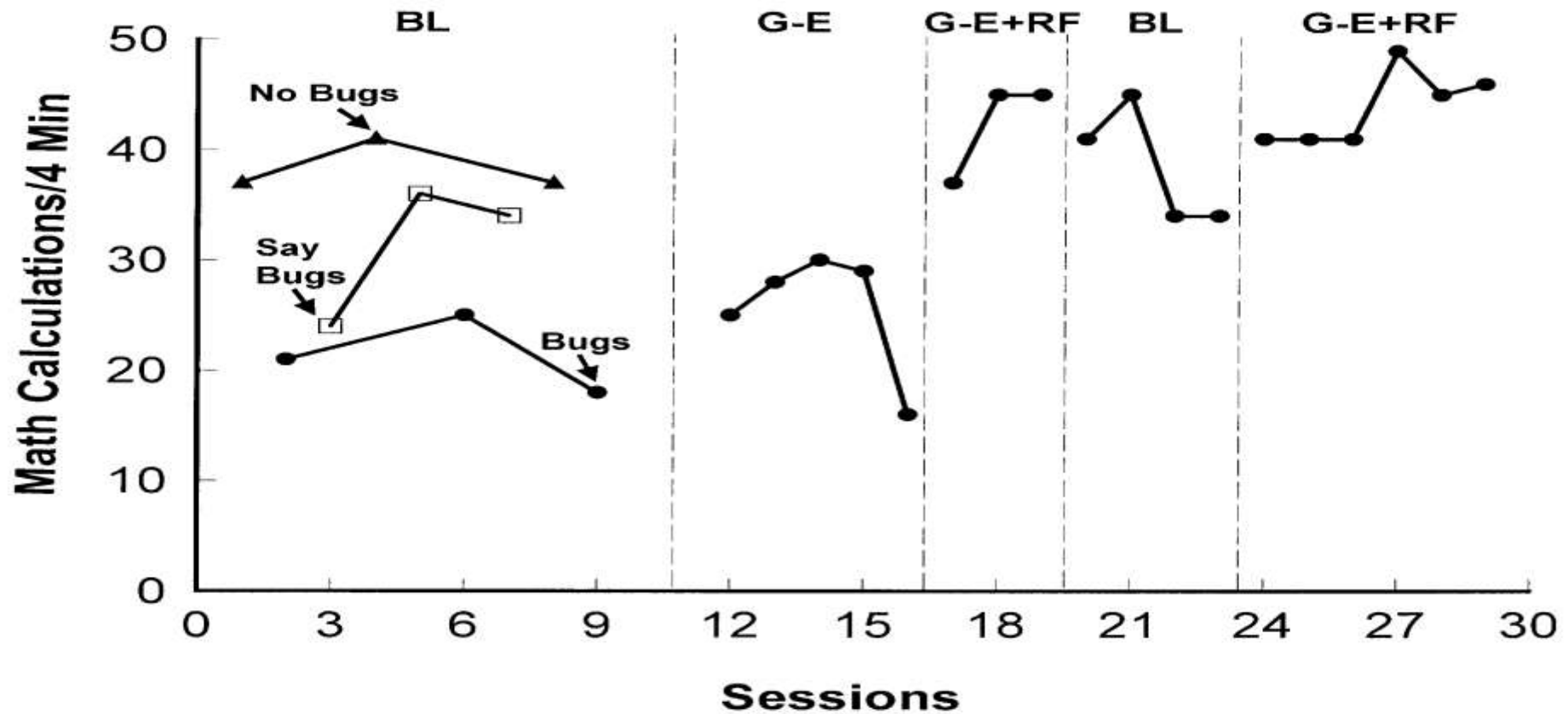
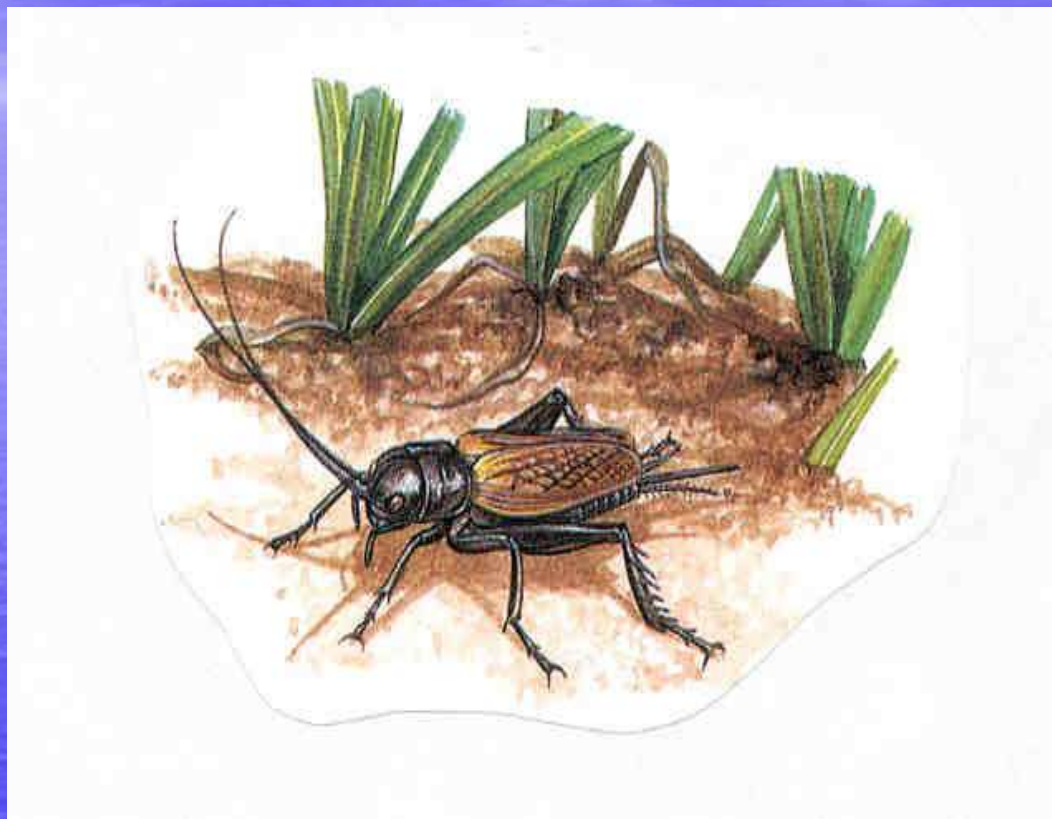


Figure 1. The number of blood spots counted on daily handkerchiefs across conditions.



# Insect Phobia



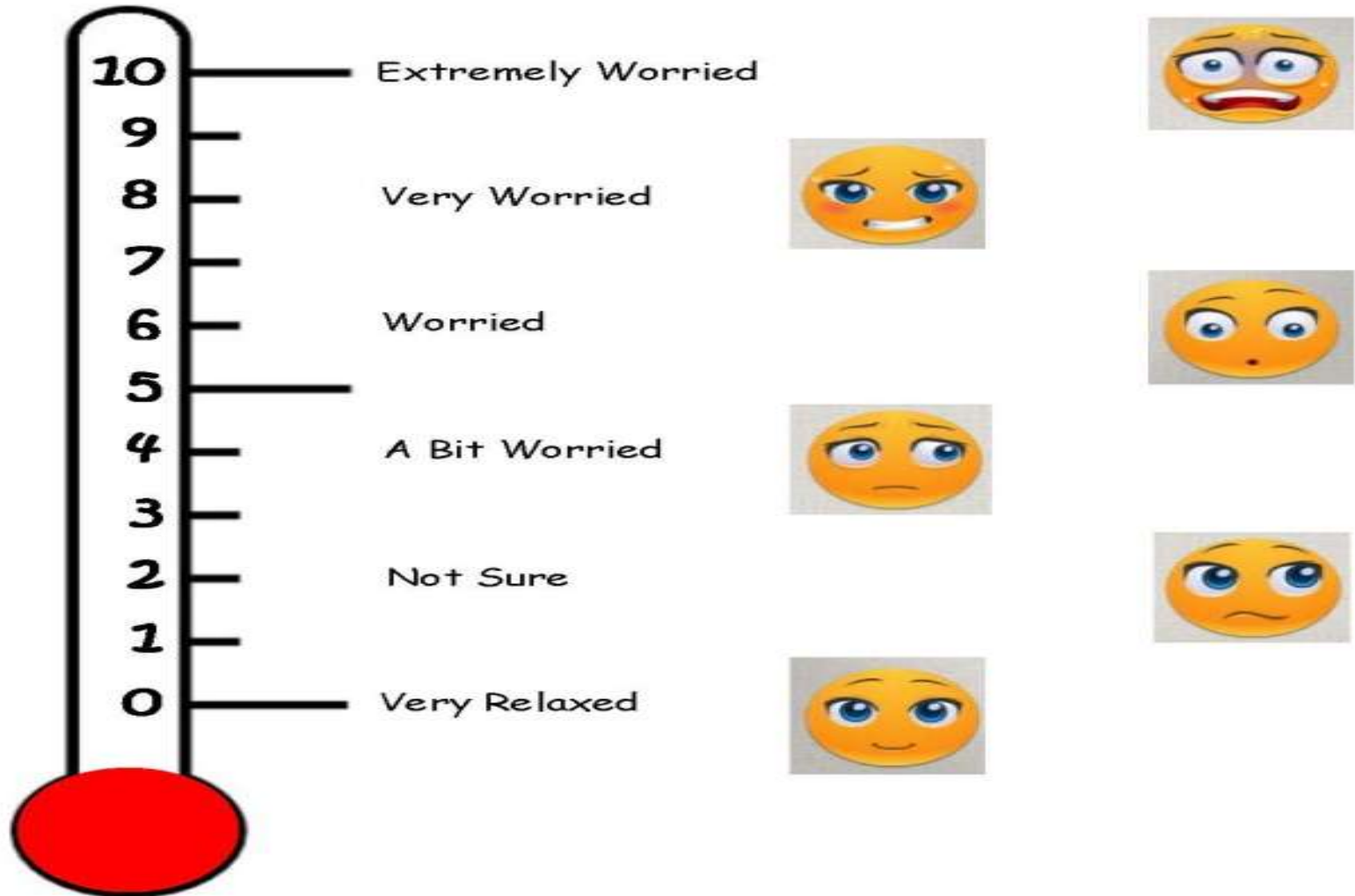


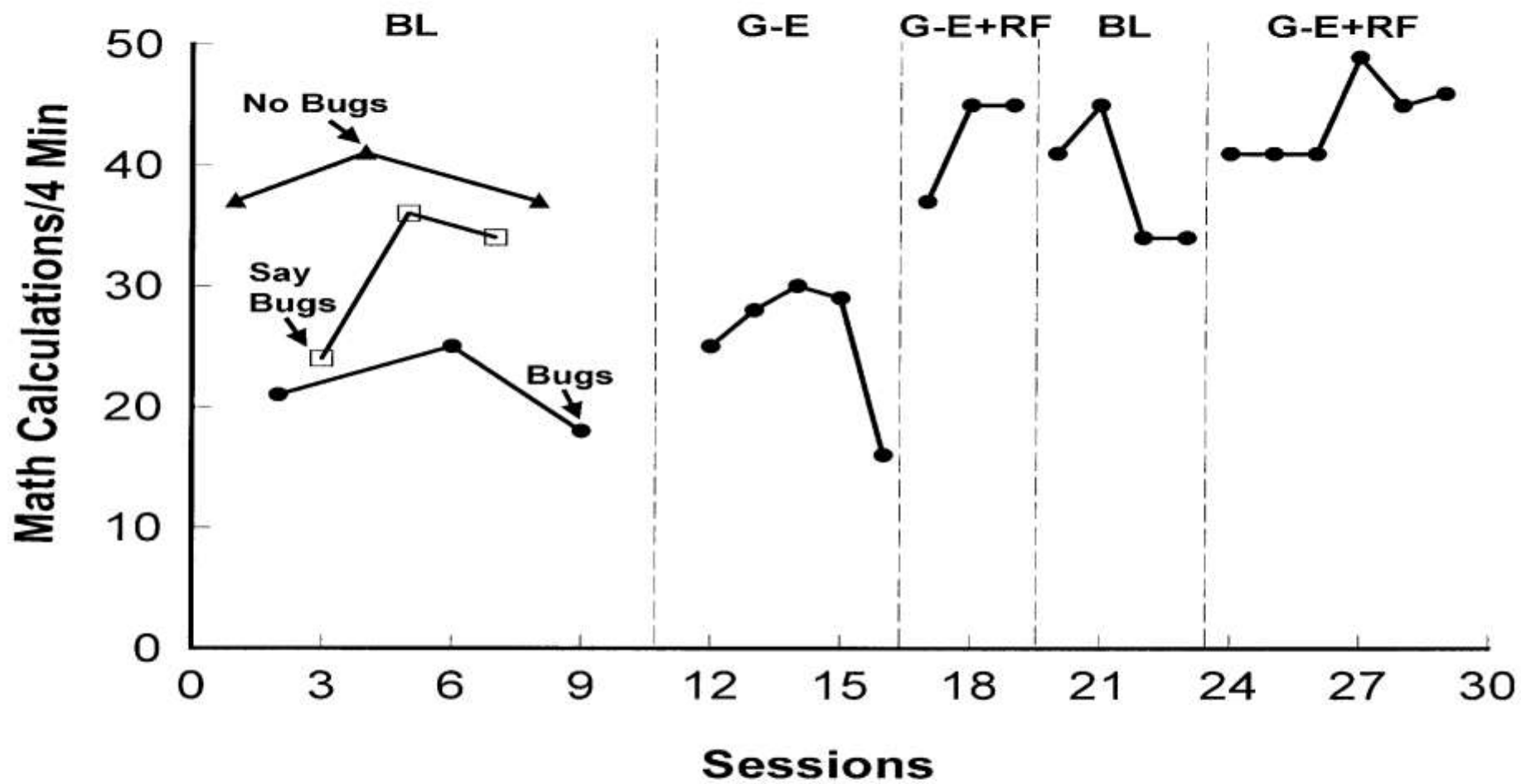


# Initial Graduated Exposure Steps

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

