Anxiety Disorders
Anxiety vs. Fear

**Anxiety**
- mood-state
- Positive in small amounts *(people behave best when they are a little anxious)*
- Future-oriented (can’t predict or control it)

**Fear**
- Alarm
- Fight or flight
- Immediate

**Panic**
- abrupt, extreme fear
Anxiety or Fear?

• A student is worried about her test in two days.
• A student is distressed after she gets her exam back.
• A man runs down a trail away from a bear.
• A man refuses to hike that trail again in the future.
• A student gets so nervous during a talk in front of the class that she starts to cry.
When anxiety becomes a disorder?
Nature of Anxiety, Fear, and Panic

Anxiety
- Negative affect
- Somatic symptoms of tension
- *Future*-oriented
- Feelings that one cannot predict or control upcoming events

Fear
- Negative affect
- Strong sympathetic nervous system arousal
- Immediate alarm reaction characterized by strong escapist tendencies in response to *present* danger or life-threatening emergencies

Panic Attack
- Fear occurring at an inappropriate time
- Three types:
  - situationally bound (cued)
  - unexpected (uncued)
  - situationally predisposed
Causes of Anxiety - Biological Contributions

• Increased physiological vulnerability
  – Polygenetic influences
    • Contributions from collections of genes in several areas on chromosomes make us vulnerable to anxiety when the right psychological and social factors in place. (e.g. activation of genes that promote Corticotropin releasing factor (CRF))

  – Brain circuits and neurotransmitters
    • GABA
      – Depleted levels
    • noradrenergic
    • serotonergic systems
Behavioral Inhibition System

• Brain stem relays danger signals (from changes in bodily functions) to frontal cortex through limbic system (area most associated with anxiety)

• Response: freeze, experience anxiety and apprehensively evaluate the situation

• Involved in generalized anxiety disorder
Fight/Flight System

• Involved in panic
• Originates in brain stem and travels through midbrain, including amygdala and hypothalamus
• May be activated by serotonin deficits
• Produces alarm and escape response
Psychological Contributions

• Freud
  – Anxiety = psychic reaction to danger
  – Reactivation of infantile fear situation

• Behaviorists
  – Classical and operant conditioning
  – Modeling
Psychological Contributions

• Integrated psychological model
  – Early experiences and perceptions
    • Controllability
    • Dangerousness
  – Parental actions/modeling
    • Predictable, secure home base.
    • Over-protective or Intrusive
  – Associations or cues to stimuli
Social Contributions

• Biological vulnerabilities triggered by stressful life events
  – Familial
  – Interpersonal
  – Occupational
  – Educational
An Integrated Model; Triple Vulnerability

Biological vulnerability (heritable contribution to negative affect)
- “Glass is half empty”
- Irritable
- Driven

Specific psychological vulnerability (e.g., physical sensations are potentially dangerous)
- Hypochondriac?
- Nonclinical panic?

Generalized psychological vulnerability (sense that events are uncontrollable/unpredictable)
- Tendency toward lack of self-confidence
- Low self-esteem
- Inability to cope
Comorbidity of Anxiety Disorders

• Suicidality: 20% (even when no depression is present)!

• High rates of comorbidity
  – 55% to 76%
    Most common is Depression: This is very interesting from a treatment perspective and may give clues for etiology
    e.g., SSRIs

• Links with physical disorders
  – Migraine headaches, thyroid disease, respiratory disease, stomach problems, arthritis, allergies
  – People with these illnesses are likely to have an anxiety disorder but not any more likely to have another psychological disorder.
  – Because anxiety often precedes these ailments, it might cause or contribute to them.
Review

• Can anxiety be good?
  • If so, when is it bad?

• What is the difference between fear and anxiety?

• Differences between a specific and generalized psychological vulnerability?
The Anxiety Disorders: An Overview

• 1. Generalized Anxiety Disorder

• 2. Panic Disorder with and without Agoraphobia

• 3. a. Specific Phobias
   b. Social Phobia

• 4. Obsessive-Compulsive Disorder
Generalized Anxiety Disorder

• Clinical Description
  – Excessive apprehension and worry
  – Unproductive worry: Not good for problem solving
    • Can’t decide on solution no matter how much
  – Uncontrollable
    • Can not stop
  – Strong, persistent anxiety
  – Somatic symptoms (different from panic which is the result of a sympathetic nervous system surge: heart rate, palpitations, perspiration, trembling)
    • (e.g., muscle tension, fatigue, mental agitation)
  – 6 months or more
Do you worry excessively about minor things?
Generalized Anxiety Disorder

• Clinical Description (cont.)
  – Shift from possible crisis to crisis
  – Worry about minor, everyday concerns
    • Job, family, chores, appointments
  – Problems sleeping

• GAD in Children
  – Need only one physical symptom
  – Worry = academic, social, athletic performance
Generalized Anxiety Disorder

• Statistics
  – Don’t appear in psychology clinics as often
  – 3.1% (year)
  – 5.7% (lifetime)
  – Similar rates worldwide
  – Female : Male = ~2 : 1
  – Insidious onset
    • Early adulthood
  – Chronic course
Generalized Anxiety Disorder

• **GAD in the Elderly**
  – Worry about failing health, loss
  – Up to 7% prevalence
  – Use of minor tranquilizers - 17-50%
    • Medical problems?
    • Sleep problems?
    • Falls
    • Cognitive impairments
GAD : Causes

• Inherited tendency to become anxious but not GAD itself—
  — think Diathesis-stress
• Less responsiveness
  — “autonomic restrictors”
• Threat sensitivity
  — Allocate their attention more readily to sources of threat than do people who are not anxious.
• GAD individuals are autonomic restrictors when compared with other anxiety disorders which include panic (i.e. less responsive autonomically- heart rate, blood pressure etc).
  — EEG studies showing intense cognitive processing in the left hemisphere add to our understanding.
  — GAD individuals are thinking so hard about upcoming problems that they do not have the attentional capacity left for the all-important process of creating images of the potential threat, images that would elicit more substantial negative affect and autonomic activity (the low autonomic response is proof as it appears not engaged).
  — So, they appeared to be avoiding all negative affect associated with the threat (painful stuff). But, this leads to avoidance and not working through problems!
GAD: Causes

Generalized psychological vulnerability

Stress
Due to life events

Possible false alarms

Generalized biological vulnerability

Anxious apprehension
(including increased muscle tension and vigilance)

Worry process
A failed attempt to cope and problem solve

Intense cognitive processing

Avoidance of imagery

Inadequate problem-solving skills

Restricted autonomic response

Generalized anxiety disorder
GAD: Treatments

- Pharmacological
  - Benzodiazepines
    - Misuse
    - Short term
    - Risks versus benefits

- Antidepressants
  - Side effects
GAD : Treatments

• Psychological
  – Cognitive-behavioral treatments: Examples
    • Exposure to worry process
    • Confronting anxiety-provoking images (engage autonomic arousal)
    • Coping strategies
  – Acceptance
  – Meditation
  – Drugs vs. Psychotherapy
    • Similar benefits
    • Psychotherapy has much better long-term results
Panic Disorder with and without Agoraphobia

• Clinical Description
  – Unexpected panic attacks
  – Anxiety, worry, or fear of another attack
  – Persists for 1 month or more
  – Agoraphobia
    • Fear or avoidance of situations/events
Panic Disorder with and without Agoraphobia

• Clinical Description (cont.)
  – Avoidance can be persistent
  – Use and abuse of drugs and alcohol
  – Interoceptive avoidance
    • Avoidance of internal sensations. (removing oneself from activities that might produce physiological arousal reminiscent of panic.)
Panic Disorder with and without Agoraphobia

• Statistics
• Although 8-12% of people have experienced at least one panic attack, only a portion of those go on to develop an anxiety disorder.
  – 2.7% (year)
  – 4.7% (life)
  – Female : male = 2:1-
  • Why?
  – Acute onset, ages 20-24
Panic Disorder - Special Populations

• Children
  – Hyperventilation
  – Cognitive development

• Elderly
  – Health focus
  – Changes in prevalence
Causes of common symptoms in primary medical settings
(Kroenke & Mangelsdorff, 1989)
Typical clinical course of Panic Disorder with Agoraphobia

Repeated spontaneous and situationally predisposed panic attacks
Typical clinical course of Panic Disorder with Agoraphobia

Repeated spontaneous and situationally predisposed panic attacks

Anticipatory anxiety: (the extent to which a Person expects another attack determines the agoraphobia avoidance behavior)

Will I have an attack?
Will it be embarrassing?
How will I escape?
Typical clinical course of Panic Disorder with Agoraphobia

Repeated spontaneous and situationally predisposed panic attacks

Anticipatory anxiety

Avoidance Behavior / Agoraphobia

Location of previous attacks

Physical sensations of attacks

Negative reinforcement of avoidance
Panic Disorder: Causes

• Generalized biological vulnerability
  – Alarm reaction to stress

• Cues get associated with situations
  – Conditioning occurs

• Generalized psychological vulnerability
  – Anxiety about future attacks
  – Hypervigilance
  – Increase interoceptive awareness
Panic Disorder: Causes

Generalized psychological vulnerability

Stress
Due to life events

False alarm

Learned alarm

Specific psychological vulnerability
Unexplained physical sensations are dangerous

Anxious apprehension
Focused on somatic sensations

Panic disorder

Associated with somatic sensations (Interoceptive cues) (e.g., pounding heart)

Development of agoraphobia
Determined by cultural, social, and pragmatic factors, and moderated by presence or absence of safety signals
Panic Disorder: Treatment

• Medications
  – Multiple systems
    • serotonergic
    • noradrenergic
    • benzodiazepine GABA

  – SSRIs (e.g., Prozac and Paxil): 60% panic free as long as they are on the drug. But….

  – High relapse rates when d/c’d
Panic Disorder: Treatment

• Psychological
  – Exposure-based
  – Reality testing
  – Relaxation
  – Breathing

• Panic Control Treatment
  – Exposure to interoceptive cues
  – Cognitive therapy
  – Relaxation/breathing

• High degree of efficacy
Links!

• [http://www.youtube.com/watch?v=277Q8dsArhl](http://www.youtube.com/watch?v=277Q8dsArhl)


• [http://www.youtube.com/watch?v=32K–rElbBgE](http://www.youtube.com/watch?v=32K–rElbBgE)