Projectives
- Personality test where patient responds to ambiguous stimuli to reveal hidden emotions and internal conflicts

Normed tests (must be reliable, valid, normed)
- Given to 1,000s people across country, noted patterns of response of people who have anxiety disorders and those who don’t

Comorbidity
- Common across all anxiety disorders
- Major depression is most common 2nd diagnosis
  - Cannot keep relationship/job because of disorder, depressed over diagnosis, etc.
- ½ patients have 2 or more secondary diagnoses
- Comorbidity = common factors and a relation between anxiety and depression

Types of anxiety disorders
- Generalized anxiety disorder GAD
  - Defining features
    - Excessive uncontrollable anxious apprehension and worry about many areas of life (work, health, relationships) for 6 months or more
    - Individuals with GAD called “autonomic restrictors”
      - Lower blood pressure and more autonomic restriction than those without anxiety
    - Less physiological response to stress than people with other anxiety disorders (but, muscles usually tight)
    - Sensitive to threat (see something as anxiety-provoking)
    - Less likely to process emotional component of thoughts and images
      - Constantly worry about what will happen later, less likely to imagine imagery of what it will be like and to emotionally process event
    - Less likely to do risky situations and drugs
  - Symptoms
    - Muscle tension, fatigue, restlessness, irritability, concentration difficulties, sleep disturbance
  - Statistics
    - 3.1% population
    - Females outnumber males 3:1
    - Onset insidious (doesn’t happen right away) in early adulthood
    - Prevalent among elderly
    - Runs in families
  - Treatment is weak
    - Psychological interventions
      - CBT most likely to work
    - Pharmacotherapy (not a long term solution)
      - Benzodiazepines (often prescribed, addictive, take during emergencies not constantly)
      - Antidepressants
    - Meditation therapy
- Link between BDD and social anxiety
  - Plastic surgery
    - Doesn’t make BDD go away, usually intensifies it

**Psychological, behavioral, and social factors that influence health**
- Major contributors to medical illness and disease
- Genital herpes, AIDS, cancer, cardiovascular diseases
  - Genital herpes: the more stressed you are, the more likely you are to have lesions
  - Feedback loop (mutually influential): lesions can also make you stressed out

**Psychological factors and medical conditions are mutually influential**
- Clinicians make note of relevant medical conditions when assigning psychiatric diagnoses

**Behavioral medicine**
- Application of behavioral science to preventing, diagnosing, and treating medical problems

**Health psychology**
- One part of behavioral medicine
- Studies psychological factors that promote and maintain good health

**Two primary paths psychological and social factors influence medical illness**
- Psychological factors can influence basic biological processes
  - Negative emotions, stress
  - Can disrupt basic biological processes which may lead to physical disorders and disease
- Long-standing behavior patterns may put people at risk for disease
  - Risky behaviors contribute to physical disorders/disease
  - Smoking, drinking, poor eating habits, no exercise
- Leading causes of death in US
  - 50% linked to lifestyle and behavioral patterns (cardiovascular health)

**Nature of stress**
- Stress
  - Physiological response of an individual
- Stressor
  - Event that evokes stress response
- Stress responses vary person to person
  - How we respond to stress is individualistic
  - Learn responses to stress by parents
- General adaptation syndrome GAS
  - Phase 1
    - Alarm response (sympathetic arousal)
  - Phase 2
    - Resistance (mobilized coping and action)
    - If it happens for a long time, you may try to resist stress
    - Good coping: exercise, breathing
    - Bad coping: drinking (chronic can cause health problems)
- Exhaustion (chronic stress, permanent damage)
- Stress can turn into depression, chronic health problems

- Physiology of stress
  - Activates sympathetic branch of ANS
  - Neuromodulators and neuropeptides act like neurotransmitters
  - Activates HPA axis, producing cortisol
    - Hippocampus in HPA stress response cycle
      - Part of limbic system (memory/learning)
        - Important for emotion; learn what to be stressed out about and what not to be
        - Taking previous experiences and letting you know how to react next time
      - Highly responsive to cortisol
      - Helps turn off HPA cycle
      - Chronic stress may damage cells in hippocampus
      - Damage to hippocampal cells interferes with stopping HPA loop, become less good at shutting off stress response
      - Increase in cortisol, increase in anxiety/stress
  - Ulcers caused by bacteria, but body can normally handle it, etc. etc. but if immune system is suppressed, body cannot handle bacteria, so ulcers created

Primate research: high and low social status
- High cortisol associated with low social status
- Low social status = e.g. lymphocytes, immune system suppression
- Dominant males benefit from predictability and controllability
  - Baboons high in hierarchy feel important and get predictability and control of their environment (high locus of control)
  - Things are predictable, not stressed out (no mental health symptoms)
  - Baboons low in hierarchy are stressed out all the time, hippocampus remembers that, stress always on

Stress: Portrait of a Killer movie **on test**
- Stress used to be used to save lives (helped survival), now bad effects on lives (chronic stress can be lethal: kill brain cells, add fat, unravel chromosomes)
- Robert Sapolsky (Stamford University) researches/teaches stress
- Suspected he could find out more about human stress and disease by looking at baboons in Kenya, Africa reserve
- Baboons only work 3 hours a day, 9 hours a day of free time
- Sapolsky took blood of baboons to look deeper into their cells and measured levels of hormones central to stress response
  - Adrenaline (epinephrine)
  - Glucocorticoids
  - Stress response/2 hormones critical to survival
- During stress response, there is high blood pressure, turn off anything not essential (growth, reproduction, ovulation, tissue repair)
- Humans turn on stress response thinking about non-lethal things like taxes, etc.
  - Not doing it for a physiological reason and doing it constantly
Endogenous opioids
- Systems in body that react to pain, same thing heroin works on
- Opioids used in anti-pain medications
- Put into system to reduce pain when we are in pain
- People more afraid of pain have less opioids in body

Poverty
- #1 producer of stress
- Expensive, hugely stressful, fewer access to social support systems, lower position in social hierarchy, no social capital

Psychosocial treatment of physical disorders
- Biofeedback
  - Patient learns to control bodily responses
  - Used with chronic headache and hypertension (stress has direct relation to chronic headaches)
  - Mood rings work in response to blood pressure, then you know to use coping strategy to reduce stress
- Relaxation and meditation
  - Progressive muscle relaxation
  - Transcendental meditation (TM)
  - Documenting stress (knowing what stresses you out can help prep you for those situations)
- Comprehensive stress reduction and pain management programs
  - More effective and longer term than individual interventions alone
  - Drug and stress-reduction programs
  - Denial as a means of coping
    - Can be used to temporarily suppress negative thoughts about seriousness of health problem in order to maintain motivation
    - Put aside stress, deal with learning healthy coping strategies, return to stress with new coping strategies

Modifying behaviors to promote health
- Lifestyle practices: core of many health problems
  - Behavioral risk factors also influenced by psychosocial factors
  - Prevention and intervention programs target behavioral risks

Somatoform and dissociative disorders
- Soma = “body”
- BDD previously considered this disorder (concerns about body) but now under OC disorders because of its obsessive-compulsive nature and response to same treatments as other OC disorders
- **Somatic symptom disorder**
  - Features
    - Preoccupation with health/body appearance and functioning
    - No identifiable medical condition causing physical complaints
    - Used to be called somatoform disorder
  - Clinical description
    - Presence of one or more medically unexplained symptoms
    - Substantial impairment in social or occupational functioning