Psychological Disorders

Chapter 16

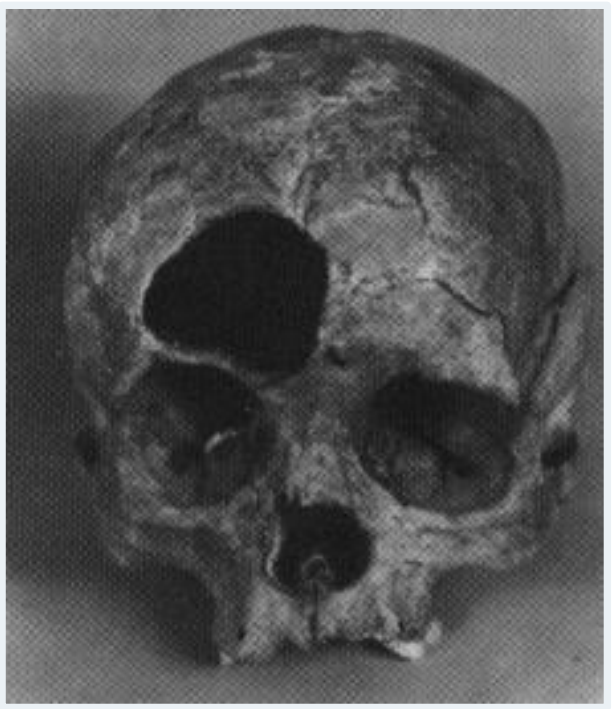
Psychological Disorders

- At various *moments*, *all* of us feel, think or act the *same* way disturbed people do much of the time.
- We, too, get anxious, depressed, withdrawn, suspicious, or deluded, just *less intensely and more briefly*.
- Some 450 million people world wide suffer psychological disorders.
- No culture known to man is without some form of psychological disorders.
- In the U.S., mental illness is common

Historical Roots

- In the ancient world, psychopathology was thought to be caused by demons and spirits that had taken possession of the person's mind and body.
- Part of daily life in ancient worlds was spent doing rituals aimed at outwitting or placating these supernatural beings.

Early Theories



- Music or singing was often used to chase away spirits.
- Trephining (3000 B.C.E.): cutting holes into the skull of a living person to let out the evil spirit.
- Is still done today to relieve pressure of fluids on the brain.

Defining Psychological Disorders

- Psychological disorders are defined as ***persistently harmful thoughts, feelings, and actions.***
- Psychologists & psychiatrists consider a behavior to be a disorder if it is:
  - **Deviant** – being different from most other people in one's culture (varies by culture, context, and time)
  - **Distressful** – prevents a person from thinking clearly or making rational decisions
  - **Dysfunctional** – (maladaptive) interferes with a person's ability to function normally in one or more important areas of life

Approaches to Explaining Psychological Disorders

Medical Model – (biological approach) views mental disorders as diseases of the mind, that like ordinary physical diseases, have causes and require treatment

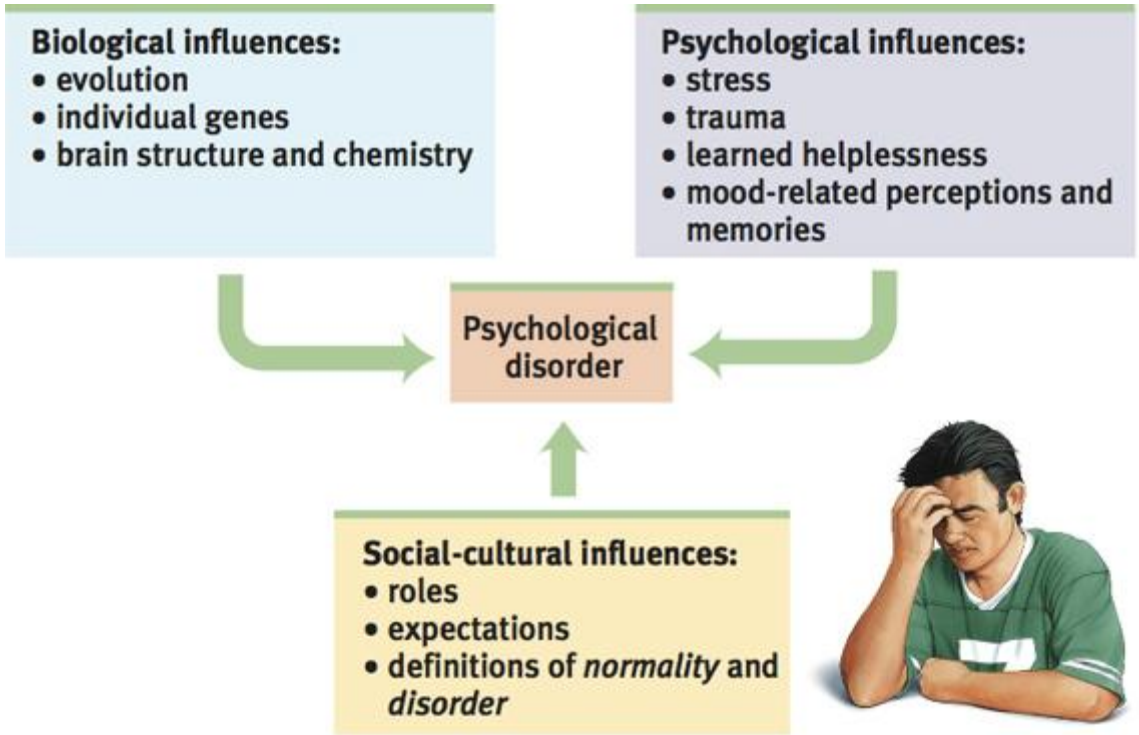
- A mental illness (psychopathology) needs to be diagnosed on the basis of its symptoms and cured through therapy, which may include treatment in a psychiatric hospital
- Causes – genetic, brain damage, abnormal brain structure, dysfunction of neurotransmitters, etc.

Approaches to Explaining Psychological Disorders

Perspective	Cause of the Disorder
Psychoanalytic/ psychodynamic	Internal, unconscious conflicts
Behavioral	Learned behaviors; Reinforcement history, the environment
Cognitive	Irrational, illogical, dysfunctional ways of thinking
Sociocultural	Societal and cultural influences in the individual's environment
Biomedical	Organic problems, biochemical imbalances, genetic predispositions

Approaches to Explaining Psychological Disorders

Biopsychosocial Approach – looks at how biological, psychological, and social-cultural factors interact to produce specific psychological disorders



Approaches to Explaining Psychological Disorders

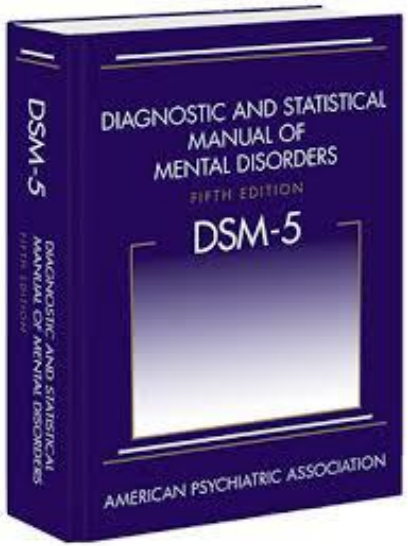
Diathesis-stress approach/model – (Rosenthal, 1960's)

- Recognizes a combination of biological and environmental causes of disorders
- Assumes that people's genes put them at risk of developing a psychological disorder when exposed to environmental triggers.

- *Most clinical psychologists take an **eclectic** approach - they accept & use ideas from a number of perspectives*

Classifying Psychological Disorders

- Diagnostic classification aims to describe a disorder, predict its future course, imply appropriate treatment, and stimulate research into its causes
- The APA developed the most widely used classification system - *Diagnostic and Statistical Manual of Mental Disorders*
- DSM-5 is the newest edition (2013)
- Provides common and concise language for the description of abnormal psychology



Multiaxial Classification

Axis I	Is a *Clinical Syndrome* (cognitive, anxiety, mood disorders [16 syndromes]) present?
Axis II	Is a *Personality Disorder* or *Mental Retardation* present?
Axis III	Is a *General Medical Condition* (diabetes, hypertension or arthritis etc) also present?
Axis IV	Are *Psychosocial* or *Environmental Problems* (school or housing issues) also present?
Axis V	What is the *Global Assessment* of the person's functioning?

Labeling Psychological Disorders

Criticisms of the DSM-5:

- It casts too wide of a net and brings “almost any kind of behavior within the compass of psychiatry”
- Labels are arbitrary; value judgements
- Labels create preconceptions that guide our perceptions and interpretations

Labeling Psychological Disorders

David Rosenhan Experiment - tested the *biasing power of labels (1973)*

- Rosenhan and 7 *pseudopatients* went to mental hospitals & complained of hearing voices, acted totally normal otherwise
- Diagnosed with schizophrenia & admitted.
- Once admitted, told to act normal & report no longer hearing voices
- Clinicians tried to “discover” the causes of the disorder
- Pseudopatients said voices went away, but doctors forced them to admit they still had problems
- Demonstrated that the label can determine how others perceive and react to a person
- Label could also lead to a self-fulfilling prophecy

Anxiety Disorders

- Some anxiety is normal, but if it is so intense & long-lasting that it impairs functioning, it might be a disorder
- **Anxiety Disorders** – psychological disorders marked by distressing, persistent anxiety or maladaptive behaviors that reduce anxiety
- **Types of anxiety disorders:**
  - Generalized Anxiety
  - Panic disorders
  - Phobias
  - Obsessive-compulsive disorder
  - Post-traumatic stress disorder

Anxiety Disorders – Generalized Anxiety Disorder

- Prolonged feelings of worry and unease *not* focused on any particular object or situation ("free-floating anxiety")
- Continually tense, apprehensive, and in a state of autonomic nervous system arousal
- Other symptoms:
  - sleeplessness & fatigue
  - restlessness
  - irritability
  - muscle tension
  - difficulty concentrating

Generalized anxiety disorder (GAD)

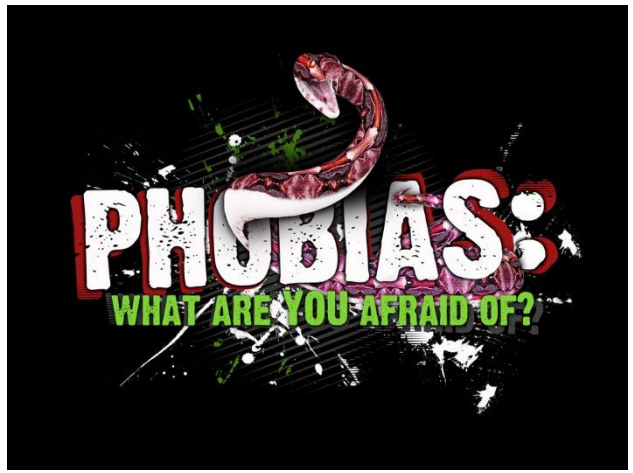
Symptoms	Treatment
Unable to recall last time they were relaxed	Psychotherapy • CBT
Furrowed brows, twitching eyelids, trembling, perspiration fidgeting	
Jittery, agitated, sleep-deprived	
Difficulty focusing & concentrating	Medications • Antidepressants • Buspirone • Benzodiazepines
Cannot identify & cannot deal with/or avoid cause	
Usually accompanied by mood disorder. E.g.depression	
Usually escalates to Panic disorder; feels like a heart attack	

Anxiety Disorders – Panic Disorder

- Acute or sudden and severe feeling of extreme anxiety or fear without warning or obvious cause (unpredictable)
- Comes on quickly and reaches peak within minutes
- Some physiological symptoms (often mistaken for a heart attack):
  - Accelerated heart rate
  - Pressure or pain in chest
  - Shortness of breath
  - Feelings of choking
  - Dizziness, feeling faint
  - Sweating
  - Nausea or numbness

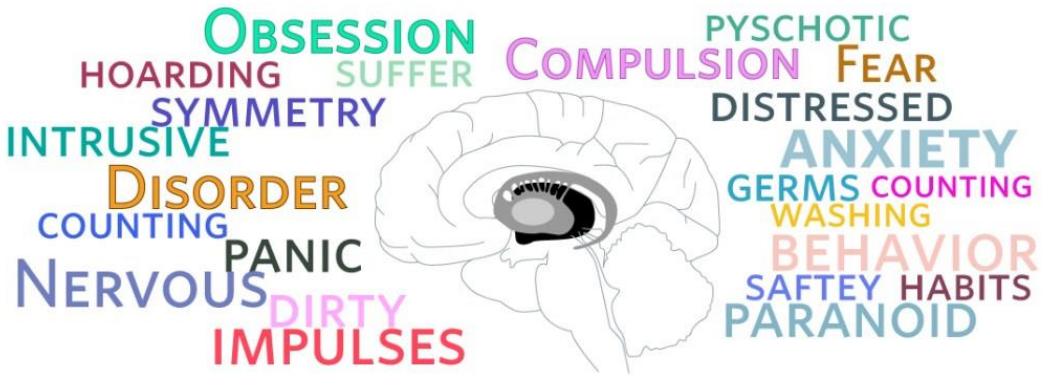
Anxiety Disorders – Specific Phobias

- Persistent, irrational fear and avoidance of a specific object or situation
- Usually realize fear is pointless, but anxiety still persists
- May greatly interfere with daily life
- **Agoraphobia** – fear of open, crowded spaces in which escape might be difficult



Anxiety Disorders – Obsessive-Compulsive Disorder

- **Obsessions** – persistent, upsetting, unwanted *thoughts*
  - Ex. infection, contamination, causing harm to self/others
- **Compulsions** – ritualistic, repetitive behaviors or *actions*
  - Ex. washing, counting, checking, arranging, etc.
- Considered a disorder when they interfere with everyday living and cause the person distress; become time-consuming to the point that effective functioning becomes impossible
- Onset: adolescence



Anxiety Disorders – Obsessive-Compulsive Disorder

COMMON OBSESSIONS AND COMPULSIONS AMONG CHILDREN AND ADOLESCENTS WITH OBSESSIVE-COMPULSIVE DISORDER

Thought or Behavior	Percentage Reporting Symptom
Obsessions (repetitive thoughts)	
Concern with dirt, germs, or toxins	40
Something terrible happening (fire, death, illness)	24
Symmetry, order, or exactness	17
Compulsions (repetitive behaviors)	
Excessive hand washing, bathing, tooth brushing, or grooming	85
Repeating rituals (in/out of a door, up/down from a chair)	51
Checking doors, locks, appliances, car brake, homework	46

Source: Adapted from Rapoport, 1989.

Obsessive Compulsive Disorder

Cause	Symptoms	Treatment
Biology-changes in your body's own natural chemistry or brain functions. **Genetics-m**ay have a genetic component, but specific genes have yet to be identified. **Environment-** Infections are suggested as a trigger for OCD, but more research is needed. **Other mental health disorders.** OCD may be related to other mental health disorders, such as anxiety disorders, depression, substance abuse or tic disorders.	**Obsessions often have themes** • Fear of contamination or dirt • Needing things orderly and symmetrical • Aggressive or horrific thoughts about harming yourself or others • Unwanted thoughts, including aggression, or sexual or religious subjects **Compulsions have theme** • Washing and cleaning • Checking • Counting • Orderliness • Following a strict routine • Demanding reassurances	**Psychotherapy** • CBT • Exposure & response prevention (ERP) • Family Therapy **Medications** • Antidepressants E.g. Anafranil, Prozac, Paxil, Zoloft

Anxiety Disorders – Post Traumatic Stress Disorder

- Caused by experiencing or witnessing severely threatening, uncontrollable events with a sense of fear, helplessness, or horror
  - Examples - war, natural disasters, assaults, abuse, accidents, etc.
- *The greater the emotional distress during a trauma, the higher the risk for post-traumatic symptoms*

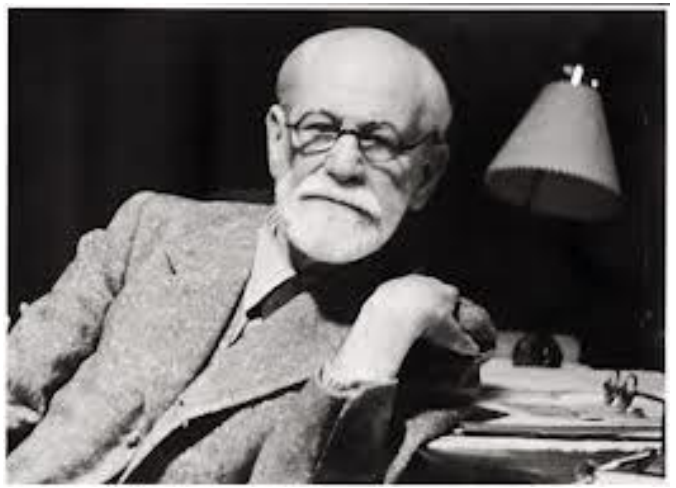
- **Common symptoms:**
  Anxiety, depression, irritability, jumpiness, inability to concentrate, sexual dysfunction, difficulty getting along with others, sleep disturbances, intense startle responses, suppressed immune system, nightmares, flashbacks, social withdrawal

Post Traumatic Stress Disorder

Cause	Symptoms	Treatment
• **Stressful experiences**; amount & severity of trauma • **Inherited mental health risks-** such as a family history of anxiety and depression • **Inherited features of your personality-** temperament • The way the brain regulates chemicals & hormones your body releases in response to stress	• Intrusive memories • Flashbacks • Nightmares • Negative changes in mood & thinking • Avoidance • Changes in emotional & physical reactions For children 6 years old and younger, signs and symptoms may also include: • Re-enacting the traumatic event or aspects of the traumatic event through play • Frightening dreams that may or may not include aspects of the traumatic event	Psychotherapy • **CBT** • **Exposure therapy** • **Eye movement desensitization and reprocessing (EMDR)-** series of guided eye movements that help you process traumatic memories and change how you react to them. Medications • **Antidepressants** • **Anti-anxiety** • **Prazosin e.g. Minipress-** may reduce or suppress nightmares

Explaining Anxiety Disorders

- **Psychoanalytic theory -** Freud suggested that, beginning in childhood, we repress our painful and intolerable ideas, feelings, and thoughts, which sometimes results in anxiety.



- Psychologists have turned to two more contemporary perspectives:
  - Learning & biological

Explaining Anxiety Disorders – The Learning Perspective

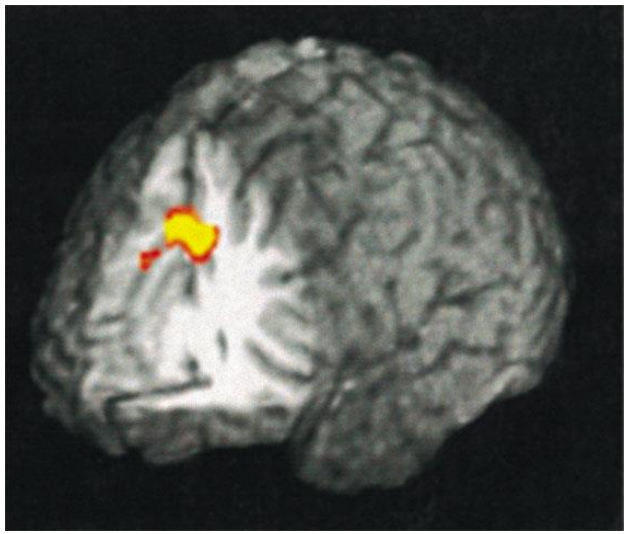
- Fear conditioning leads to anxiety (classical or operant conditioning)
- Conditioned fears may remain long after we have forgotten the experiences that produced them.
  - EX: Associating a painful experience with a thunderstorm or car crash, now afraid of storms or cars
- **Stimulus Generalization** – bit by a dog, now afraid of all dogs
- **Reinforcement** – avoiding or escaping new feared stimuli helps us feel better, maintaining the new phobia or fear

Explaining Anxiety Disorders – The Learning Perspective

- **Observational learning** – we can learn to fear things by watching others
- Human parents can transmit fears to their children

Explaining Anxiety Disorders – The Biological Perspective

- Helps to explain why we learn some fears more readily & why some people are more vulnerable.
- **Natural selection** - our ancestors learned to fear certain things to preserve the species
- **Genetic predisposition** - genes may be partly responsible. Twins are more likely to share phobias
- **The brain** - Generalized anxiety, panic attacks, and even OCD are linked with **brain** circuits like the **anterior cingulate cortex**, which monitors our actions & checks for errors.

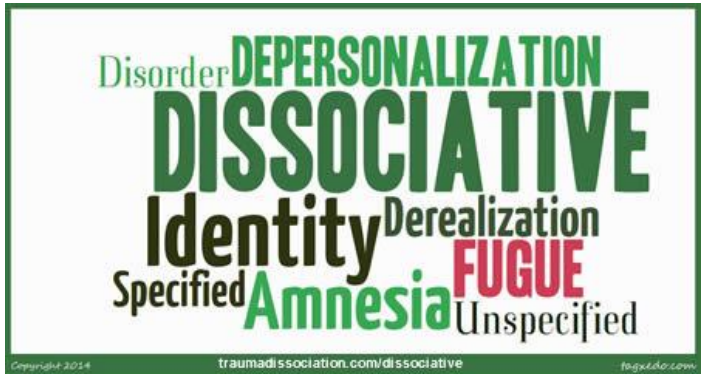


Anterior Cingulate Cortex of an OCD patient shows increased brain activity

Dissociative Disorders

What is **dissociation**?

- literally a “dis-association” of memory; a “disconnection” between the mind and body
- Conscious awareness becomes separated (dissociated) from previous memories, thoughts, and feelings.
- person suddenly becomes unaware of some aspect of their identity or history, unable to recall except under special circumstances (e.g., hypnosis)

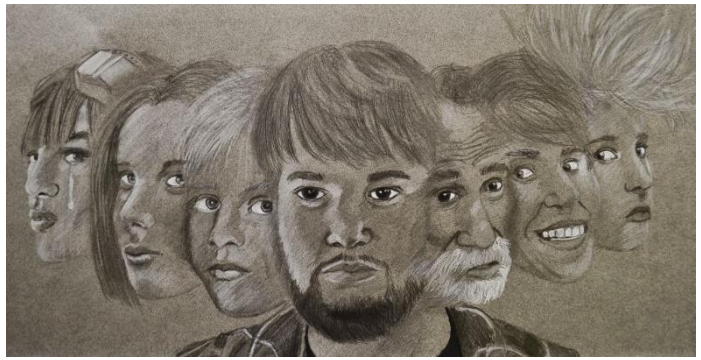


Dissociative Disorders

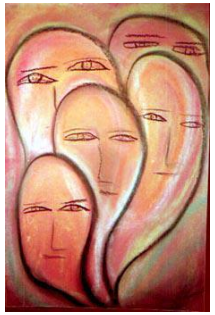
- **Dissociative amnesia (psychogenic amnesia)** – sudden loss of memory for a traumatic event or a period of time that is too painful to remember
  - person still knows identity and most of their past
- **Dissociative Fugue** – sudden memory loss of their present life resulting in a new identity and a move to a new location; flee their homes, jobs and families, don't recall previous life

Dissociative Disorders

- **Dissociative Identity Disorder (DID)** – (formerly called multiple personality disorder)
  - 2 or more distinct personalities (alters) manifested by the same person at different times
  - Amnesia involved when alternate personalities take over
  - Each alter speaks, acts, writes differently
  - Each alter has own memories, wishes, and (often conflicting) impulses



Dissociative Disorders



Dissociative Identity Disorder (DID)

- May be a defense mechanism against trauma or unacceptable impulses; DID patients have suffered horrific past events

Critics argue that the diagnosis of DID increased in the late 20th century.

- DID has not been found in other countries.
- Perhaps prompted by movies, books, & therapists seeking diagnosis
- Controversy over whether or not it exists
- Do therapists prime patients into a diagnosis?
- Are there distinct biological and physiological differences when different identities are present?

Somatic Symptom (Somatoform) Disorders

- Psychological disorder in which the symptom take a somatic (bodily) form
- **Somatic Symptom Disorder** – a person experiences a physical problem in the absence of any identifiable physical cause
  - **Conversion disorder** – a related disorder in which a person experiences very specific physical symptoms that have no identifiable physical cause
  - Anxiety is “converted” into a physical symptom
  - May experience sensory failure (blindness, deafness) or motor failure (paralyzed limbs)

Somatic Symptom Disorders

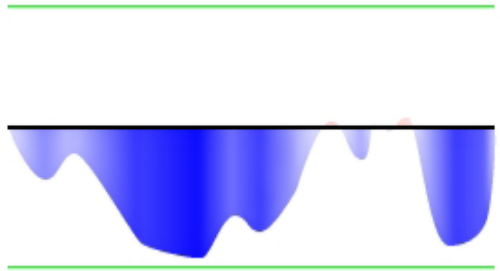
- **Illness Anxiety Disorder** – (previously called hypochondriasis) interpretation of normal bodily sensations – headache, stomach cramp, etc. – as symptoms of a serious illness.
  - Sympathy or temporary relief from everyday demands may reinforce this belief

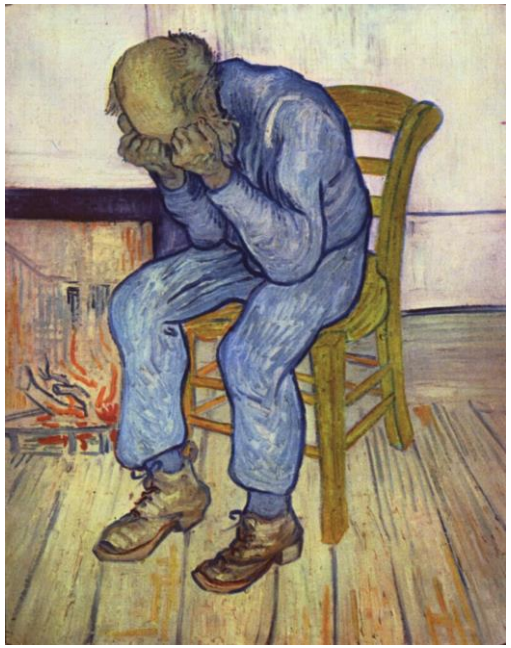
Mood Disorders

- Condition where a person experiences extreme moods inappropriate for or inconsistent with situations
- **Two principal forms:**
  - Major depressive disorder
  - Bipolar disorder

Mood Disorders – Major Depressive Disorder

- Person experiences extreme depression, overwhelmed, hopeless for weeks or months
- “Common cold” of psychological disorders - #1 reason for seeking mental health services
- Can begin suddenly or slowly
- Young adults and women most susceptible
- Despite best efforts, everything from conversation to bathing is an unbearable, exhausting effort





Mood Disorders – Major Depressive Disorder

To be diagnosed, must experience 5 of following (usually for more than 2 weeks):

- ✓Persistent depressed mood most of the day
- ✓Loss of interest or pleasure in most activities
- ✓Significant weight loss or gain
- ✓Sleep changes
- ✓Speeding up or slowing down of physical & emotional reactions
- ✓Loss of energy
- ✓Feelings of worthlessness, guilt
- ✓Reduced concentration, inability to make meaningful decisions
- ✓Recurring thoughts of death/suicide

Causes of Major Depressive Disorder

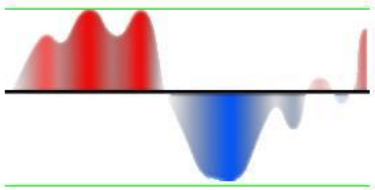
Biological	Cognitive	Socio-cultural
• Genetics- chances increase with parent or sibling diagnosed (major depression- 1:2; bipolar- 7:10) • Brain- serotonin and norepinephrine levels are different. • Lower levels of omega 3 fatty acids- possible factor. • Left frontal lobe less active	• Low self-esteem, depression-prone people are more likely to perpetuate the depression cycle • Learned helplessness; *Locus of control*-internal vs. external	• Environmental stressors e.g. war, poverty, relationships • Diathesis stress model- trauma/stress triggers genetic predispositions

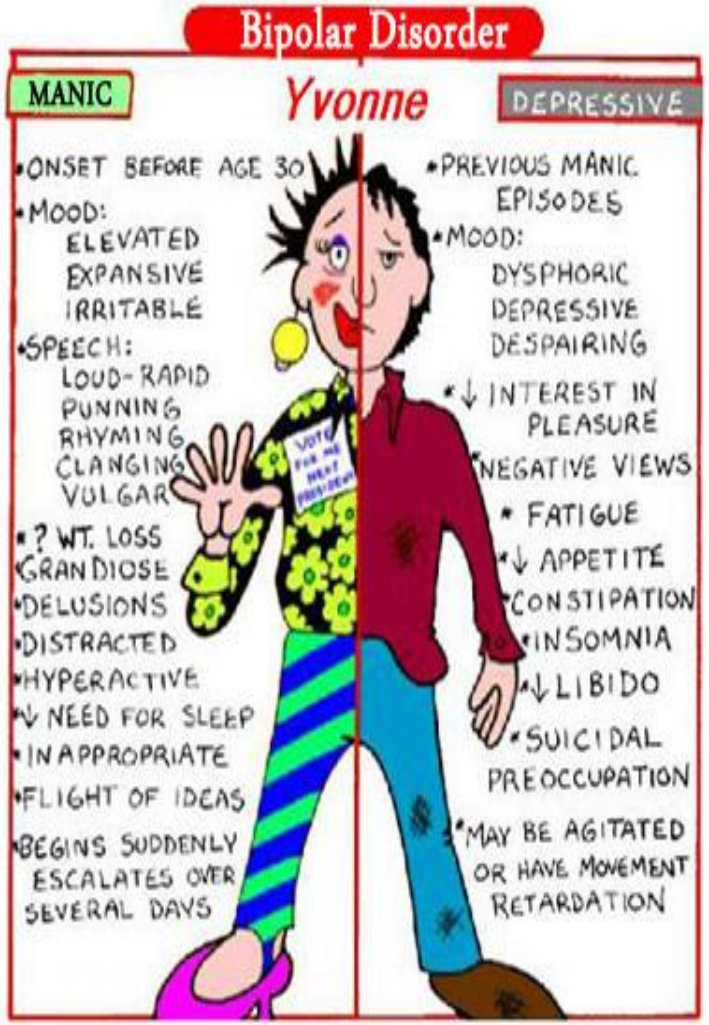
Treatment of Major Depressive Disorder

Psychotherapy	Drug Therapy
• Cognitive behavioral therapy • Interpersonal therapy • Dialectic behavioral therapy (DBT) • Acceptance and commitment therapy • Mindfulness techniques	• Selective serotonin reuptake inhibitors (SSRIs) e.g. Prozac, Paxil, Zoloft, Lexapro • Serotonin and norepinephrine reuptake inhibitors (SNRIs). E.g. Cymbalta, Effexor XR, Pristiq • Norepinephrine and dopamine reuptake inhibitors (NDRIs) e.g. Wellbutrin- not frequently associated with sexual side effects. • Atypical antidepressants- Don't fit neatly into any of the other antidepressant categories e.g. Remeron • Tricyclic antidepressants. Tricyclic antidepressants, e.g. Tofranil (Not prescribed unless patient tried an SSRI first without improvement) • Monoamine oxidase inhibitors (MAOIs) e.g. Parnate - may be prescribed, typically when other medications haven't worked, because they can have serious side effects

Mood Disorders – Bipolar Disorder

- Characterized by mood swings alternating between periods of major depression and mania
- Effects men & women equally
- **Mania** – extremely energetic, excessive talking, optimistic, euphoric, little need for sleep
- May make impulsive/unwise decisions





Causes & Treatment of Bipolar Disorder

Biological	Treatment
• A strong **genetic** component is well established, although the exact genes involved are not known. • 1% of the population has bipolar attacks, having an identical twin with the problem inflates a person's chances to about 70%	**Medications**- Mood stabilizers, antidepressants, anti-psychotics, Antidepressant-antipsychotic (e.g Symbyax), Anti-anxiety medications. **Psychotherapy** • Interpersonal and social rhythm therapy (IPSRT). • Cognitive behavioral therapy (CBT). • Psychoeducation. • Family-focused therapy **Electroconvulsive therapy (ECT)** Transcranial magnetic stimulation (TMS)

Related Mood Disorders

Dysthymic Disorder:

- Sad mood, lack of interest, loss of pleasure
- Like Major Depression but less intense and for longer period of time (must last at least 2 years to qualify)

Post-partum Depression: Major Depression following birth of a child

Seasonal Affective Disorder (SAD): Symptoms of depression connected to lack of sunlight in winter months

Explaining Mood Disorders

- Many behavioral & cognitive changes accompany depression
- Depression is widespread - Since so widespread, must have common causes, too
- Trapped in negative cycle of depressed behavior & depressive thoughts
- Women twice as likely to have major depression (internal), men more likely to have external disorders (lack of impulse, alcohol abuse)
- Most major depressive episodes self-terminate, even without professional help
- Stressful events related to work, marriage, & close relationships precede depression
- Depression strikes earlier & earlier and affects more & more people with each new generation

Explaining Mood Disorders – Biological Perspective

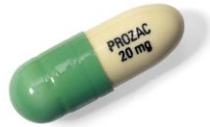
Genetic influences

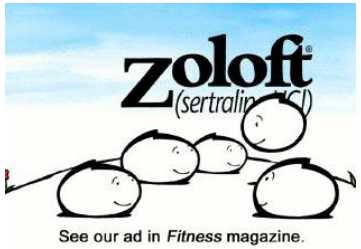
- Mood disorders run in families – risk increases if you have a depressed parent or sibling
- Twin & Adoptive studies support genetic influences
- Linkage analysis – points us to a "chromosome neighborhood" responsible, but no specific gene yet

Explaining Mood Disorders – Biological Perspective

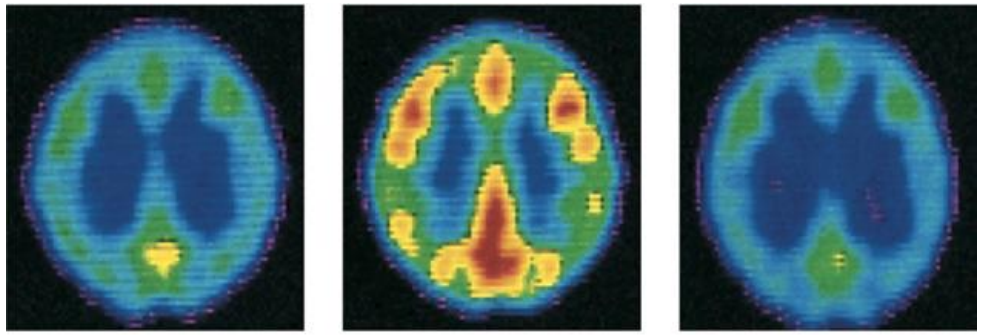
The Brain

- Norepinephrine (increases arousal & boosts mood) scarce during depression & overabundant during mania
- Serotonin levels low during depression
  - Drugs that relieve depression increase serotonin & norepinephrine by blocking reuptake or breakdown
  - Exercise boosts serotonin





PET scans show brain energy consumption rises & falls with changes in emotions. Red areas indicated rapid consumption of glucose.



Depressed state (May 17) | Manic state (May 18) | Depressed state (May 27)

Explaining Mood Disorders – Social-Cognitive Perspective

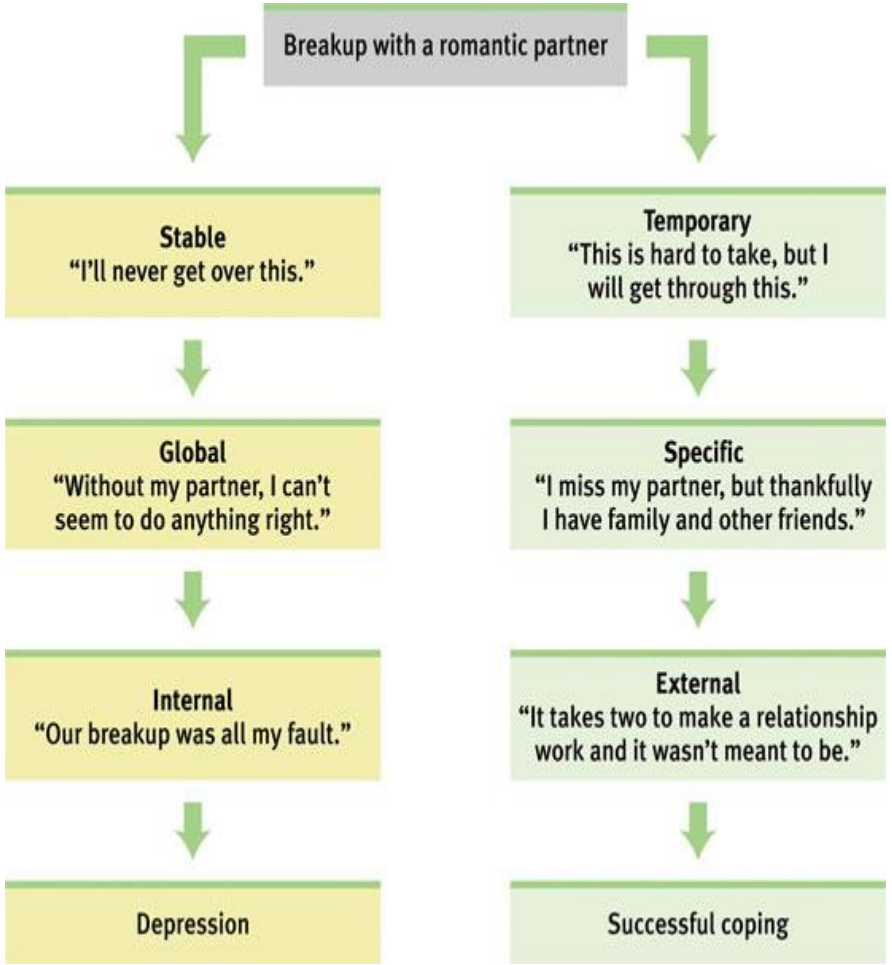
Social-cognitive perspective explores how people's assumptions & expectations influence what they perceive

- View life through dark glasses - Magnify bad experiences & minimize good ones
- More common in women because of their tendency to *ruminate* or overthink
- Self-defeating beliefs may arise from **learned helplessness** (Seligman)
- Depression higher among Westerners – rise of individualism, less commitment to family & religion
- Depressed people's self-defeating beliefs & their negative explanatory style feed their depression

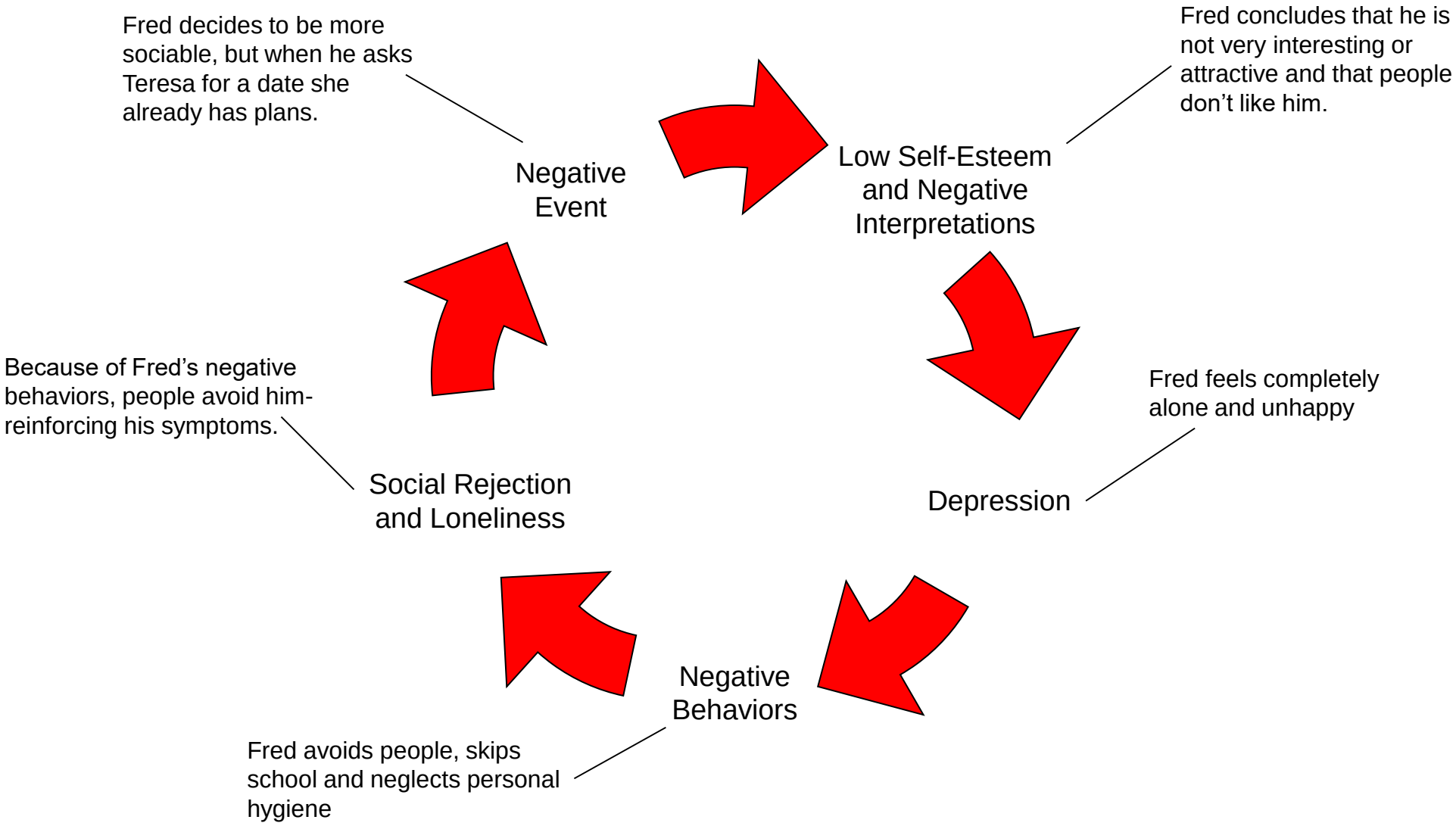
Explaining Mood Disorders – Social-Cognitive Perspective

Explanatory style – who or what they blame for their failures

- Often self-blame for anything bad & out of their control
  - **Stable** – "It's going to last forever."
  - **Global** – "It's going to affect everything I do."
  - **Internal** – "It's all my fault."
- Research proves a pessimistic explanatory style can lead to depression



Cycle of Depression

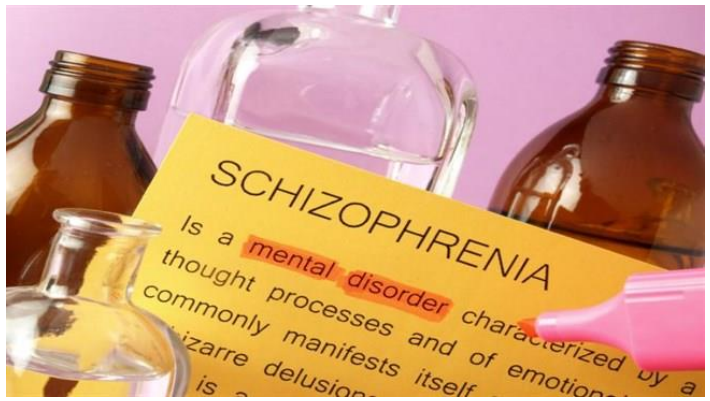


Statistics for Thought - Suicide

- Nearly 1 million people die by suicide
- Canada, US, Australia have more than double that of Italy, Britain, & Spain
- Whites nearly twice as likely than blacks in US
- More than 90% of people who kill themselves have a diagnosable mental disorder, most commonly a depressive disorder or a substance abuse disorder.
- Late adulthood rates increase, especially for men
- Higher rates among nonreligious, rich, single, gay, transgender, & gender nonconforming individuals
- Four times as many men as women die by suicide; however, women attempt suicide two to three times as often as men.

Schizophrenia – "Split Mind"

- A severe and disabling pattern of extremely disturbed thinking, emotion, perception, and behavior that seriously impairs the ability to communicate and relate to others and disrupts most other aspects of daily functioning
  - One of the most serious disorders
  - Often involves loss of contact with reality – "split from reality"
  - Comes in varied forms



Schizophrenia

- Schizophrenia affects 20 million people worldwide but is not as common as many other mental disorders
- Typically strikes men earlier, more severely, and more often
- Usually develops in adolescence, early adulthood - For men, before age 25, and for women between the ages of 25-40
- 10-13% of homeless population have schizophrenia
- Accounts for the diagnosis for over 40% of patients in public mental hospitals. This may be due to the fact that there is no cure, and often times patients will need therapy for the remainder of their lives.
- One of the most heavily researched psychological disorders

Categorizing Schizophrenia

Positive symptoms – presence of inappropriate behaviors such as:

- Disorganized thoughts
- Hallucinations
- Delusions
- Inappropriate emotions

- The **ADDITION** of these symptoms makes them schizophrenic

Negative symptoms – absence of appropriate behaviors such as:

- lack of pleasure & motivation
- Toneless voices
- Expressionless faces

- What they are **MISSING** makes them schizophrenic

Schizophrenia – Disturbed Perceptions

- **Hallucinations** – false sensory experiences
- Often auditory – voices which are hostile, violent, manipulative, abusive
- Can also be sights, smells, taste, touch sensations without external stimuli

Schizophrenia – Disorganized Thinking

- Thinking is fragmented, bizarre & distorted
- Breakdown in ***selective attention*** - We can give undivided attention to one stimulus even though thousands of stimuli exist but schizophrenics can't filter out info.
- **Delusions** – false beliefs, often of *persecution* or *grandeur*, that may accompany psychotic disorders
  - Those with paranoid tendencies, may believe they are being threatened or pursued.

Schizophrenia – Disorganized Language

- **Loose Associations** – one thought not connected with the next
  - "I need to go to the store to buy some band-aids. I read an article about how expensive AIDS drugs are. People take too many street drugs. The streets should be clean from the rain today."
- **Neologisms** (new words) – only have meaning to themselves
  - "The only problem I have is my frustionating!"
- **"Word salad"** - jumble of words reflecting utterly chaotic thoughts
  - "Sometimes it feels and smells like someone has screwed a quarter-pounder hamburger into my head and arms and legs if you shine a headlight inside it will drill you."

Schizophrenia – Inappropriate Emotions & Actions

- Expressed emotions often inappropriate - laugh, cry, express rage at inappropriate times
- **Flat affect** – zombielike state; show no apparent feeling
- Most have impaired *theory of mind* –difficulty perceiving facial expressions or reading others' states of mind
- **Catatonia** – Inappropriate motor behavior that ranges from a physical stupor to senseless, compulsive acts such as continually rocking or rubbing an arm

SCHIZOPHRENIA

- **Disorganized type:** typical image of mental illness with incoherent speech, hallucinations, delusions and odd behaviors

- **Catatonic type:** a range of motor dysfunctions
  - **Stupor:** long periods of coma like, motionless state
  - **Excitement:** agitated and hyperactive
- **Paranoid type:** delusions and hallucinations but no catatonic symptoms and none of the incoherence of disorganized type
- **Undifferentiated type:** a catchall term for schizophrenia symptoms that are erratic and do not fit into one of the other categories, but are clear symptoms of the disorder
- **Residual type:** the diagnosis for individuals who have suffered from schizophrenia, but have no major symptoms at the time

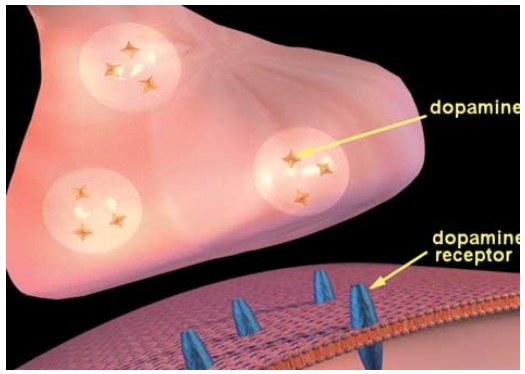
Recovering From Schizophrenia

- ***Chronic* or *Process* Schizophrenia** – slow-developing process
  - Often exhibit negative symptoms
  - Recovery is doubtful
- ***Acute* or *Reactive* Schizophrenia** – a previously well-adjusted person develops it rapidly in reaction to particular life stresses
  - Recovery is much more likely

  - 40% improve with treatment and function reasonably well. The rest have continuous or intermittent symptoms that permanently disrupt functioning
  - 1 in 7 will have full and enduring recovery

Schizophrenia and Brain Abnormalities

- **Chemical Imbalance** - Excess of receptors for dopamine,
- High level may intensify brain signals in schizophrenia creating positive symptoms – hallucinations & paranoia
- Drugs that block dopamine receptors lower the symptoms
- Drugs that increase dopamine (cocaine, meth) intensify them
- Dopamine over-activity causes overreactions to external & internal stimuli



Schizophrenia and Abnormal Brain Activity & Anatomy

- Brain scans show low brain activity in the frontal lobes (reasoning, planning, & problem solving)
- PET scans of brain during hallucinations show increased activity:
  - in the amygdala for those with paranoia
  - in the thalamus when they heard or saw something.
- Studies show a shrinkage of cerebral tissue causing fluid filled areas of the brain to become larger and the thalamus smaller than normal
- Tends to involve a loss of neural connections

Schizophrenia and Prenatal Influences

Higher risk if the mom-to-be:

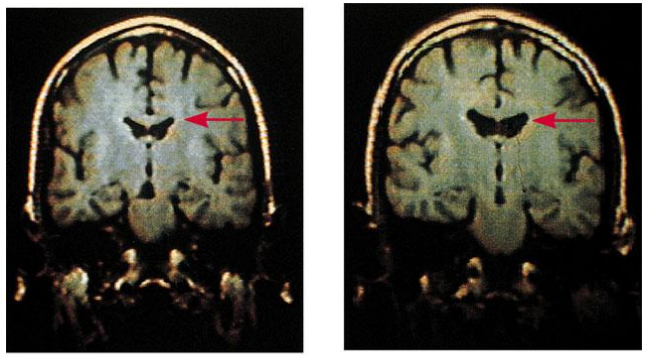
- Has diabetes
- Lives in a country with a flu epidemic
- Gave birth in the months following fall-winter flu season
- Experiences the flu
- Lives a densely populated area

Additional risk factors:

- Low birth weight
- Oxygen deprivation during delivery
- Father is over 45

Schizophrenia and Genetic Factors

- 1 in 100 = normal possibility of getting schizophrenia
- 1 in 10 if sibling or parent has it
- 1 in 2 in identical twins (even if reared apart); 1 in 10 chance if they don't share a placenta
- Adopted children not likely to have it if adoptive parent has it; only if biological parent has it
- We haven't identified a single gene responsible yet – influenced by many genes
- Not just a gene anyway, its nature & nurture



No schizophrenia Schizophrenia

Schizophrenia Triggers

Unless a person is related to someone with schizophrenia, there are no family or social factors by themselves that are known to produce schizophrenia.

Possible early warning signs:

- Mother w/ severe & long-lasting schizophrenia
- Low birth weight or oxygen problems during birth
- Separation from parents
- Short attention span & poor muscle coordination
- Disruptive or withdrawn behavior
- Emotional unpredictability
- Poor peer relations & solo play

Other Types of Disorders

Most people get stuck thinking about depression and schizophrenia when they think about psychological disorders. In reality there are far more. Some of the more common, and more studied disorders are:

- Eating Disorders
- Personality Disorders
- Developmental Disorders

Eating Disorders

Of the eating disorders that exist, two are most prevalent and most studied:

Anorexia nervosa: an eating disorder that causes a persistent loss of appetite that endangers an individuals health

- Stems from emotional or psychological reasons rather than natural causes
- Usually a distorted view of oneself
- 1% of population affected
- 3.4% with partial syndrome anorexia

Eating Disorders

The other common eating disorder is bulimia nervosa.

Bulimia Nervosa: An eating disorder characterized by binges and purges

- Induced vomiting, or laxatives
- .6% of population affected with bulimia
- Up to 4.2% of females

Personality Disorders

Personality disorders are enduring or continuous inflexible patterns of thinking, feeling, and acting that impair one's social functioning

- Common features of all personality disorders
  - Distorted thinking
  - Interpersonal difficulties
  - Problems with impulse control
  - Problems with emotional responses

Types of Personality Disorders

Grouped into 3 clusters based on common attributes.

Cluster A: "Odd Suspicious, and Eccentric" – disorders that show a pattern of paranoia, social isolation cognitive or perceptual distortions, and eccentric behaviors – dominated by distorted thinking

- **Schizoid Personality Disorder (SPD)**: eccentric behaviors, emotionless disengagement
  - Can't communicate with others
  - Solitary lifestyle, secretiveness, emotional coldness, and apathy.
  - Cold and indifferent

Types of Personality Disorders

Cluster B: "Dramatic, Emotional, Erratic" – disorders that cause significant disruption, even harm to self and others

- **Histrionic Personality Disorder** – displays shallow, attention-getting emotions and goes to great lengths to gain others' praise and reassurance – "drama queens"
- **Narcissistic Personality Disorder:** Grandiose sense of self importance and preoccupation with fantasies of success

Types of Personality Disorders

- **Borderline Personality Disorder (BPD):** Unstable and extreme impulses and intense emotions without clear reasoning.
  - Problems with relationships and self-image
  - Intense fears of abandonment
  - Intense anger and irritability
  - High sensitivity to & constant thinking about rejection and abandonment

Types of Personality Disorders

Antisocial Personality Disorder (formerly called a sociopath or psychopath) – Longstanding pattern of irresponsible behavior indicating lack of conscience and responsibility towards others

- Means “disruptive,” not just unsociable
- Typically male
- Lack of conscience becomes clear before 15
- May show lower emotional intelligence
- Many criminals don’t fit the description – not impulsive and show concern for friends & family

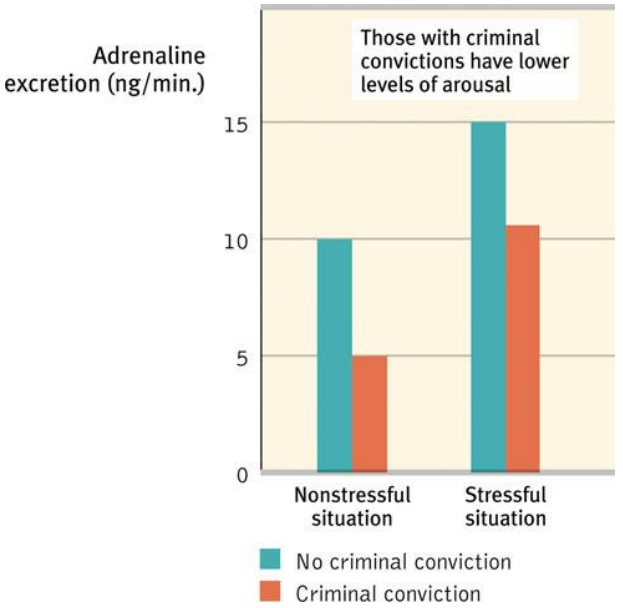
Types of Personality Disorders

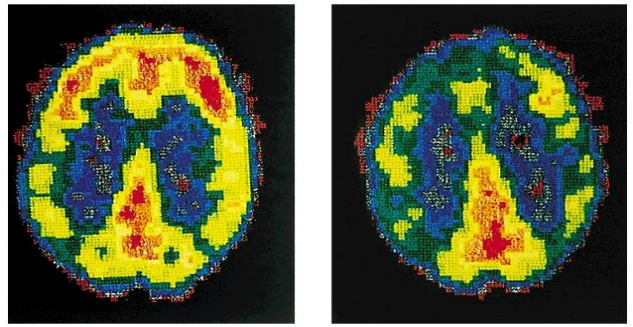
Antisocial Personality Disorder characteristics:

- Superficial charm – can be a clever con artist
- Liar, insincere, manipulative
- High intelligence
- No anxiety or fear
- No guilt or regret – feel little; no responsibility
- Impulsive
- Does not learn from experience
- Cannot form lasting relationships

Understanding Antisocial Personality Disorder

- Both biological and psychological factors contribute to the disorder
- No single gene code found to determine future criminal behavior
- Having biological relatives with antisocial and unemotional tendencies increases the risk.
- Show low arousal levels in response to threats
- Stress hormone levels lower than average
- Frontal lobes are less active & contain less tissue





Normal Murderer

Types of Personality Disorders

Cluster C: "anxious and fearful"– disorders include symptoms of inadequacy, submission, clinginess orderliness, hypersensitivity

- **Avoidant Personality Disorder**: anxiety, fearful sensitivity to social rejection, so person is withdrawn

Development Disorders

Developmental disorders are a group of disorders that can appear at any age, but most commonly show signs during childhood.

- ***Autism*** **-** Marked by disabilities in language, social interaction and the inability to understand another person's state of mind, withdraw into their own world, fail to form normal attachments to their parents
  - 1 in 68 children; recent increase in cases
  - Causes are still unknown-research states it has a hereditary component
- ***Dyslexia -*** A reading disorder where letters words and numbers are perceived out of order, upside down or completely incomprehensible

Neurodevelopmental Disorders

Attention-Deficit Hyperactivity Disorder (ADHD)

- Characterized by persistent inattention and/or hyperactivity and impulsiveness that interferes with basic functioning and development
- Conditions associated with central nervous system functioning
- Predominately affects children (more males) but also found in adults
- Controversies:
  - Frequency and accuracy of the diagnosis - subjective
  - Is it even a disability?
  - Children are unnecessarily medicated