# KOSSLYN CHAPTER 11 – Psychological Disorders: More Than Everyday Problems

**IDENTIFYING <u>PSYCHOLOGICAL DISORDERS</u>**: mental conditions characterized by cognitive, emotional, and behavioral symptoms that:

- Create significant distress
  - Ex: repeatedly bursting into tears, expressing hopelessness about the future, chronic worry, profound sadness for long periods of time
- Impair work, school, family, relationships, or daily living
- Lead to significant **risk of** harm, causing an individual to put lives at risk (intentionally or accidentally)

## **Cultural / Social Influences** – determine what is "abnormal" / "disordered"

- Often changes from generation to generation as cultural norms shift over time
- Varies from culture to culture

**Psychosis:** severely impaired ability to perceive, comprehend events accurately, combined with grossly organized behavior 2 symptoms:

- 1. **Hallucinations:** mental images so vivid that they seem real
- 2. **Delusions**: unshakable but false beliefs that are often bizarre

Hallucinations, delusions should not be considered abnormal if they are an accepted part of culture

## Diagnostic and Statistical Manual of Mental Disorders (DSM)

- Manual of mental disorders designed to help clinicians diagnose and treat patients
- *5 axes* / types of information that need to be considered when assessing a person's problems:
  - 1. Clinical disorders (ex: anxiety disorders, schizophrenia)
  - 2. Personality disorders / mental retardation (generally arise during childhood, persist throughout life, can affect how symptoms of other disorders are expressed)
  - 3. Medical conditions relevant to diagnosis on Axis 1 or 2 (ex: food allergies)
  - 4. *Social | environmental problems* (ex: marital problems, homelessness)
  - 5. Patient's highest level of functioning in major areas of life within the past year

#### 17 Major Categories of Psychological Problems

- 1. Disorders usually first diagnosed in infancy, childhood, or adolescence (ex: ADHD)
- 2. Delirium, dementia, amnestic, etc. disorders → disorders of consciousness / cognition
- 3. Mental disorders due to a general medical condition not elsewhere classified
- 4. Substance-related disorders
- 5. Schizophrenia, other psychotic disorders
- 6. Mood disorders
- 7. Anxiety disorders
- 8. Somatoform disorders → physical / medical complaints have no medical origin and so are thought to be psychological in nature (ex: hypochondriasis)
- 9. Factitious disorders → person intentionally fabricates symptoms of medical / psychological disorders, but not for external gain (ex: disability claims)
- 10. Dissociative disorders → disruption in usually integrated functions of consciousness, memory, identity
- 11. Sexual / gender identity disorders
- 12. Eating disorders
- 13. Sleep disorders (ex: insomnia)
- 14. Impulse-control disorders not elsewhere classified (ex: kleptomania)
- 15. Adjustment disorders → disorders related to the development of distressing emotional, behavioral symptoms in response to identifiable stress
- 16. Personality disorders → personality traits that are inflexible / maladaptive, cause distress / difficulty with daily functioning
- 17. Other conditions that may be a focus of clinical attention (ex: bereavement)

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## Advantages / Disdvantages

- +/- Covers a tremendous number of disorders
- Created psychological / psychiatric disorders for medical problems (ex: "breathing-related sleep disorder vs. sleep apnea?)
- Criteria for different disorders overlap
- + Neutrality, makes no assumptions about why disorders arise or the best way to treat them
- + Includes standards that can be used to ensure reliability (consistency) in diagnoses

DSM-IV-TR is still the predominant means of categorizing psychological disorders in the US

# **Explaining Psychological Abnormality**

Explanations have changed with the times / reflect the values, knowledge of each culture

## The Brain:

Psychological disorders can increasingly be explained as arising in part from genetics, abnormal neurotransmitter function, abnormal structure and functioning of the brain.

## The Person:

Learning maladaptive behaviors: classical conditioning, operant conditioning Maladaptive thoughts, biases: mental events can bias what a person tends to pay attention to; influence the pattern of a person's thoughts; affect the attributions that a person makes about the causes of positive / negative events

### The Group: social and cultural factors

Stresses caused by other people / the physical environment

Culture / whether something is socially accepted as a disease / labels for diseases

Factors at the levels of the brain, person, and group interact, and it is the net effect of these factors that ultimately gives rise to a disorder. 2 ways these factors may interact:

- **Diathesis-stress model**: a predisposition to a given disorder (diathesis: genetic, brain-based) and specific factors (stress) <u>combine</u> to trigger the onset of the disorder
  - Even if a person has the genes, neurotransmitter activity, brain structure / function associated with a disorder, without strong enough psychological / social stress, the disorder will not be likely to develop
  - When people experience stress those who are not genetically or neurologically vulnerable for a given disorder are unlikely to develop that disorder
  - o No single event / factor alone is likely to lead to a psychological disorder!
  - Drawbacks: all types of stress are typically grouped together, so important differences among the various types of stress will be overlooked / minimized; diasthesis and stress are viewed as distinct factors that do not affect each other
- **Biopsychosocial approach**: psychological disorders are best explained by considering all 3 types of factors (levels of the brain, person, group) separately as well as by understanding their influences on each other

**MOOD DISORDERS**: characterized by persistent / episodic disturbances in emotion that interfere with normal functioning in at least one realm of life

<u>Major depressive disorders (MDD):</u> 2 wks of depressed mood / loss of interest in nearly all activities; sleeping / eating disturbances, loss of energy, feelings of hopelessness

- Affects the ABC's  $\rightarrow$  Affect (mood); Behavior (actions); Cognition (thoughts)
- Most common psychological disorder in the US; American women > men
- Different cultures don't experience exactly the same symptoms of depression

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• Depression can lead to suicide.

Dysthymia: similar to MDD, but less intense and longer lasting

<u>Bipolar Disorder</u>: one of more episodes of mania, or by alternating episodes of hypomania and depression hypomania, often alternating with periods of depression; cycling of moods <u>Manic Episode</u>: period of at least 1 wk during which an abnormally elevated, expansive, or irritable mood persists

**Hypomania**: milder form of a manic episode, symptoms are less likely to interfere with function Manic or hypomanic episodes are often preceded or followed by episodes of depression

## **Explaining Mood Disorders**

Bipolar disorder and MDD may arise from a set of common underlying neurological and psychological factors.

## The Brain / Biological Factors

#### Depression

- Genetics → Depression tends to run in families [ex: if one identical twin has MDD, the co-twin is 4x more likely to experience depression]; Effects of genes are usually weak!
- Malfunctioning neurotransmitters (serotonin, norepinephrine, dopamine) → not much known!
- Depressed people have unusually low activity in one area of the frontal lobe that has direct connections to many brain areas involved in emotion (ex: amygdala). These parts of the frontal lobe also have connections to brain structures that produce serotonin, epinephrine, dopamine

## Bipolar disorder

- Genetics [ex: if one identical twin has bipolar disorders, the co-twin has an 80% chance of developing some kind of mood disorder]
- Enlarged amygdala
- Shifts in temporal lobe activity during manic episodes that do no occur during other mood states

## The Person

#### Depression

- *Negative triad of depression* → negative view of world; self; future
- *Cognitive distortions*: systematic biases in how people think about events and others; perpetuate negative views
- Attributional style: a persons' characteristic way of explaining life events → affects risk of depression [ex: Blaming self]

Bipolar disorder → little is known; depressive attributional style when in depressed phase of disorder

## The Group

### Depression

- Stressful life events
- Social isolation
- "Punishing" social relationships
- Cultural factors
- Gender differences (may arise from cultural factors) → boys and girls are taught to respond differently to stress

### Bipolar disorder

o Stressful life events; disruptions in daily social rhythm of life (ex: sleeping at different times)

#### Interactional theory of depression $\rightarrow$ (James Coyne)

1. The depressed person, genetically vulnerable to depression, has depressive thoughts and feelings.

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- 2. These thoughts and feelings lead the person to act in ways that alienate other people who might otherwise provide support. Actions that alienate others include: impulses that lead him / her to do or say things that alienate others who can provide support.
  - Seeking excessive reassurance
  - Seeking out negative feedback
  - Interpersonal aggression
- 3. These actions then lead others to reject the depressed person, confirming that person's negative view of him/herself. Such rejections and criticisms increase the likelihood of negative future events.
- 4. The depressed person may then continue to seek out feedback from others, perhaps attempting to determine whether such negative feedback was a fluke or to elicit reassurance from others, which perpetuates the cycle.

Being around depressed people may make you feel/act depressed because the depressed person creates stress!

**ANXIETY DISORDERS:** characterized by intense, pervasive anxiety or fear, or extreme attempts to avoid these feelings

**Generalized anxiety disorder**: excessive anxiety and worry that is not consistently related to a specific object or situation

<u>Panic disorder</u>: characterized by frequent, unexpected panic attacks or fear and avoidance of such attacks

**Panic attack**: episode of intense fear, anxiety, or discomfort accompanied by physical and psychological symptoms such as pheart alpitations, breathing difficulties, chest pain, fear of impending doom or of doing something uncontrollable, and a sense of unreality

**Agoraphobia**: condition in which people fear or avoid places that might be difficult to leave should panic symptoms occur

### The Brain

- Genes people can inherit a biological vulnerability for panic
- Arise from excessively sensitive *locus coeruleus* (small group of cells deep in the brainstem triggering an increased heart rate, faster breathing, sweating, other parts of the fight-or-flight response)
- Changes in breathing: changes in carbon dioxide levels can also elicit panic... "suffocation alarm"

### The Person

- *Anxiety sensitivity* belief that autonomic arousal can have harmful consequences → higher risk of experiencing spontaneous (uncued) panic attacks
- 4 step process:
  - 1. Anxiety sensitivity leads people to become frightened by changes in their heart rate or breathing rate.
  - 2. In turn, their fear causes the flight-or-fight response (which in turn increases heart rate and breathing rate).
  - 3. People with anxiety sensitivity then become afraid of the bodily sensations that intensify with fear what psychologists refer to as a fear of fear.
  - 4. When people have a fear of fear, they become hypervigilant for the bodily signals that have previously led to panic in the past. Thus, in a vicious cycle, these people are more likely to become anxious that they might have a panic attack, which in turn increases the fight-or-flight response (including increased heart rate and breathing changes), which then triggers panic.

### The Group

• Culture / environmental changes

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<u>Phobia</u>: exaggerated, irrational fear of a specific object, activity, or situation that leads the person to go to extreme lengths to avoid the feared stimulus

**Social phobia**: fear of public humiliation or embarrassment, which leads the person to avoid situations likely to arouse this fear

**Specifc phobia**: persistent and excessive or unreasonable fear triggered by a specific object or nonsocial situation, along with attempts to avoid the feared stimulus The Brain

- Genetic vulnerability causes the amygdala / other fear-related brain structures to react too strongly in certain situations
- Identical twin + co-twin are both phobic... but not always, so there must be some other nongenetic factor?

### The Person

- Learning
  - Classical conditioning association between stimulus and fear
  - Operant conditioning negative reinforcement
  - Mixed findings

## The Group

Observational learning

<u>Obsessive-Compulsive Disorder</u> (OCD): characterized by presence of obsessions / compulsions <u>Obsession</u>: recurrent, persistent thought, impulse, or image that feels intrusive and inappropriate and is difficult to suppress or ignore [ex: thoughts of germs / contamination]

**Compulsion**: repetitive behavior or mental act that a person feels compelled to perform in response to an obsession [ex: excessive washing]

#### The Brain

- Genetic contribution, but no straightforward familial link
- Obsessions and compulsions have been related to neural activity that occurs in the basal ganglia (obsessions occur when this area doesn't turn off recurrent thoughts about an object / situation)

# The Person

- OCD can arise when someone interprets his/her thoughts as conveying something fundamentally negative about him/herself or as otherwise unacceptable, and then tries to suppress the offending thought
- Operant conditioning helps maintain OCD behavior via negative reinforcement

#### The Group

Culture, religious obsessions, praying compulsions

<u>Posttraumatic Stress Disorder</u> (PTSD): experienced by some people after a traumatic event and characterized by persistent re-experiencing of the trauma, avoidance of stimuli associated with the trauma, and heightened arousal

#### 3 criteria:

- 1. Person experiences/witnesses an event that involves actual/threatened serious injury/death
- 2. Traumatized person responds to the situation with fear, helplessness
- 3. Traumatized person has 3 sets of symptoms:
  - a. persistent reexperiencing of the traumatic event, which may take the form of intrusive, unwanted, and distressing recollections, dreams, or nightmares of the event or may involve flashbacks that can include illusions, hallucinations, and a sense of reliving the experience
  - b. persistent avoidance of anything associated with the trauma and a general emotional numbing
  - c. heightened arousal which can cause people with PTSD to startle easily, have difficulty sleeping, or be in a constant state of hypervigilance

#### The Brain

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- Genes
- Childhood trauma can enhance the fight-or-flight response, making it easier to trigger and more pronounced; changes of levels of hormones related to stress response
  - Lower levels of cortisol; when stressed, people with PTSD may not produce the high levels of cortisol that typically occur with the fight-or-flight response
- Abnormal brain structures:
  - Locus coeruleus: overly reactive
  - o Limbic system: more easily activated by mental imagery of traumatic events
  - o Hippocampus: unusually small

## The Person

- History of social withdrawal, depression
- Sense of not being able to control stressful events
- Belief that the person's life is at risk during the traumatic event or that s/he has no control over the situation
- Prior belief that the world is a dangerous place
- Lower IQ → fewer cognitive resources for coping with trauma?

## The Group

• Support from friends, family members, etc. immediately after a trauma may help decrease the likelihood that PTSD will develop

**SCHIZOPHRENIA**: characterized by symptoms of psychosis that profoundly alter the patient's affect, behavior, and thoughts

<u>Positive Symptoms</u>: excess / distortion of normal functions (ex: delusions of persecution, grandeur, reference, or control; hallucinations; disorganized behavior – inappropriate, childlike silliness or unpredictable agitation; disorganized speech)

<u>Negative Symptoms:</u> diminution / loss of normal functions (ex: restricted range of emotional expression, flat affect – failure to express / outwardly respond to emotion, alogia – slow, empty replies to questions, avolition – inability to initiate / persist in goal-directed activities)

Average onset – 20s; gradual development of symptoms

Symptoms emerge gradually, beginning with a prodromal phase (period immediately before symptoms fully emerge; slowly deteriorating functioning, outbursts of anger, withdrawal from other people; poor hygiene) → active phase

### 4 Subtypes

- 1. **Paranoid** delusions of persecution are prominent; intellectual functioning and affect are relatively intact, but auditory hallucinations are common
- 2. *Disorganized* disorganized speech / behavior, flat / inappropriate affect are prominent
- 3. Catatonic bizarre, immobile, relentless motor behaviors are prominent
- 4. *Undifferentiated* symptoms do not clearly fall into any of the above 3 subtypes

#### The Brain

- Genetics
- Structural abnormalities enlarged ventricles, reduction in size of other parts of the brain containing white / gray matter, including the frontal cortex, which plays a central role in abstract thinking and planning from maternal malnourishment, maternal illness, maternal stress during pregnancy, prenatal/birth-related medical complications that lead to fetal oxygen deprivation
- Elevated levels of stress-related hormones (especially during adolescence)
- Neurotransmitters → overproduction of dopamine as a result of high levels of stress-related hormones?

#### The Person

• Trouble processing / responding to sensory stimuli → unusual sensory experiences / hallucinations (ex: seeing inanimate objects move of their own accord); trouble making sense of stimuli, problems organizing what they are perceiving / experiencing

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• Difficulty with interpreting / using information in various contexts

## The Group

- Urban areas; lower socioeconomic classes → Social selection (aka social drift) the tendency of the mentally disabled to drift to the lower economic classes; Social causation the chronic psychological and social stresses of living in an urban environment may lead to an increase in the rate of schizophrenia (especially among the poor)
- Family interactions families with **high expressed emotion**: members are critical, hostile, overinvolved

# **EATING DISORDER**: disorders involving a severe disturbance in eating behavior

**Anorexia nervosa**: eating disorder characterized by the refusal to maintain even low normal weight, and an intense fear of gaining weight

• 2 types: restricting type (undereating for weight loss); bing-eating/purging type **Bulimia nervosa**: eating disorder characterized by recurrent episodes of binge eating, followed by some attempt to prevent weight gain (vomiting, laxatives)

• 2 types: purging; nonpurging

#### The Brain

- Genetic predisposition (but heritability varies wildly!)
- Abnormal functioning of neurotransmitter serotonin
- Biological effects of dieting

### The Person

- Linked to personality-related characteristics, irrational beliefs → women who are perfectionists, have unusually high levels of anxiety; have irrational beliefs and inappropriate expectations about their bodies, jobs, relations, lives; "black-and-white" / dichotomous thinking; preoccupation with "ugly" over "beauty"
- Negative reinforcement from eating disorder behaviors
  - o Purging can temporarily relieve anxiety created by overeating
  - Preoccupations with food provide distractions from work, family conflicts, social problems
  - Restricting eating gives a sense of increased control

### The Group

• Family / culture

**PERSONALITY DISORDERS:** set of relatively stable personality traits that are inflexible and maladaptive, causing distress or difficulty with daily functioning Some argue that personality disorders should not be disorders at all

- Defining traits as disorders treats normal variations in personality as pathological
- Doing so creates separate Axis II categories for some conditions that could be part of an Axis I clinical disorder.

#### *3 clusters:*

### CLUSTER A – odd, eccentric behaviors

Paranoid personality disorder –suspiciousness and distrust of others to the extent that other people's motives are interpreted as ill-intentioned. However, unlike the paranoid subtype of schizophrenia, there are no delusions or hallucinations

Schizoid personality disorder – detachment from social relationships, narrow range of displayed emotion

Schizotypal personality disorder – extreme discomfort in close relationships, odd / quirky behavior, cognitive / perception distortions (such as sensing the presence of another person or spirit)

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### CLUSTER B – emotional or dramatic behaviors

*Antisocial personality disorder* – disregard / violation of the rights of others

- Commiting illegal acts, lying, impulsivity, irresponsibility, physical aggression, reckless disregard for the safety of others, indifference to the suffering of others
- The Brain → familial; the genes predispose, the environment triggers [ex: child's biological parents are criminals, if child is adopted into family of law-abiding people, slight increase in criminal behavior, if not, whopping increase!]; genes cause autonomic nervous system to be underresponsive so that people are understimulated by "normal" behaviors, which leads them to seek out highly arousing, thrilling activities
- <u>The Person</u> → difficulty controlling impulses, anger, difficulty understanding how others feel, engendering a lack of empathy

The Group → insecure attachment to primary caregiver, abuse, neglect

Borderline personality disorder – instability in relationships, self-image, feelings; pronounced impulsivity (ex: spending, substance abuse, sex, reckless driving, binge eating). Relationships are often characterized by rapid swings from idealizing another person to devaluing him or her. Recurrent suicidal gestures, threats, self-mutilation, such as nonlethal cuts on the arm are common, as are chronic feelings of emptiness.

Histrionic personality disorder – excessive attention seeking, expression of emotion

Narcissistic personality disorder – exaggerated sense of self-importance, need of admiration, lack of empathy

## <u>CLUSTER C</u> – anxious or fearful behaviors or symptoms

Avoidant personality disorder – social discomfort, feelings of inadequacy, hypersensitivity to negative evaluation

Dependent personality disorder – clingy, submissive behavior due to an extreme need to be taken care of Obsessive-compulsive personality disorder – preoccupation with perfectionism, orderliness, and control (but no obsessions or compulsions, as occur with OCD)

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