

Class Preparation: Mental Health #1

Directions: Fill in the charts below. Identify what mental health disorders can occur when each neurotransmitter is increased or decreased.

	Functions	Increase	Decrease
Dopamine	Fine muscle movement, integration of emotions/thoughts, and decision making. It stimulates the release of hormones from hypothalamus.	-Schizophrenia -Mania	-Parkinsons -Depression
Norepinephrine	Mood, attention/arousal, and fight or flight in response to stress.	-Anxiety -Mania -Schizophrenia	-Depression
Serotonin	Mood, sleep regulation, hunger, pain perception, aggression and libido.	-Anxiety	-Depression
GABA	Reduces anxiety, aggression, pain perception, anticonvulsant and muscle relaxion.	-Less Anxiety	-Anxiety -Schizophrenia -Mania
Acetylcholine	Learning and memory, regulates mood, mania, sexual aggression, and stimulates the parasympathetic nervous system.	-Depression	-Alzheimer's -Dementia -Parkinsons -Huntington's

Structures of the Brain

Brain Structure	Function
The limbic System	Involved in the processing and regulating of emotions, the formation and storage of memories, sexual arousal, and learning. The amygdala and the hippocampus work together as part of the limbic system to create memories and experiences. The hippocampus encodes the memory of what happened, and the amygdala processes the emotion of how we felt.
Frontal Lobe	The frontal lobe is the largest and most complex lobe. It is responsible for memory, judgment, abstract thought, creativity, social appropriateness, and motor tasks.
Parietal Lobe	The parietal lobe is responsible for the processing of sensory information, spatial orientation/processing, direction, and proprioception.
Temporal Lobe	The temporal lobe is responsible fore the understanding of language, speech formation, memory, hearing, and nonverbal interpretation.
Occipital Lobe	The occipital lobe is responsible for visual processing which includes the assessment of distance, size, and depth. It helps with color determination, object recognition/movement, and the organization of complex processes.