

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	Integrations of emotions and thoughts, fine muscle movements, decision making, stimulates hypothalamus to release hormones.	Schizophrenia Mania	Parkinsons Disease Depression
Norepinephrine	Mood, attention, and arousal, fight or flight in response to stress.	Anxiety Mania Schizophrenia	Depression
Serotonin	Mood, sleep regulation, pain perception aggression and libido,	Anxiety	Depression
GABA	Reduces anxiety, aggression, pain perception, anticonvulsant, and muscle relaxation	Reduction of Anxiety	Anxiety Schizophrenia Mania
Acetylcholine	Plays a role in learning and memory, regulates mood, sexual aggression.	Depression	Alzheimer's, Dementia, Parkinsons, Huntingtins Disease

Structures of the Brain

Brain Structure	Function
The limbic System	Hippocampus interacts with the PFC making new memories Amygdala: plays a major role In processing fear and anxiety
Frontal Lobe	Higher cognitive functions, problem solving, attention, memory, self control and emotional expression. Plays a key role in personality and communication abilities. Largest brain structure.
Parietal Lobe	Receives and processes sensory information , understands spatial orientation and direction. Proprioception. Visuospatial processing
Temporal Lobe	Understands language, memory acquisition, specifically auditory, olfactory and visual memories, face recognition, object recognition, perception and processing auditory information
Occipital Lobe	Visual processing hub, Assess distance , size and depth, mapping the visual world, determining color properties, recognize object movement, reading and identify visual stimuli

