**Coaching Clients with Emotions of Fear**

**Fear + Anticipation**

**Brain Regions:** The fear response starts in a region of the brain called the amygdala along with heightened activity in the prefrontal cortex and anterior cingulate cortex for anticipatory processing.

**Neurotransmitters:** norepinephrine-fear (anger) with elevated cortisol and decreased GABA. fear conditioning is dependent on dopamine signaling in the for learning and memory consolidation.

**Resignation (Sadness + Acceptance)**

**Brain Regions:** increases in limbic-paralimbic blood flow (subgenual cingulate, anterior insula) and decreases in neocortical regions (right dorsolateral prefrontal, inferior parietal) subgenual anterior cingulate cortex controls sadness-induced modulations of cognitive and emotional network hubs

**Neurotransmitters:** serotonin-disgust (sadness with decreased dopamine and norepinephrine, elevated cortisol.

**Protective Defensiveness (Fear + Anger)**

**Brain Regions:** the amygdala has been recognized as the central site for all negative emotions with increased activity in the anterior cingulate cortex and reduced prefrontal cortex regulation.

**Neurotransmitters:** High norepinephrine and dopamine, elevated cortisol, reduced serotonin and GABA.

**Disgust + Sadness**

**Brain Regions:** the insular cortex (IC) and the basal ganglia (BG) in the experience, expression and recognition of disgust. Happiness, sadness, and disgust were each associated with increases in activity in the thalamus and medial prefrontal cortex

**Neurotransmitters:** Decreased serotonin and dopamine, with altered GABA function.

**Dread (Fear + Sadness)**

**Brain Regions:** Combined amygdala hyperactivity with subgenual anterior cingulate cortex involvement, reduced prefrontal cortex activity.

**Neurotransmitters:** Elevated norepinephrine and cortisol, decreased serotonin and dopamine, disrupted GABA.

**Defeat/Resignation (Sadness + Acceptance)**

**Brain Regions:** Similar to resignation above - increased limbic activity (subgenual cingulate, anterior insula) with decreased dorsolateral prefrontal cortex activity.

**Neurotransmitters:** Significantly reduced dopamine and norepinephrine, altered serotonin function, elevated cortisol.

**Coaching Implications**

Understanding these patterns helps you recognize that when clients express these states, they're experiencing real neurochemical shifts that affect their cognitive processing, decision-making capacity, and emotional regulation. This knowledge can inform your pacing, intervention timing, and the types of questions that might be most effective during different emotional states.