

MAXIMIZING PERFORMANCE BY MINIMIZING ANXIETY

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Anxiety

- Anxiety is a normal human experience
- Anxiety which interferes with functionality is the definition of dysfunction
- What is functionality? To work, to play, to love. In other words, for students, it's school, friends, and family.

Neuro-physiological

- Neuro-physiological underpinnings of anxiety are constant across disorders
- Parasympathetic system in operation when you are calm
- Heart rate, breathing, muscle tension/contraction, increased electrical activity, galvanic skin response
- Sympathetic system take over which works when you are stressed.
- The brain is not passive, it understands by monitoring heart, lungs, skin, eyes, kidneys, etc. and the “off” button for the sympathetic system is not “flicked.”

Behavioral Markers of Anxiety

- ▣ 1) palpitations, pounding heart, or rapid heart rate
- ▣ 2) chest pain
- ▣ 3) trembling or shaking
- ▣ 4) shortness of breath, smothering, or feeling of choking
- ▣ 5) sweating, chills, or hot flushes
- ▣ 6) nausea, abdominal distress or vomiting
- ▣ 7) paresthesias (numbness or tingling sensations)
- ▣ 8) dizziness, loss of balance, lightheaded, or faint
- ▣ 9) fear number 1 “I’m going crazy!”
- ▣ 10) fear number 2 “I’m losing control !”
- ▣ 11) fear number 3 “I’m dying/having a heart attack!”
- ▣ 12) derealization (feelings of unreality)
- ▣ 13) depersonalization (being detached from oneself)

Fight/Flight and Panic

- Sympathetic nervous system hits it culminating point.
- Amygdala in brain triggers hypothalamus which releases adrenalcorticotropic hormone (ACTH)
- The Adrenal glands receive the signal and then release epinephrine (adrenaline). Eyes – pupils dialate, searching for more information – where is the danger?
- Blood pressure goes up, blood sugar goes up, immune system suppressed, etc. If chronically triggered, think of the long term effect of these three alone.
- Fight/flight response triggered, a very good tool for survival.

Frontal Lobe – Your brake pedal

- Frontal Lobe – checking on the situation.
 - ▣ Attempts to understand the source of anxiety
 - ▣ Attempts to understand severity. Is this a big deal?
 - ▣ The brake pedal to the gas pedal, the amygdala.
- Prefrontal Lobe – understanding the situation
 - ▣ Affect labeling -What am I feeling?
 - ▣ Affect association - What's making me feel this way?
- Frontal Lobe home of Emotional Learning
 - ▣ Fears, phobias, specific worries
 - ▣ Not knowing the source of worry is a worry.

Fight/Flight, Panic, and Cognition

- “Survival” portions of our lower brain take over
- The purpose of anxiety is to PROTECT oneself from perceived danger.
- Fancy stuff done in the cerebral cortex, like reason, deduction, logic, complex language, are in the backseat now.
- Cognition can appear irrational & disordered – difficult to steer the car and press the pedals in the backseat.

Subtle changes in cognition

- Decreased sensitivity to sound range for the frequencies levels of the human voice.
- Decreased sensitivity to central vision, increased sensitivity to peripheral vision.
- Decreased attention span, concentration.
- Decreased capacity for higher cognitive learning. (Fancy stuff offline).
- Disorganized storing of memories

Remember those markers?

- If you want to reverse anxiety and switch back to the parasympathetic, reduce the markers
 - ▣ 1) palpitations, pounding heart, or rapid heart rate
 - ▣ 2) shortness of breath, smothering, or feeling of choking
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 - ▣ 4) nausea, abdominal distress or vomiting
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 - ▣ 6) dizziness, loss of balance, lightheaded, or faint
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Anxiety treatments in clinical settings

- Diaphragmatic breathing
 - Change the breathing, heart rate pattern
- Progressive muscle reaction
 - Change the muscle tension, sweating, and electrical activity
- Thought stopping
 - Cognitive strategies, avoiding catastrophic thinking, stopping the spinning mind.
- Imaging
 - Calming thoughts, imagining success and serenity

Anxiety treatments in school settings

Breathing differently

Feeling differently

Thinking differently

Breathing differently

- Changing the breathing pattern will change how your brain understands your experience.
- Everyone sighs – a signal the stressful event is over
- This sigh can be created directly in the class
 - One deep breath, slowly letting it out
 - Do not hyperventilate with many deep breaths
 - In the class, students can be encouraged to take a deep breath through the nose and let it out slowly through the mouth.
 - Breathing can be done as a whole class exercise for the target child's behalf or for the benefit of the class as a whole.
 - Big test, big presentation, teach kids to breath before they begin

Feeling differently

- Changing tension in the muscles will change how your brain understands your experience.
- Vigorous muscle activity is a no-no. The more flailing, the more the brain reads the need for fight/flight
 - Muscle tightness then relaxation discharges tension.
 - In the class –stretch, get out of chair can be done as a group
 - Individuals can squeeze muscles together then relax without being noticed – toes in shoes, arms, squeeze butt cheeks
 - Posture change. No crunching into a ball. Long and loose is best
 - Getting up and moving around may break the tightness. Talking a walk can be relaxing break from being scrunched

Feeling differently

- Changing temperature will change how your brain understands what's happening on your skin relative to anxiousness. -Hot and sweaty means still fighting to survive.
- Rapid heart beat pushes blood to the capillaries. Face gets red and feels hot. Something cold can help reverse.
 - Cold drink of water
 - Washing face and hands with cold water.
 - Forcing the blood from the capillaries – brain receives signal the stressful event is ending
 - Kids in the class will sometimes put their face on something cold like the tabletop, looking for something cool.

Feeling differently – whole groups

- In classrooms, boardrooms, or before you go into courtroom, it's all the same. Feel different.
- Whole group activities include
 - ▣ The Bird
 - ▣ The Noodle
 - ▣ The Rock Concert
- Don't underestimate importance of Laughter.
- Athletes and Performers – Ever notice their whole group anxiety reducers?

Thinking differently

- Changing what you think about can change how you feel. Seems simple and logical, and people who do this are naturally good minimizing anxiety.
 - Learn the vocabulary of anxiety.
 - Learn to identify markers and advocate for their own mental health needs.
 - Demystification of anxiety.
 - Thought stopping – agreeing with yourself to worry about what worries you most at some other time
 - Imagery - Imagining success. Used in Sports Psychology
 - Practice breathing, relaxation techniques in a counseling setting.
 - Teaching parents.

Your frontal lobe is now different

- Frontal lobe is the home of learning about emotions, understanding anxiousness.
- When you identify source of anxiety
- When you make attempts to feel, breathe, or think differently
- When you use metacognition (think about *how* you think when dealing with anxiety).
- Today you have thought about your own anxiousness. You have already began to change your frontal lobe.