

# Understanding brain function and stress for a studio of self-driven students

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# The Self-driven Child

William Stixrud and Ned Johnson, 2018



# The Secret to motivation

Stress undermines performance and mental health

- Low sense of control = stress, feel powerless, overwhelmed
- Sense of control= physical and mental health, academic success, happiness
- Autonomy = motivation



# Stress

- Brain scans show dangerously high levels of stress in affluent children equal to those living in inner city conditions.
- Chronic sleep deprivation and high levels of stress in the teen years affect physical and mental health for life.





# -it's what makes life stressful

**Novelty**

-something not experienced before

**Unpredictability**

-something you had no way of knowing would occur

**Threat to the Ego**

-Your safety or competence as a person is called into question

**Sense of Control**

-You feel you have little or no control over the situation

-Sonia Lupien, Centre for Studies on Human Stress



# Three types of Stress

- 1- Positive Stress - motivates to grow
- 2- Tolerable Stress - occurs in brief periods and builds resilience with support
- 3- Toxic Stress - frequent, or prolonged activation of the stress system in absence of support



# Increase Stress Tolerance

- Help students to perform well in stressful situations
- Help them to throw it off, rather than accumulate it.
- Make a list of what they can control.
- Are there things they can be in charge of to create more control?
- Change your language- Do you dictate or do you give choice?
- “Name it to tame it”
- Tell them you are confident in their ability to handle the stressors





“If we have confidence that we can impact a situation, it will be less stressful. In contrast, a low sense of control may very well be the most stressful thing in the universe”

“Agency may be the one most important factor in human happiness and well-being”



# Four parts of the brain



## The Pilot

Prefrontal cortex. Planning, organization, impulse control and judgement. It is the “Goldilocks” because it needs just the right amount of chemicals to work properly



# Four parts of the brain



## “The Lion Fighter”

Amygdala, Hypothalamus, Hippocampus. The stress response system is designed to keep us safe from harm. Sensitive to Fear, Anger, and Anxiety. When it is engaged we tend to be defensive, reactive, inflexible, and aggressive.



# Four parts of the brain



## The Cheerleader

Dopamine. We feel a reward through higher dopamine levels when we win, earn money, receive recognition etc. Low dopamine is associated with low drive, low effort, and boredom. When under chronic stress, dopamine levels stay low over time. People lose motivation.



# Four parts of the brain



## The Buddha

“Default Mode Network.” It activates when we daydream, mediate, and lie down before falling asleep.



# Anxiety and Depression

- Anxiety begets Anxiety
- Depression leaves “scars” in the brain so that less and less stress is required to trigger an episode.
- Teenagers have an exaggerated stress response
- “Adults who experienced even a single bout of major depression in adolescence are likely to display long-term problems in work, relationships, and the pleasure they take in life.”



# “Fear almost always leads to bad decisions”

“[A parent/teacher’s] role is to teach them to think and act independently, so that they will have the judgement to succeed in school and, most, important in Life. Rather than pushing them to do things they resist, we should seek to help them find things they love and develop their inner motivation. Our aim is to move away from a model that depends on parental pressure to one that nurtures a child's own drive.”



# False Assumption

- 1- Narrow path to success -parents must make decisions, and children must be competitive at all times
- 2-Success in school -equals success in life, Yale or McDonald's
- 3-Pushing -means children will be more accomplished
- 4- World is more dangerous -adult supervision to avoid hurt or bad decisions



# False Assumption

“With enough hard work, anything is possible”

How do you react after not making it?

- How did this affect your personal worth?
- Are you going to come up with a new strategy?
- Accept defeat and create a new goal?



# Brain Competency takes practice

- 1-Unconsciously incompetent- “I’m fine. I don’t need to study”
- 2- Consciously incompetent- “Wow, that was harder than I thought. I guess I need to study”
- 3- Consciously competent- “I’ve studied really hard, this test will be fine”
- 4- Unconsciously competent- Doing something for so long it’s automatic.



# Authoritative Teaching And Becoming a Consultant



# Authoritative Teaching (Parenting)

“I’m going to do everything I can to help you be successful, and not force you to do things because I said so”

-Don’t ask “Do you have homework tonight” or “Did you practice this week?”

**-Do ask “Is there anything you’d like help with today?”**

-Ask if they would like a tutor. Sometimes working with someone who is closer in age can produce great results.

*Have your piano students ever had a tutor?*

*Is this a way to mentor the next generation of piano teachers?*



# Become a Consultant



“The Homework Wars” or in our case “Practicing wars”

-Don't enforce rules/attitudes you don't believe in (How important is it to learn all the capitals? What is a piano equivalent?)

-Don't work harder than your student. Students become weaker when we work harder. They are responsible for getting their work done, not you.

-Don't force them to do something they are dead set against. (How many of our students should really be freed from piano lessons?)



# Being a Consultant

- Parents in particular need to be the safe base, or unconditional love.
- taking a consultant role, parents decide not to fight with kids and let them take the responsibility “I love you too much to fight with you about homework”
- There can be limits with help from an adult when problems arise from bad decisions



# Being a Consultant

- Have parents explain how important music is to them and the family
- Parents offer help in any way they can to make practicing enjoyable, but they are not willing to fight with them.
- It is important to be flexible within limits so children can find things they enjoy.
- Music- If you don't like piano is there another instrument you would like to try?
- Sports- If not soccer, maybe karate, running, or something less competitive



# Being a Consultant

-Don't give in to peer pressure. Just because other children are excelling in one area doesn't mean that your child can't excel in another.

-Don't all of a sudden take control away from the child once the "stakes are too high" i.e. High school grades

"Developing a clear sense of Who's responsible for what is more important than always doing well. That is the key to raising a self-driven child"



# Being a Consultant

Teachers and coaches often take a more autocratic approach with good results.

Parents are the only ones who can love unconditionally. Which makes the role of consultant necessary to create a safe base for the child.

*How do we as piano teachers use both roles to our advantage?*



“Kids won’t reach their potential by constantly being driven. In fact, the opposite is true; they will do what is necessary to get you off their back, but they won’t do more. People go the extra mile when it matters to them, not when it matters to you.”



“Students learn and perform best in a an environment that offers high challenge and low threat-when they’ve been given difficult material in a learning environment in which it is safe to explore, make mistakes, and take the time they need to learn and produce good work. When students know it’s alright to fail, they can take the kinds of risks that lead to real growth. They can develop brains that are capable of performing at a high level, and of being happy.



# Thank you for coming today!

How do you let students in your studio make choices?

How do you decrease stress?

Why are students motivated to practice in your studio?

# Sources:

Dr. Christopher Fischer, “*Motivation, Mindset and Grit*” Webinar presented through Frances Clark Center

Alfie Kohn, “*Punished by Rewards*”

Kelly McGonigal, “*The Willpower Instinct*”

# Suggested Reading:

Angela Duckworth, “*Grit*”

Anders Ericsson and Robert Pool, “*Peak*”

Daniel H. Pink, “*Drive*”

