

Building the Pyramid: Fostering Academic Success through Non-cognitive Skills

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Introductions

- Melissa Knight, Director of Academic Coaching, Lynn University
- Amanda Evans, Senior Academic Coach, Lynn University
- Welcome to our session!



What are Cognitive Skills?

- Cognitive Skills: brain-based skills including perception, attention, memory, and processing
- Typically related to IQ and Academics



What are Non-Cognitive Skills?

- Non-cognitive skills are characteristics and traits that are not measured by academic tests, but are important to fostering academic success
- Non-cognitive skills include:
 - Motivation
 - Academic Self-Concept
 - Self-Efficacy
 - Resilience



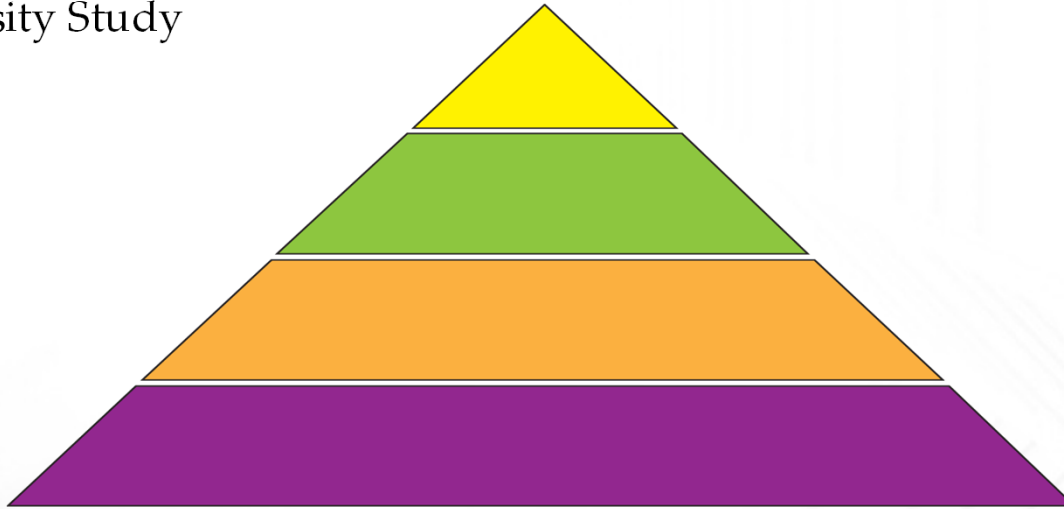
Research

- A lack of non-cognitive skills has been associated with less desirable educational and economic outcomes in adulthood
- Research has shown non-cognitive skills can help compensate for cognitive deficiencies related to academics (Rosen et al., 2010)
 - Motivation
 - Academic Self-Concept
 - Self-Efficacy
 - Resilience



Research continued...

- Self-efficacy can account for academic success beyond learning disabilities and delinquency (Evans, 2005)
- University Study



Research summary

- It appears as though cognitive skills and non-cognitive skills can predict academic success, but that non-cognitive skills additionally predict employment and occupational status in adulthood (Rosen et al, 2010)
- Ivy League Study



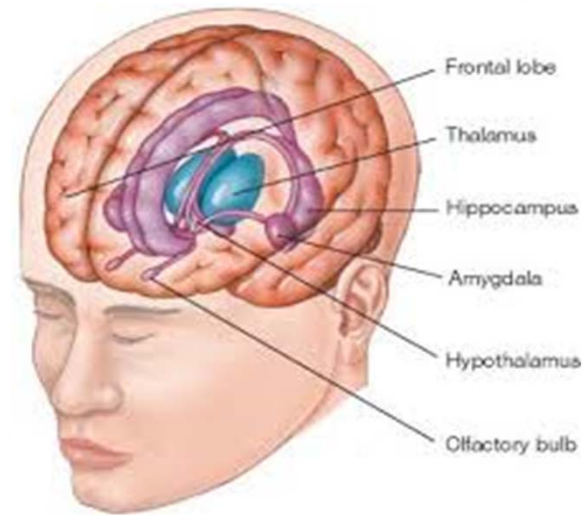
The Brain

Amygdala

fight, flight, free
spontaneous joy

Hippocampus

Visual Spatial memory
Memory in context setting



Non-cognitive Skills

- How do we develop non-cognitive skills in the following areas?:
 - Motivation
 - Academic Self-Concept
 - Self-Efficacy
 - Resilience



Motivation

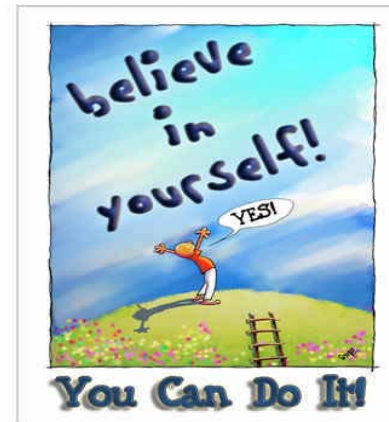
Motivational Interviewing

- How to facilitate change through conversation
- A method that is strength based to support students in finding their own way for change
 - Avoid being the “fixer”
- Skills needed
 - Active listener
 - Ask powerful questions
 - Patience



Self-efficacy

- Cognitive or non-cognitive skill?
- Fostering self-efficacy
 - Performance accomplishments
 - Vicarious experience
 - Verbal persuasion
 - Physiological states



“Developing specific EF and self-determination skills will lead to an increase in self-efficacious behavior.” Goudreau & Knight, JAD

Academic Self-concept

- Academic self- concept is one's self perception regarding academic performance (ex: "I am good at math")
- Academic self-concept can significantly and positively affect academic achievement
- Research has shown that a strong academic self-concept is correlated with higher grades



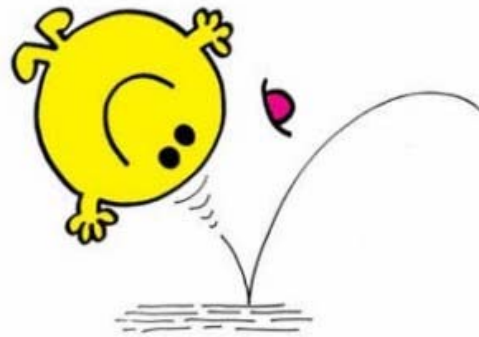
Strategies for Improving Academic Self-concept

- Develop assignments and projects that encourage students to pursue their individual interests to reduce social comparison
- Provide students with performance feedback related to their improvement over time, rather than comparing class averages
- Express to students that each brings a unique set of valuable skills

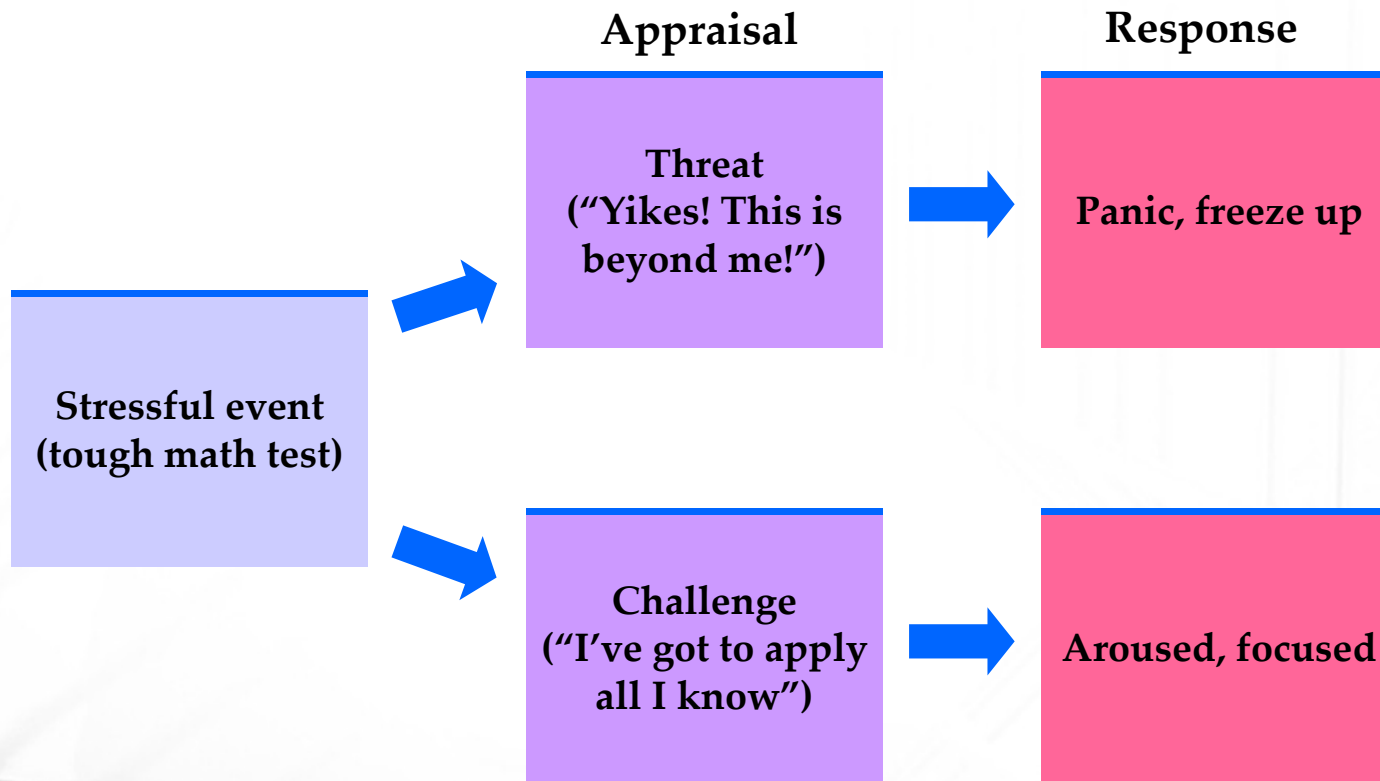


Resilience

- The ability to “bounce back” from setbacks
- Ex: Failing an exam



Building Resilience: The Transactional Model



Group Activity

- Break into groups of 4
 - Group 1: Motivation
 - Group 2: Self-concept
 - Group 3: Self-efficacy
 - Group 4: Resilience
-
- Write down what you can do in your daily practice to foster academic success in the assigned area

Q/A

- Thank You!

Reference

- Gourdreau, S.B, & Knight, M. (2015). Executive Function Coaching: Assisting with Transitioning from Secondary to Postsecondary Education. *Journal of Attention Disorders* 1-9.
- Marsh, H.W. & Craven, R. *Academic Self-Concept*. Retrieved from: http://cachescan.bcub.ro/e-book/V/580593_3.pdf
- Rollnick, S.,Kaplan, S., & Rutchman, R. (2016). *Motivational Interviewing in Schools*. New York: Guilford Press.
- Rosen (book/print out)