

# 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



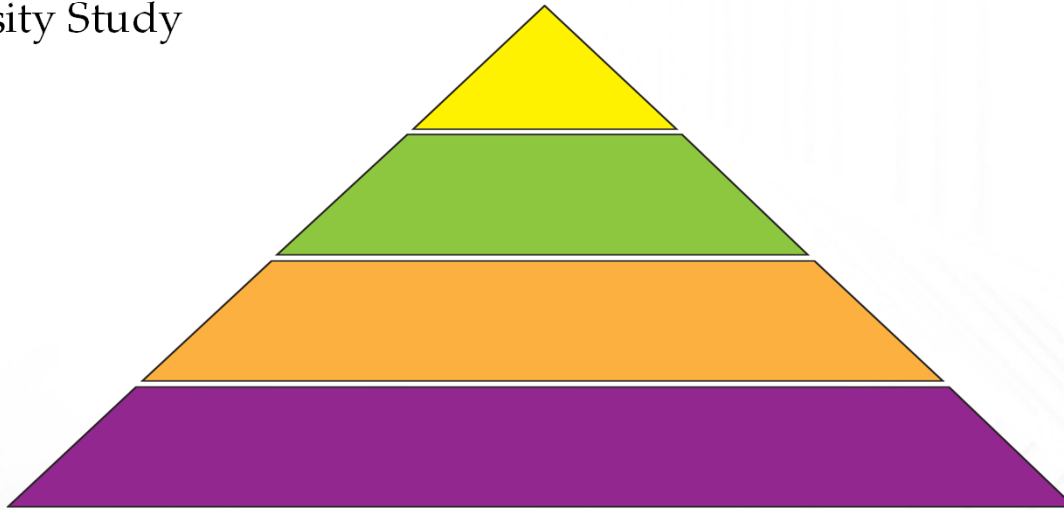
# Research

- 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



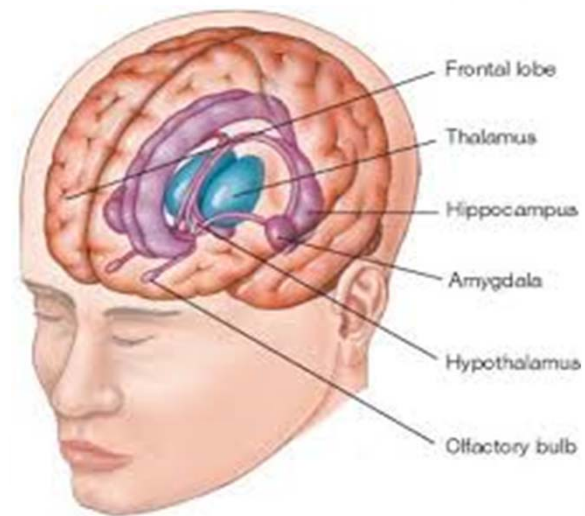
# The Brain

## 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

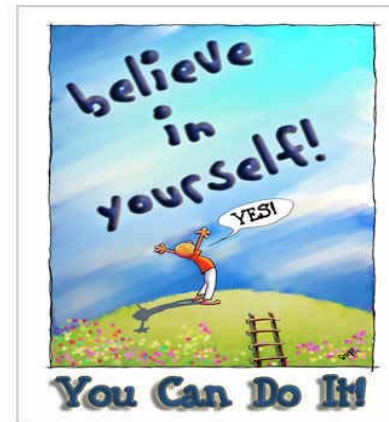
## Motivational Interviewing

- 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



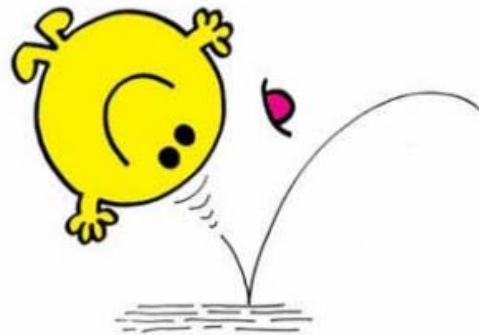
# Strategies for Improving Academic Self-concept

- 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



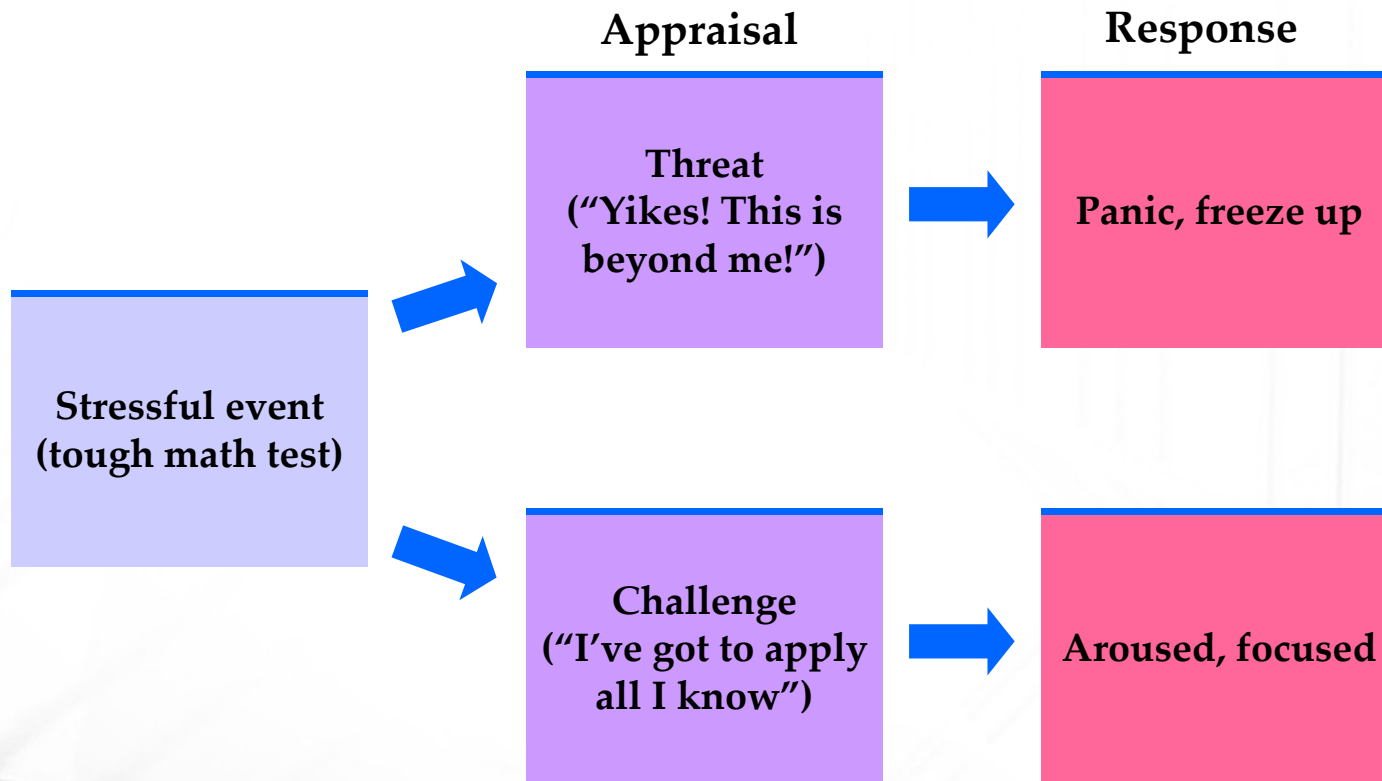
# Resilience

- 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

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