The Triune Brain Theory

- Paul MacLean, NIMH - based on the evolutionary development of the human brain - posits that we have “3 brains in one.”
- Reptilian Complex: Based on physical survival and maintenance of the body
- Limbic System: Primitive system that attaches emotion to memory
- Neocortex: Logical functions of the brain that is engaged in planning

The Reptilian Complex

- Brain stem and cerebellum - orchestrates movement and autonomic function, including stress responses
- R-complex behaviors are automatic, ritualistic, and resistant to change
- Change approach: establish a regular routine with predictable outcomes

The Limbic System

- Amygdala and Hippocampus
- Associated with emotions like fear, anger, pity
- Change approach: Explore emotions around keeping things the same and making changes. Document emotional responses to behaviors

The Neocortex

- Cerebral cortex: 5/6 of the human brain
- Planning and operational thinking
- Change approach: Use cognitive abilities to make realistic plans and to process and defuse emotional and habitual triggers to relapse

Atkinson’s Achievement Motivation Theory

- Motivation can be oriented toward desire for success or through fear of failure
- People with high achievement needs tend to anticipate success more than they do failure
Atkinson’s Achievement Motivation Theory

- People with high achievement needs tend to choose moderately hard (realistic) tasks over easy ones.
- People motivated by fear of failure tend to choose either extremely easy or extremely difficult ones.
- This is their chance to explain away failure because the task was too hard for most people to accomplish.

Self-Regulation

- The ability to engage in autonomous activity that is intrinsically motivated.
- The ability to maintain a chosen behavior in spite of environmental and emotional deterrents.

Motivation

- Intrinsic motivation: doing an activity for the inherent satisfaction of the activity itself.
- Extrinsic motivation: performance of an activity in order to attain some separable outcome.

4 Types of Behavioral Regulation

- External Regulation
- Introjected Regulation: Taking in a regulation but not accepting it as one’s own.
- Identified Regulation: Accepting the value of the activity as personally important.
- Integrated Regulation: Integrating the value of an activity with other aspects of the self.

Types of Motivation
Motivation

- In general, the more integrated and internalized a motivator is, the more powerfully it will affect behavior.

Self-Regulation

- Goals
- Implementation Intentions
- Performance
- Metacognitive monitoring
- “…the mental act of monitoring and evaluating one’s on-going effort to attain the goals one seeks.”
  - Reeve, 2005

Cycle of Self-Regulation

- Forethought
  - Goal Setting
  - Implementation Intentions
- Performance
  - Goal-Performance Feedback
- Self - Reflection
  - Self-Monitoring
  - Self-Evaluating
- Leads to more informed forethought

Goals

- Goals generate motivation
  - Focus attention on discrepancy between present accomplishment and ideal accomplishment
  - People with goals outperform people without goals
  - In all aspects of life

Goal Difficulty

- As difficulty increases, performance increases
- People exert in proportion to what the goal requires
- 80% of more is more than 80% of less!
**Goal Specificity**

- Often involves stating the goal in numerical terms
- Reduces ambiguity in thought
- Reduces variability in performance

**Implementation Intentions**

- The process by which the goal will be accomplished
- More motivational than goal attainment
- Facilitates making plans of action
- Link goal-directed behavior to a situational cue
  - Date, time, events

**Feedback**

- Feedback required for goals to function
- Progress in relation to the goal
- Goal + Performance Feedback = Maximal Performance

**Self-Regulated Change Strategies**

- **Goal-setting and Planning**
  
- **Seeking Information:** “Before beginning my lifestyle change, I gather as much information about potential resources as I can.”

- **Keeping Records and Monitoring:** “Before starting my lifestyle change, I’ll observe my physical, mental, and emotional status as they are now

- **Environmental Structuring:** “I will take a look at my environment and remove anything that distracts or deters me from my goal.”

- **Self-Consequating:** “Here is how I will reward myself for small successes

- **Note** - this frequently doesn’t work unless the reward is a direct outcome of the behavior change - example: noticing how good one feels after a workout
Self-Regulated Change Strategies

- Seeking Social Assistance: “I’ll find a friend who’s good at what I’m trying to do for support and advice.”