

PSI 428

Attentional Processes

Week 2.1
What is attention

Learning Objectives

- To discuss the meaning of the term “attention”
- Understanding the varieties of attention

What is attention?

- “... everyone knows what attention is” (James, 1890/1950)
- “On attention itself, it is needless to discourse at length; its nature and conditions are familiar to every thoughtful student” (Munsell, 1873, p.11).

What is attention?

- No one knows what attention is
- There may not be an “it” there to be known about.
 - There may not be a single cognitive construct which we define as “attention”

Two Themes in Attention

- Selectivity:
 - Conscious perception is selective.
 - Effects of stimuli on behavior are selective (when we are writing a paragraph we are selecting certain sensory information while guiding our behavior).

Two Themes in Attention

- Capacity limitation:
 - We cannot carry out an unlimited number of mental operations at the same time.

Varieties of Attention

- There may not be an “it” there to be known about.
 - There may not be a single cognitive construct which we define as “attention”



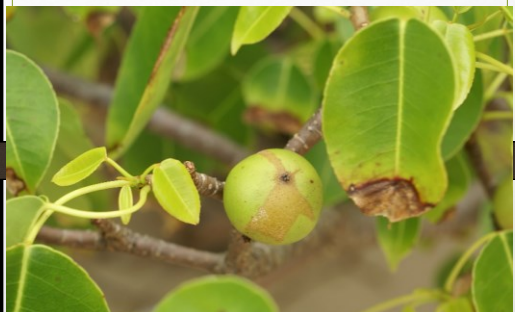
Varieties of Attention

- **Selection:** Setting a particular stimulus/object in the world as the current object of processing.



Varieties of Attention

- **Mental/Perceptual Set:** Processing some information better (different) based on expectations. Internal setting of the of the system to detect certain stimuli.
- **Vigilance/Sustained Attention:** With effort, you continue to focus on certain stimulus



Varieties of Attention

- **Orienting attention: Attention:** “an interrupt process that automatically detects novel, possibly important, environmental changes outside the current focus of attention and draws attention to themselves.”



Varieties of Attention

- **Voluntary control of attention:** we can direct our attention to certain stimulus despite the presence of distractors

Which «attentions» are not covered in this course?

- Vigilance
- The role of attention in animal learning,
- Neural basis of attention
- Orienting response