Unfinished Business from Monday’s Lecture
IV. Perspectives on psychology
A. Historically: Functionalism vs Structuralism
B. Neurobiological
C. Behavioral
D. Cognitive
E. Psychoanalytic
F. Phenomenological
IV. Perspectives on psychology

A. Historically

A. Structuralism

1. Edward Titchener
2. Stressed Observation
3. But Introspection as privileged method
4. Determine basic/fundamental components (structures) of the mind

B. Functionalism

1. William James
2. Also used Introspection, but not to break down mind to components
3. Examined purpose/function of consciousness and behavior
“Action may not always bring happiness, but there is no happiness without action.”

“The greatest discovery of any generation is that a human can alter his life by altering his attitude.”

“A great many people think they are thinking when they are merely rearranging their prejudices.”
IV. Perspectives on psychology

A. Historically: Functionalism vs Structuralism

B. Neurobiological

Brain-behavior
Genetic influences
IV. Perspectives on psychology

A. Historically: Functionalism vs Structuralism

B. Neurobiological

C. Behavioral (Watson, Skinner)

Environmental determinants

Black Box
IV. Perspectives on psychology

A. Historically: Functionalism vs Structuralism

B. Neurobiological

C. Behavioral

D. Cognitive

Measure things inside the black box:

- Perception,
- memory,
- information processing
Behavioral:

- Stimulus
- Processing
- Response

Cognitive

- Stimulus
- Processing
- Still more Processing
- Response
IV. Perspectives on psychology
A. Historically: Functionalism vs Structuralism
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C. Behavioral
D. Cognitive
E. Psychoanalytic
Freud's Conception of the Human Psyche
(The Iceberg Metaphor)

Conscious

Preconscious
Superego

Ego*

Unconscious
Id

Nonconscious

*Note: Ego is freefloating in all three levels

Note – contemporary version termed psychodynamic
IV. Perspectives on psychology
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REMEMBER: Behavior is Multiply Determined
Bio-psycho-social perspective

**Biological influences:**
- natural selection of adaptive traits
- genetic predispositions responding to environment
- brain mechanisms
- hormonal influences

**Psychological influences:**
- learned fears and other learned expectations
- emotional responses
- cognitive processing and perceptual interpretations

**Social-cultural influences:**
- presence of others
- cultural, societal, and family expectations
- peer and other group influences
- compelling models (such as in the media)

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*Figure 1 Biopsychosocial approach*

*Myers: Psychology, Ninth Edition*

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Research Methods
A Scientific Approach to Understanding Human Behavior

Michael Shermer, Publisher, Skeptic magazine
Scientific Skepticism

- As scientists, we should
  - evaluate all claims with an open mind
  - insist on persuasive evidence before accepting these claims

- And we should avoid
  - Cynicism (Pathological skepticism)
  - The tendency to dismiss any claims that contradict one’s beliefs
I. Research methods

A. Experimental method

1. Independent variable (IV) is manipulated by Experimenter
2. Dependent (DV) variable is measured
3. Except for IV, all other conditions kept constant
4. Confounds
5. Blinding
6. Example
Experimentation

- **Independent Variable**
  - the experimental factor that is manipulated
  - the variable whose effect is being studied

- **Dependent Variable**
  - the experimental factor that may change in response to manipulations of the independent variable
  - in psychology it is usually a behavior or mental process
I. Research methods

A. Experimental method

1. Independent variable (IV) is manipulated by Experimenter
2. Dependent (DV) variable is measured
3. Except for IV, all other conditions kept constant
4. Confounds
5. Blinding
6. Example
Keeping conditions Constant

- Random Assignment
- Control of confounds
I. Research methods

A. Experimental method

1. Independent variable (IV) is manipulated by Experimenter
2. Dependent (DV) variable is measured
3. Except for IV, all other conditions kept constant
4. Confounds
5. Blinding
6. Example
Blinding

- Important when expectations can influence outcome
Acupuncture to treat Depression

- Possible Designs
  - Compare ACU to no treatment?
  - Sham Points versus real points?
  - Need to double-blind

- Our Design:
  - Participants were randomly assigned to
    - specific: treat specific symptoms of depression
    - nonspecific: pattern not specific to depression
    - waitlist: waited before receiving specific
  - Treatments were developed by an assessing acupuncturist, administered by one of several other acupuncturists
Acupuncture to treat Depression

Synopsis

- DV: Blind Interview Ratings of Depression Severity After Treatment
- IV: Treatment delivered (or not delivered in the case of Waitlist)
- Confounds measured
  - Acupuncturist beliefs
  - Client beliefs
  - Neither differed between specific and nonspecific
Acupuncture to treat Depression

Results

Allen, Schnyer, & Hitt, 1998, *Psychological Science*
Name that Variable!

✓ Professor Fisbee gives one group of students Starbucks fully caffeinated, and the other Decaf.

✓ Students do not know which type they receive.

✓ He then measures how well they score on a test of psychological reasoning.

✓ Before assigning students to groups, he matches them on grade point average so that the two groups have equivalent GPA.