Unit 1: Chapters 1 and 2

_____
Copyright © 2018
Dr. Joseph A. Mayo

Chapter 1: Psychology as a Science

Theoretical Perspectives

‣ What is applied psychology?
  * emphasizes practical uses of psychology
‣ Major psychological views (*eclecticism*):
  1. **biological**
     * nature
     * biological & hereditary causes of behavior
  2. **behavioral**
     * nurture
     * only observable and measurable behavior
     * learning
       – classical conditioning
       – operant conditioning

3. **psychoanalytical** (**psychodynamic**)
   * Freudian psychology
   * unconscious impulses (sex & aggression)
   * early childhood influences
4. **Gestalt psychology**
   * patterns of organization in thoughts & behaviors
   * "whole is greater than sum of its parts"
5. **humanistic**
   * unique personal growth
   * self-determination (free will)
6. **cognitive** (mental processes)
7. **cross-cultural**
   * diversity in behavior across & within cultures
   * cultural, ethnic, and gender differences (e.g., **individualistic** vs. **collectivistic cultures**)

Scientific Methods

1. **naturalistic observation**
   * watching or recording behavior in natural settings without interference
   * simply record, *not* imply causes
   * **Hawthorne effect**
2. **case study**
   * in-depth study of a single person
   * inability to generalize from unique

3. **survey**
   * science of self-report
   * need for representative sampling
   * wording of questions
   * call for brevity
   * mail survey (< 10% return rate)
   * telephone interview (cheapest; unrepresentative sampling??)
   * personal interviews (most accurate, though time consuming and costly)

2

4. **correlation**
   * statistical technique (<u>not</u> a research method)
   * <u>statistical relationship</u> between scores on two or more variables (prediction)
   * can *not* determine causation due to possible impact of **<u>intervening variables</u>**
5. **experiment**
   * controlled observation
   * **independent variable** (cause)
   * **dependent variable** (effect)
   * must control for all **extraneous variables**
   * need for replication before drawing valid conclusions and generalizing results

Chapter 2: Learning and Performance

‣ Learning *not* to respond:
  – **habituation**
    * repetition leads to over-familiarity
    * measuring a young infant's perceptions
‣ Automatic responding:
  – **orienting response**
    * automatic response to unexpected stimuli
    * survival-oriented

3

▸ 3 techniques that cause changes in *performance*:
  1. **Pavlovian classical conditioning**
      * learning by associations (*UCS*, *CS*, *UCR*, *CR*)
      * **reflexes**
      * **physiological** and **emotional respondents**
      * **stimulus generalization**
      * **discrimination learning**

▸ Using classical conditioning
  – eliminating unwanted behavior:
      * bed–wetting
      * snoring
      * alcohol addiction (**aversive counter-conditioning**)
      * controlling phobias and anxieties through **systematic desensitization**
          > incompatible stimuli
          > **hierarchy of fears**
          > armchair and *in vivo* approaches

---

* military basic training
* falling in love
    > associating warm feelings with a partner's actions and voice
    > stimulus generalization
        ~ attraction to someone possessing similar qualities to an earlier partner
        ~ "love at first sight"
* selective associations
* taste likes/dislikes (**conditioned taste aversion**)
* attitudes
* ads

2. **Skinnerian operant conditioning**
   * learning through the consequences of our own actions
   * **reinforcers** and **punishers**

‣ Using operant conditioning
  – **reinforcers** *increase* likelihood of behavior:
    * **positive reinforcement**
      > adding a pleasant stimulus
      > money
      > praise
    * **negative reinforcement**
      > subtracting an unpleasant stimulus
      > child keeping bedroom clean to avoid parents' nagging
      > taking a pain reliever for a headache

  – **punishers** *decrease* likelihood of behavior:
    ***positive punishment**
      > adding an unpleasant stimulus
      > corporal punishment
    ***negative punishment**
      > subtracting a pleasant stimulus
      > "grounding" a child from TV privileges
      > withdrawal of love and approval for misbehavior (*not* recommended)

› **Guidelines for reinforcement**:
  – Reinforce immediately.
  – Reinforce consistently.
  – Reinforce intermittently (**partial reinforcement**).
  – Apply **response shaping**.
  – Avoid **over-justification**.
  – Avoid **superstitious behavior**.

› **Guidelines for punishment**:
  – Employ punishment sparingly.
  – Punish immediately.
  – Make the punishment fit the crime.
  – Use **extinction** (removing a positive reinforcer) to weaken an undesirable behavior.
  – Do *not* punish when a person feels a lack of personal control, which can lead to **learned helplessness**.
  – Use **management** as the most effective method.

3. **Bandura's observational learning**
   * imitation and modeling of the behavior of significant others
   * learning *vicariously* and *latently*
› Using observational learning:
  – many childhood behaviors (+ and –) based on modeling
  – modeling used in the treatment of phobias
  – mass media's influence in modeling behavior