# PS498

Unit 2 Seminar Thursday, March 7<sup>th</sup> 2019

### Purdue University Global Career Services Presentation

- Resumes and cover letter development
- Job search strategies
- Networking
- Preparing for an interview
- Targeting industry-specific job leads and information
- The presentation can be accessed by clicking on the following link:
- PS 498 Career Services Presentation
- Attendance will be taken, so we ask that you please sign in with your first and last name.

# Overview

Review foundations of Applied Behavior Analysis

Review three levels of scientific understanding

• Explore the dimensions of the science

Unit to-do

## Attitudes of Science "Foundations of ABA"

• \_\_\_\_\_: All events have causes and occur lawfully as a result of other events.

• Empiricism

#### • Experimentation

• <u>Increased credibility of data results from duplication</u> of the same study or similar studies.

#### • Parsimony

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\_: Willingness to abandon beliefs in light of new data.

### Attitudes of Science "Foundations of ABA"

 Determinism: All events have causes and occur lawfully as a result of other events.

• Empiricism

#### • Experimentation

 Replication: Increased credibility of data results from duplication of the same study or similar studies.

• Parsimony

 Philosophic doubt: Willingness to abandon beliefs in light of new data.

Cooper, Heron, and Heward Applied Behavior Analysis, Second Edition

# Levels of Scientific Understanding

• **Description** – Collection of facts about observed events

 Prediction – Relative probability that when one event occurs, another event will or will not occur

 Control – Specific change in one event (dependent variable) can reliably be produced by specific manipulations of another event (independent variable)

### Development of Applied Behavior Analysis

"Some Current Dimensions of Applied Behavior Analysis"
 (Baer, Wolf, & Risley)

- Outlined dimensions of ABA in the first edition of JABA
- Most widely cited publication in ABA
- Written by the founding fathers of Applied Behavior Analysis
- Defined the criteria for judging adequacy of research & practice in ABA & outlined the scope of work for those in the science
- Remains standard description of the discipline

- Baer, Wolf, and Risley (1968) recommended the following seven defining dimensions for research or behavior change programs:
  - Applied
  - Behavioral
  - Analytic
  - Technological
  - Conceptual
  - Effective
  - Generality

#### Applied

- Investigates socially significant behaviors with immediate importance to the participant(s)
- Examples include behaviors such as:
  - Social
  - Language
  - Academic
  - Daily living
  - Self-care
  - Vocational
  - Recreation and/or leisure

#### **Behavioral**

- Precise measurement of the actual behavior in need of improvement & documents that it was the participant's behavior that changed
  - The behavior in need of improvement
  - The behavior must be measurable
  - Important to note whose behavior has changed

#### Analytic

- Demonstrates experimental control over the occurrence and non-occurrence of the behavior (a functional relation is demonstrated)
- Functional & replicable relationships

### Technological

- Written description of all procedures in the study is sufficiently complete and detailed to enable others to replicate it
- All operative procedures are identified and described in detail
  & clarity
- Replicable technology

#### **Conceptually systematic**

- Behavior change interventions are derived from basic principles of behavior
- Procedures are also described in terms of basic principles
- Assist in integrating discipline into a system instead of a "collection of tricks"

#### Effective

- Improves behavior sufficiently to produce practical results for the participant(s)
- Improvements in behavior must reach clinical or social significance
- Extent to which changes in the target behavior(s) result in noticeable changes

#### Generality

- Produces behavior changes that last over time
- Appear in other environments (other than the one in which intervention was implemented)
- Or spread to other behaviors (those not directly treated by the intervention)

Offers society an approach toward solving problems that is:

- Accountable
- Public
- Doable
- Empowering
- Optimistic

#### Accountable

- Created by the focus on
  - Environmental variables that reliably influence behavior
  - Reliance on direct & frequent measurement to detect changes in behavior
    - Detect successes and failures
    - Allow changes to be made

#### Public

• Visible, explicit, & straightforward

Of value across a very broad spectrum of fields

### Doable

Not complicated

 Variety of individuals are able to implement principles and interventions

### Empowering

- Provides practitioners with real tools that work
- Raises confidence
- Increases confidence for future challenges

### Unit 2 TO DO

Unit Reading > <u>Baer, Wolf, Risley (1968)</u>

Discussion Board

Learning Activity – Informative brochure

• Quiz (20 pts.)

Due Tuesday 3/12



Cooper, J., Heron, T. and Heward, W. (2007). Applied behavior analysis. 2nd ed. Upper Saddle River, NJ: Pearson.