

Introduction to Applied Behavior Analysis

Goals

- Define applied behavior analysis (ABA)
- Describe the 7 dimensions of ABA
- Learn about the history of ABA
- Distinguish between respondent and operant behaviors
- Identify consequences of behavior
- Learn about ABA interventions

In their book, *Applied Behavior Analysis*, Cooper, Heron & Heward define ABA as:
the science in which tactics derived from the principles of behavior are applied to improve socially significant behavior and experimentation is used to identify the variables responsible for the improvement in behavior

_____ is the scientific approach to understanding how _____ affects behavior for all humans and animals.

Principles of ABA refers to RULES of how we all learn.

A behavior is more likely to be repeated if that behavior is followed by something the person likes.

A behavior that is followed by an unpleasant consequence is _____ likely to be repeated (i.e. receiving a speeding ticket).

The goal of ABA is to apply the rules of learning to make changes in socially significant behavior.

_____ means behavior that will have a positive impact for the client, client's family and community.

- Examples of socially significant skills: _____, _____, and _____.

Objective Measurement

Data are collected before and during the intervention

Ongoing data collection is necessary to assess the effects of the intervention

Written, on-going data collection is an essential feature of ABA

T/F

Bear, Wolf, & Risley (1968) outlined 7 dimensions of ABA in the inaugural issue of *The Journal of Applied Behavior Analysis (JABA)*

1. Applied: behavior must be of social significance to the individual and community
 - a. Teaching a teenager to _____ is socially significant because _____
 - b. Teaching _____ is socially significant because _____
2. Behavioral: focus on the observable and measurable (emotions such as anger or boredom are not the focus of ABA)
 - a. Observable, measurable behaviors: _____, _____, _____
3. Analytic: a functional relation has been reliably demonstrated between _____ event and a change in behavior
4. Technological: the intervention is described in enough detail that anyone could do replicate it
 - a. Describe procedures in a way that they can be implemented the same way by someone else

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5. Conceptually systematic: interventions are derived from a strong theoretical base (core principles of learning)
6. Effective: change in the behavior is large enough to be observed and appreciated by others
7. Generality: behavior change is observed across a ___ of settings and is _____ over time.

In 1913, a psychologist named James B Watson argued for an objective study of behavior including direct observation of the effect environment had on a behavior. He proposed that behavior could be controlled and predicted by what occurred just prior to the behavior. This was called the stimulus-response interaction.

In 1938, BF Skinner published the book *The Behavior of Organisms*. He outlined the experimental analysis of _____. He thought Watson's argument _____ was not enough. He argued that consequences, events which follow a behavior, were more influential on future behavior than what preceded the behavior.

Skinner argued for the 3-term contingency:

Stimulus →	Response →	Stimulus
Antecedent →	Behavior →	Consequence

Skinner termed behavior learned as a result of environmental consequences "operant behavior." Thus, behavior analysts are primarily concerned with _____.

One of the earliest applications of ABA to autism spectrum disorder (ASD):

- Wolf, Risley, & Meese: used applied behavior analysis to teach Dickie, a 3.5 year-old child with autism, to wear his glasses.

ABA has evolved over time. T/F

ABA is most well-known for addressing a variety of _____, behavioral and _____ issues.

ABA is just applied to special education. T/F

Examples of applied behavior analysis in use: free class time in general education, pediatric medicine, sports psychology, business and service organization.

Respondent vs. Operant Behavior

Respondent- elicited, reflexive, involuntary

- Ex: sneezing in response to smelling pepper, knee jerk at doctor's appointment

Operant- learned, controlled by antecedent (what comes before) and consequence (what comes after) events

- Observable and measurable
- Ex: saying hello, responding to a text message, asking someone out on a date

Operant behavior is controlled by antecedent and consequence events

Antecedent: anything that occurs before behavior

Consequence: specific stimulus that follows behavior; will influence whether behavior occurs again

Is ABA more involved with respondent or operant behaviors? _____

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$S \rightarrow R \rightarrow S$ OR $A \rightarrow B \rightarrow C$

Name the above diagram and label each part. Then give an example situation.

A:
B:
C:

A:
B:
C:

A:
B:
C:

Applied behavior analysis seeks to identify _____ amongst observed _____ and _____.

A functional relation is a relation between a behavior and a consequence which is observed often. T/F

Consequences that Influence Behavior

Positive reinforcement: adding something to the environment immediately following a behavior/response that increases the behavior/response in the future.

Ex: _____, _____

Negative reinforcement: removing something from the environment immediately following a behavior/ response, which leads to an increase in the behavior/response in the future.

Ex: _____, _____

Positive punishment: adding something to the environment immediately following a behavior/response that leads to a decrease in the behavior/response in the future.

Ex: _____, _____

Negative punishment: removing something from the environment immediately following a behavior/ response, which leads to a decrease of the behavior/response in the future.

Ex: _____, _____

Define and give an example of positive reinforcement.

This will (decrease/increase) the behavior.

Define and give an example of negative reinforcement.

This will (decrease/increase) the behavior.

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Define and give an example of positive punishment.

This will (decrease/increase) the behavior.

Define and give an example of negative punishment.

This will (decrease/increase) the behavior.

A _____ change can occur by altering either the _____ or the _____.

Using your examples, above alter the antecedent or the consequence to modify the behavior.

ABA interventions

Interventions based on ABA

- Shaping
- Chaining
- Discrete trial training
- Incidental training
- Stimulus shaping
- Stimulus fading

These interventions:

1. Involve breaking skills down into component parts
2. Identifying a functional reinforcer (consequence) to increase responding
3. Are documented through data collection and analyzed for effectiveness

Myths regarding ABA:

ABA is only used when reducing behaviors.

T/F

ABA is developmentally appropriate for toddlers with autism.

T/F

Teaching in a natural environment is crucial to ABA program.

T/F

ABA is only about rote learning.

T/F

ABA can be fun.

T/F