

**EEX 3616**  
**Understanding Behavior**

- Behavior
  - ✓What is behavior?
  - ✓What are the models of behavior?
- A Learning" Approach to Behavior
  - ✓How the environment plays a role in behavior?
- Function of Behavior
  - ✓Why does behavior occur?

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**Defining Behavior**

**Operationally Defined Behavior**

- concrete definition
- can be observed
- can be measured (quantifiable)

**Behaviors have Dimensions**

- used in operational definitions
- observable and measurable

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**Dimensions of Behavior**

**6 ways to operationally define**

- frequency or rate (how often/how many)
- topography (what does it look like)
- locus (when/where does it happen)
- duration
- latency
- force or intensity

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## Models of Behavior

- **Biophysical Model**
  - ✓ Behavior is the result of chemical and genetic conditions
  - ✓ Physiology determines how the individual responds to the environment
  - ✓ Disorders are manifestations of physiological flaws
  - ✓ Control of maladaptive behavior is achieved by physiological means
- **Psychodynamic Model**
  - ✓ Human behavior is the result of mental states
  - ✓ Disorders are caused by pathological imbalances
  - ✓ Illness is the result of some unconscious motivation or underlying conflict
  - ✓ The treatment consists of resolving the conflict

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## Models of Behavior

- **Psychodynamic Model**
  - ✓ Psychoanalytic
  - ✓ Human behavior is the result of mental states
  - ✓ Disorders are caused by pathological imbalances
  - ✓ Illness is the result of some unconscious motivation or underlying conflict
  - ✓ The treatment consists of resolving the conflict
- **Cognitive Model**
  - ✓ Behavior is the result of thought processes that arise from past observations or interactions with the environment
  - ✓ treatment consists of changing perceptions

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## Models of Behavior

- **Learning Model**
  - ✓ Behavior is learned by watching or interacting with the *environment*
  - ✓ Based on two assumptions:
    1. the problem is the behavior itself
    2. the behavior is a function of environmental events
  - ✓ Disorders are thought to be learned (reinforced) behaviors
  - ✓ Intervention emphasizes controlling *environmental* antecedents and consequences to change behavior
  - ✓ Involves precise behavioral targeting, definition, measurement, and recording

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## Environment

Stimuli are the things that make up the environment

An object or event that may or may not have an effect on behavior by operating on the senses or other modality

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## The environment can be described by its effect on behavior

neutral stimuli

- no predictable effects whether presented or withdrawn

reinforcing stimuli ("R+")

- associated with increase in behavior when presented following that behavior.

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## The environment can be described by its effect on behavior

aversive stimuli

- associated with decrease in behavior
- when presented following that behavior.

discriminative stimuli

- special type of antecedent stimuli
- sets the occasion for behavior to occur.

("Signals")

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## The Environment: Practice

- Mr. Bullet gives Steve a rock every time he completes his work. Over time, Steve's work completion behavior becomes more frequent. In this case, rocks appear to be a(n) \_\_\_\_\_ stimulus to Steve.
- Janice dislikes her friend Mary's singing so every time she hears Mary sing she takes a toy of Mary's and doesn't return it ever. Over time, Mary's singing behavior becomes less frequent. In this case, Mary's toys appear to be a(n) \_\_\_\_\_ stimulus to her.

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## The Environment: Practice

- Edwardo regularly flips off teachers as they walk down the hall. One day, Principal Thinskin decides to give Edwardo suspension from school for every time he flips someone off. In this case, giving suspension is a(n) \_\_\_\_\_ to Edwardo.
- In the future, Edward flips the teacher off less often. Now it appears that suspension appears to be a(n) \_\_\_\_\_ stimulus for Edwardo.

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## The Environment: Practice

- Mr. Slate is annoyed that Fred often leaves work before the bird-whistle blows at the end of the day. In response, Mr. Slate begins docking Fred 1/2 hour of pay whenever he leaves even an instant before the whistle blows. Over time, Fred's leaving early behavior decreases. In this case, pay appears to be a(n) \_\_\_\_\_ to Fred.

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## The Environment: Practice

- Horace occasionally sneaks down to the refrigerator at night and drinks all the soda. His wife, Odetta, is worried about his waistline and wants him to stop. She begins snuggling up close to him for the remainder of the night whenever he returns from drinking the sodas. Over time, Horace completely stops drinking soda. In this case, snuggling appears to be a(n) \_\_\_\_\_ to Horace.

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## The Environment and Behavior: Practice

Herby likes to eat but there are some foods that make him sick. At times he will eat non stop from 6:00 AM to midnight. But Herby reads labels and when he sees "sodium bendryoxy" listed, he will not eat that food

- What is behavior of concern?
- Can we predict when it might occur?
- Why does it occur under these conditions?

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## PRACTICE

Fritz acts bizarre when the radio or TV are on. He typically screams and yells at the top of his lungs while pounding on his chest. When the news is on TV or when he hears Hansen songs playing on the radio, he attempts to force sharp objects into his ears.

- What is behavior of concern?
- Can we predict when it might occur?
- Why does it occur under these conditions?

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## PRACTICE

Brenda was grounded and knows that she's not supposed to be playing with her Barbi. When she hears her mother's voice coming down the hall she quickly puts Barbi in her box and slides it under the bed. When she hears her mother's voice moving away from her room she pulls the box back out and plays with Barbi.

- What is behavior of concern?
- Can we predict when it might occur?
- Why does it occur under these conditions?

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## PRACTICE

Willy likes to shake the hands of people. In fact, Willy likes to shake all kinds of things. He shakes people's hands as they walk past him in the mall, he shakes tree branches, he shakes mannequin arms, and he's even shaken his own arm into thin air.

- What is behavior of concern?
- Can we predict when it might occur?
- Why does it occur under these conditions?

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## UNDERSTANDING FUNCTION

**The most common problem behaviors in school and in life serve a function:**

- 1. **to get something**  
-attention, objects, power, self-stimulation
- 2. **to escape/avoid something**  
-tasks, embarrassment, situations, persons

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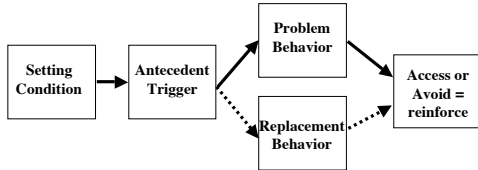
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## Functional Behavior Pathways



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## Examples of Function in School

- **Get/Access Reinforcers**
  - ✓ I yell because others look at me
  - ✓ I fight because others obey me
  - ✓ I wander because people talk to me
- **Escape/Avoid Aversives**
  - ✓ I cry when work gets hard because someone will help me
  - ✓ I throw a book during math class because the teacher will remove me from class
  - ✓ I stand out of the way during PE because the other game participants will avoid throwing me the ball.

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## What's the Problem? What does the problem behavior look like and when is it likely?

- **Observable and measurable, concrete**
- **Conduct interviews, archival record reviews, and observations across settings.**
- **Determine what others have tried in the past.**
- **Create observable and measurable definition of problem behavior.**

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### **What are the Predictors?**

**What types of actions or events (antecedents) typically precede instances of desired and undesired behavior?**

**What types of actions or events (consequences) typically follow instances of desired and undesired behavior?**

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### **ABC Analysis**

**Identify predictors of student behavior**

- Identify actions and events which precede and follow student behavior via observation.
- Identify predictable antecedent-behavior-consequence (ABC) chains.
- Consider predictors that occur in environments other than the problem setting.

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### **FBA via ABC**

**The simplest methods involve existing data**

1. Talking
2. School-wide
3. Interviews
4. Questionnaires

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### Why'd He Do That?

Develop a testable explanation of student behavior

- Develop hypothesis regarding problem behavior sequences based on patterns noted in ABC
- Hypothesis should predict problem behavior
- Predictors (antecedents/consequences) must be observable

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### Testable Explanations vs. Explanatory Fictions

- Frank names all of his colors correctly when his teacher gives him candy for each color he names
- Frank names all of his pencils because he is a schizophrenic.
- Robin is out of her seat during reading time because her neighbor talks to her.
- Carl cries all morning when he rides the bus to school
- Fritz yells because he doesn't like math

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### FBA Summary

- Student behavior is predicted and reinforced by the environment.
- We can use this information to both prevent negative and promote positive behavior
- We can use this information to effectively consequence both positive and negative behavior
- FBA is the first step in developing an

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