

Social Cognitive Learning Theory

EDS 248
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The Essence of Social Learning Theory

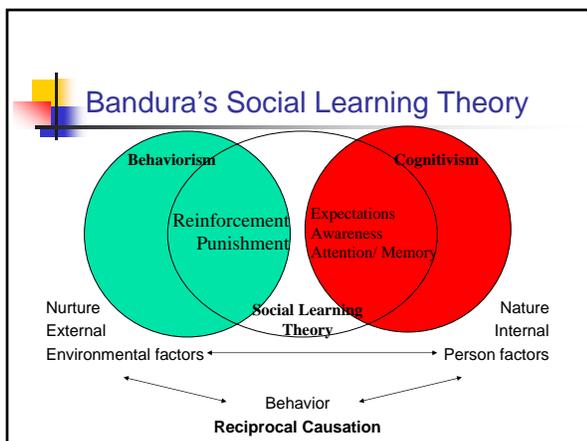
Learning by observation (or vicarious acquisition) and modeling.

Observation of behaviors and their outcomes is a mode of learning (vs. simply being shaped by the environment).

Learning does not require behavior change or performance (learned tasks may be displayed now, later, or never).

Reinforcement has an indirect effect on learning.

Cognitive processes influence learning.



Behavioral Factors and Social Learning Theory

People reinforce others who copy their behavior.
 Students are reinforced by teachers when they reproduce behaviors being taught.

Imitated behavior leads to other people reinforcing copied behavior.
 Children are reinforced by parents when they reproduce what the teacher has taught

Behavior is imitated subsequent to observations of its effect on others.
 Students will engage in behaviors that are observed to achieve desired outcomes.
 Students will not engage in behaviors that observed to achieve undesired outcomes.

How the environment reinforces and punishes models

- Model as a discriminative stimulus (S+) (or antecedent)
 - (S+ = model) $R > S_{RF}$
 - Modeled behavior (R) is reproduced/learned/conditioned because of reinforcement. Observer (student) is reinforced by the model (teacher)
 - Imitated behavior (style of dress) leads to reinforcer (peer praise). People often reinforce others who copy what they themselves do.

Problems with a strictly behavioral analysis of social learning theory

1. Behaviors emerge complete, whole, without any shaping
 - operant conditioning requires $R > S_{RF}$
2. Behaviors emerge without ever having been directly reinforced. Simply watching others is enough.
3. Behaviors displayed long after discriminative stimulus (S+) has been displayed. The S+ may not even be present when the R is displayed.

Behaviorism and Social Learning Theory

S+	R	S _{RF}
Discriminative stimulus	Response	Reinforcement
Teacher models a behavior that is to be learned	Student _i observes > reproduces behavior	-Model (Teacher) praises Student _i -Third party (other students) praise Student _i -Modeled behavior itself obtains a reinforcing outcome
Student _i observes the R > S _{RF} <i>Vicarious Reinforcement</i> Student _i is likely to reproduce the teacher's modeled behavior		

Reinforcement and Contemporary Social Learning Theory

Reinforcement not viewed as essential to learning.

Reinforcement offers a reason to display behaviors.
 People learn (via direct experience and/or observation of others) that certain situations are more likely to lead to reinforcement and behave accordingly.

Expectation of reinforcement influences cognitive processes (attention) that influence learning.
 People pay attention to behavior (e.g., a skill being taught) that they believe has reinforcing value (a skill that they will be required to perform to obtain a desired outcome).
 In other words, you pay attention to behavior that you believe may be reinforcing.

Cognitive Factors and Social Learning Theory

Consequences affect performance, but not necessarily learning.
 Students may learn behaviors, but not display them until the consequences are judged desirable.

Cognitive processes affect learning.
 Attention is a critical factor in learning.

Expectations affect learning.
 Prior experiences (i.e., being rewarded or punished) influences behavior choices.

Awareness of reinforcement contingencies affect learning.
 Knowledge of exactly what behavior leads to exactly what consequence.

General Principals

- Observation of behaviors (of others/models) and their outcomes is an important mode of learning.
- Learning doesn't require behavior change or performance .
- Reinforcement has an indirect effect on learning.
- Cognitive processes influence learning.

Reciprocal Causation

The integration of behavioral and cognitive psychology is illustrated by this theory.

P=Person factors (internal)
E=Environment factors (external)
B=Behaviors (responses/choices made)

Internal (person), External (environment), and choices made (behavior) influence each other in a reciprocal fashion.

Reciprocal Causation

The integration of behavioral and cognitive psychology is illustrated by this theory.

P=Person factors (internal)
E=Environment factors (external)
B=Behaviors (responses/choices made)

Environment influences behavior (e.g., the positive reinforcement a child obtains when she reads will lead to increased reading behavior)

Reciprocal Causation

The integration of behavioral and cognitive psychology is illustrated by this theory.

P=Person factors (internal)
E=Environment factors (external)
B=Behaviors (responses/choices made)

Internal "person" factors influence behavior (e.g., awareness of the probability of reinforcement for reading behavior results in the child being more likely to engage in such behaviors).

Reciprocal Causation

The integration of behavioral and cognitive psychology is illustrated by this theory.

P=Person factors (internal)
E=Environment factors (external)
B=Behaviors (responses/choices made)

B>P, choosing to read frequently affects views of self as a reader.
B>E, choosing to read frequently affects environmental supports for reading.

Reciprocal Causation

The integration of behavioral and cognitive psychology is illustrated by this theory.

P=Person factors (internal)
E=Environment factors (external)
B=Behaviors (responses/choices made)

The environment influences internal expectations for future behavior (e.g., the environment that reinforces reading behavior will result in an expectation of reward for future reading behavior).

Reciprocal Causation

The integration of behavioral and cognitive psychology is illustrated by this theory.

P=Person factors (internal)
 E=Environment factors (external)
 B=Behaviors (responses/choices made)

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    graph TD
      P((P)) -- red --> E((E))
      P --> B((B))
      B --> P
      B --> E
    
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The internal expectations of the person influences how the environment is experienced (e.g., expectations of success in reading results in small failures being ignored).

Types of Models

- Live**
In person demonstration
- Symbolic**
Portrayal via media
- Verbal**
Instruction on how to behave

Modeling Prerequisites

Attentional Processes	What children observe or attend to depends on characteristics of the model and characteristics of the child. Learners need to be focusing on relevant (important) and ignoring irrelevant (unimportant) stimuli.
Retention Processes	Processes that enhance memory are mediators of observational learning (e.g., imagery and rehearsal). Learners must remember what they observed.
Motor Reproduction Processes	Doing all or part of what was learned. Learners must be able to perform (practice) the behavior. This helps them to encode the behavior motorically and allows for feedback on performance.
Motivational Processes	People can see an action, one that they are capable of doing, remember it and still not perform it. Performance depends upon motivation. Learners need to want to demonstrate the behavior that was modeled.



Modeling Requirements

Competence
Model is viewed as being a competent and capable person.

Prestige/Power
Model has high status and respect.

Stereotypical
Model displays "gender appropriate" behavior.

Relevance
Models situation is similar to the observer's



Self-Efficacy

The belief that one is capable of executing behaviors successfully. Similar to self-esteem, but is more situationally specific.

Has dramatic effects on behavior (i.e., choice of activities, effort and persistence, learning and achievement)

Is influenced by several factors (i.e., previous successes and failures, persuasion or being told that success is possible, successes and failures of others lets them know their chances).



Concluding Comments

- Observation alone is sufficient for learning.
- Modeling provides an alternative to shaping for teaching new behaviors.
- Teachers and parents should model appropriate behaviors.
- Teachers should expose students to a variety of exemplary models.
- Vicarious reinforcement and punishment may influence student behavior.
- Describing the consequences of behaviors can affect their occurrence.
- Students must believe they are capable of accomplishing school tasks.



Next Week

- Read Ormrod Chapters 7 & 8
- From readings write & turn-in 4 discussion questions (two for each chapter)
- Bring art supplies (e.g., colored pens, pencils, drawing paper) for an activity.
