

Albert Bandura (1925 - Present)

Chapter 13

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Albert Bandura

1. Born Dec. 4, 1925 (in Mundare) Alberta, Canada.
2. B.A. from University of British Columbia (1949).
3. PhD from University of Iowa (1952).
4. Postdoctoral at Wichita Guidance Center, 1953.



(1925-present)

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Albert Bandura

5. Joined Stanford University after 1953 and is still there.
6. Wrote his first book with Richard Walters, *Adolescent Aggression*, in 1959.
7. President American Psychological Association (1974).



(1925-present)

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Albert Bandura

8. Holds offices in many scientific societies. Serves on editorial boards of 17 journals.
9. Influenced by Spence, and by Miller and Dollard's book, *Social Learning and Imitation* (1941).

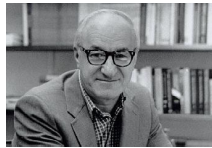


(1925-present)

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Albert Bandura

10. APA's Award for Distinguished Scientific Contributions (1980). He continues to work at Stanford to this day.



(1925-present)

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Imitative Behavior: History

1. Plato and Aristotle, thought that students learn from teachers who serve as models, and thus believed that humans have an innate tendency to imitate.
2. Since the idea of innateness prevailed in thinking about imitation no experimentation was carried out to find whether this was true or not.

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Thorndike & Watson

1. Thorndike (1908) placed a trained and a naïve cat in adjoining cages. Naïve cat did not learn to escape through imitating the trained cat. It had to learn to escape the box by trial and error.
2. Watson (1908) also tried training monkeys through imitation with little luck.
3. **Conclusions:** Animals learn through direct experience, and not through imitation or observing others.

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Miller and Dollard

1. Miller and Dollard (1941), challenged the nativist view of imitative behavior, and argued that imitative behavior can be explained on the basis of instrumental conditioning.
2. Dollard and Miller divided imitative behavior into three categories.
3. When two individuals respond to the same situation, in the same way, e.g., stop at red light, laugh with others, applaud with others etc. we call that **same behavior**.

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Miller and Dollard

4. When one person guides another in developing a behavior is called **copy behavior**, e.g., an art teacher assists his student to paint or draw.
5. When an observer blindly follows a model it is called **matched-dependent behavior** e.g., “when in Rome, do as the Romans do”. Doing every thing like the model under wide variety of situations is called **generalized imitation**.

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Conclusions: Behaviorists

The following conclusions are drawn by Miller and Dollard (1941), and explicitly put forth by B. F. Skinner.

1. Observational learning does not take place all the time.
2. Model's behavior is observed.
3. Observer matches model's behavior (works as discriminative operant).
4. Matching behavior (response) is reinforced.
5. A schedule of reinforcement is required to maintain this behavior.

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Bandura Criticizes

1. Bandura criticizes behaviorist approach to explain imitative behavior. He says:
2. Why does observational learning take place when neither the model nor the observers are reinforced.
3. Observer needs only to be **aware** of reinforcing consequences (cognitive process).
4. Conditioning does not explain delayed modeling.

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Imitation in Animals

Recent studies have shown that animals can also learn through imitation.

1. When trained chickens (demonstrator) pecked at one of the two keys in the presence of observer chickens. The observer chickens later were noticed for pecking the same key pecked by the demonstrator (Nicol & Pope, 1993).
2. Demonstrator rats moved levers in left or right directions in the presence of observer rats. When given a chance later, observers too moved the levers in the same direction (Hayes and colleagues, 1990; 1992).

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Bandura's Distinction

1. Bandura says that **imitation** is copying the model blindly, and **observational learning** may or may not include imitative behavior. For example, not hitting a pot hole on the road when observing the driver in front hits it.
2. Observational learning involves getting information from the modeling source and is much more complex than mere imitation.

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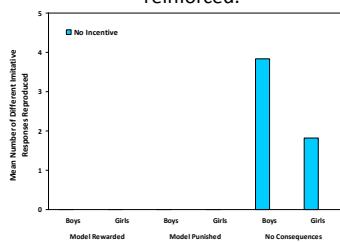
Bobo Doll Study



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Vicarious Reinforcement

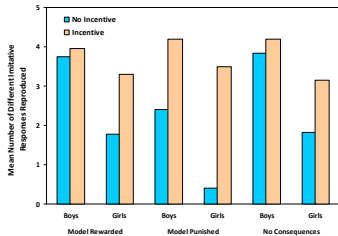
Bandura showed in his bobo doll that children imitate model's behavior because they see her get reinforced.



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Performance

When incentive was added aggressive behaviors (performance) increased in both boys and girls.



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Bandura agrees with Tolman

Bandura reaches the same conclusions as Tolman and Hoznik (1930) did for learning and reinforcements in their experiment with rats. They suggested:

1. Behavioral learning has a cognitive explanation.
2. Learning did not require reinforcement.
3. Reinforcement (incentive) directs learned activity (performance).

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Implications of Violent Media

1. Bandura defines a model that conveys information. Television and other forms of media can teach us good and bad things.
2. Fictional and non-fictional violence in television increases violence in the viewer.
3. Difficulty in controlling violence in television is due to widespread disagreement over what is violent; and suppressing one form may increase other forms.

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Observational Learning: Factors

Since reinforcement did not affect observational learning, Bandura pointed out there are **four** factors that do, and are:

Acquiring Behavior	Performing Behavior
Attention	Production
Retention	Motivation

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Attentional Processes

In order for the individual to imitate model must be attended to.

1. Without adequate **sensory processing** attention cannot be directed toward the model.
2. If past reinforcements have lead someone to pay attention to a model, then future **reinforcements** will selectively direct attention toward the model.
3. **Characteristics** of the model will affect observer attention, e.g., her being colorful, dramatic, attractive, prestigious, competent, or resembles the observer.

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Retentional Processes

Information from observation must be retained in memory.

1. Information about the model can be retained by the observer in **imagery forms**, i.e., mental pictures.
2. The information can also be retained in **verbal forms** i.e., language or symbols.
3. The two forms of retention are intertwined.

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Behavioral Production Processes

Once an observed behavior is retained (learned) it needs to be translated into performance.

1. Cognitive (learnt) processes will not translate into behavior if **motor apparatus** was immature or not did not exist or function.
2. **Cognitive rehearsal** necessary to produce behavior.

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Motivational Processes

Reinforcement leads the individual to perform, and is not a learning variable (see also Tolman, 1930).

1. Reinforcement creates an **expectation** in observers that if they act like the model getting reinforcement they will be reinforced also.
2. Reinforcement serves as an incentive (**motivational process**) for translating learning into performance.

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Motivational Processes

Bandura lists three kinds of reinforcements and punishments.

Reinforcement*	Punishment
Past like behaviorism	Past like behaviorism
Promised incentives imagined	Promised threats
Vicarious seeing and recalling a model being reinforced.	Vicarious seeing and recalling a model being punished.

* Table based on Boeree (2006).

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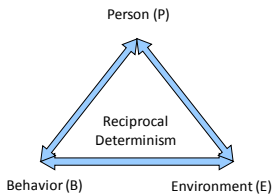
Reciprocal Determinism

1. Bandura criticizes behaviorists for stating **environment** is the only cause of behavior. Bandura adds, that **behavior** can also have an effect on environment.
2. The third thing that he adds to the equation is individual's personality. Personality or **person** consists of linguistic and imagery processes that affect behavior and environment.
3. Why do people act as they do? Bandura says it is because of person, behavior and the environment.

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Reciprocal Determinism

Reciprocal determination is represented as motif, where person (P), environment (E) and behavior (B) are triangulated. The three reciprocally affect each other.



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Environment

Environmental factors can affect behavior, e.g., a loud noise startles everyone and thus affects our behavior. Many outstanding characteristics of a model affect our behavior, e.g., following trendy fashions portrayed by models is everyday occurrence.

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Behavior

Behavior also affects environment in turn. Rats that press the lever to avoid shock change their environment. Bandura says that though the **potential environment** is the same for all animals the **actual environment** depends on their behavior.

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Person

At other times a people's beliefs, imaginations, linguistic abilities affect their actions. Bandura (1977) concludes, "Beliefs about the prevailing conditions of reinforcement outweighed the influence of actual consequences".

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Reciprocal Determinism: Conclusions

1. Bandura argues reinforcements and punishments do not determine people's behavior, as behaviorists suggest; for if they did, "people would behave like weathervanes, becoming corrupt with unprincipled individuals and honorable with righteous ones" (Hergenhahn & Olson, 2004).
2. So Bandura concludes, behavior is caused by observational learning (environment) and self-regulation (person), and not reinforcement and punishment for they have little affect on learning.

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Self-Regulation of Behavior

Bandura says human behavior (learning) is **self-regulated** and serves as a second important factor besides observational learning, and consists of:

1. Performance Standards
2. Perceived Self-efficacy
3. Moral Codes

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Performance Standards

1. Performance standards can arise out of direct experience or vicariously when we observe others getting reinforced.
2. Intrinsic reinforcement, for self-evaluation is stronger than extrinsic reinforcement.
3. If performance standards are too high they can be a source of personal distress and depression. Moderate performance standards are most motivating and satisfying.

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Self-efficacy

1. Like performance standards, the belief in what one is capable of is called **perceived self-efficacy**. This efficacy arises from ones own successes and failures, observing others succeed or fail and verbal persuasion.
2. Ones perceived self-efficacy may or may not correspond to **real self-efficacy**. At times one may perceive oneself with higher self-efficacy when in reality she may have lower self-efficacy, and at other times the opposite.

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Moral Conduct

Moral codes like other beliefs, when internalized determine behavior. These codes develop through interactions with the model and direct experience. Departure from the code results in **self-contempt**.

Piaget & Allport	Bandura
Piaget (stage theory) and Allport (trait theory) suggest that human behavior is consistent (stable) and based on whatever stage the individual is in.	Bandura disagrees and suggests that human behavior is inconsistent and is based on situation. To study situational nature of behavior morality is a great topic.

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Moral Conduct

Let us look at some examples of how behavior changes with respect to moral standards.

Type	Moral Code	Situation
Moral Justification	Do not steal	I stole for I had a family to feed.
	Do not kill	I killed the ruthless oppressor.
	Do not lie	I lied to save a life.

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Moral Conduct

Type	Moral Code	Situation
Euphemistic Labeling	Do not kill animals	I put animals to sleep.
	Do not kill humans	I killed for honor.
	Do not lie	I lied not to hurt others.
Advantageous Comparison	Stealing is wrong	I just stole, he killed a man!
	Do not kill	I killed one, he killed many.
	Do not lie	I just lied, he embezzled.

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Moral Conduct

Type	Moral Code	Situation
Displacement of Responsibility	Cruelty to others is wrong.	I wasn't cruel, I followed orders.
	Do not kill.	I did not steal I was an accomplice.
	Do not lie.	He lied I was merely nodding.
Diffusion of Responsibility	Do not steal.	We shared the loot.
	Do not kill.	We all killed "Caesar".
	Do not lie.	We share equally in covering up for our deeds.

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Moral Conduct

Type	Moral Code	Situation
Disregards of Consequences	Do not steal.	I stole because I knew they were rich.
	Do not kill.	I dropped bombs in the clouds.
	Do not lie.	I lied for the fun, no one was getting hurt.
Dehumanization	Do not steal.	I am not stealing from my slave.
	Do not kill.	Inferior humans can be killed.
	Do not lie.	Lying is okay with savages!

Moral Conduct

Type	Moral Code	Situation
Attribution of Blame	Do not steal.	His car was stolen because he was showing it off.
	Do not rape.	Victim was sexually provocative, she asked for it.
	Do not lie.	He wanted to hear that.

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Freedom Vs. Determinism

To a large extent our behaviors are self-regulated, thus we are free to make choices about our behaviors. Constraints to free choices are:

1. Incompetence
2. Unwarranted fears
3. Excessive self-censure
4. Social inhibitors (prejudice, discrimination)

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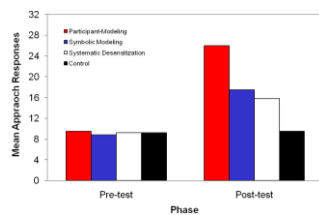
Faulty Cognitive Processes

1. To a some extent our behaviors are determined by our thinking. Thinking leads to behavior. So we can think and become angry, nauseated or sexually aroused etc. Faulty cognitive processes (thinking) lead to faulty behaviors.
2. How do we acquire faulty thoughts?
3. Faulty thoughts can be based on faulty reasoning or understanding, or not enough information.

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Clinical Applications

Modeling Therapy (MT) has been successfully used to remove faulty cognitive thinking, e.g., in removal of phobias ([herpephobia](#), fear of snakes). Bandura and colleagues (1969) have shown effective success with MT.



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Modeling & Learning

New Learning	Performance
Acquisition: Behavior that results from vicarious reinforcement.	Inhibition: Behavior that results from vicarious punishment
Creativity: Behavior resulting from combination of characteristics based on a number of models.	Disinhibition: Reduction in feared activity by watching a model
Abstract Modeling: Modeling experiences result in extraction of a principle.	Facilitation: Increasing the likelihood of a learned behavior after watching a model.

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Human Agency

Human agency is defined as conscious planning and intentional execution of actions that influence future events.

1. **Intentionality:** Representation of a future course to be performed.
2. **Forethought:** Anticipation of the consequences of our intentions.
3. **Self-reactiveness:** Do things that bring self-satisfaction, pride, self-worth and avoid those that bring self-dissatisfaction, self-devaluation, and self-censure.
4. **Self-reflectiveness:** The metacognitive capability to reflect on directions, consequences, and meanings of plans and actions.

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Social Cognitive Theory

1. Bandura's theory is called **social cognitive theory**, unlike Hull's purely learning theory or Tolman's cognitive theory.
2. His theory does resemble Dollard and Miller's social learning theory but Bandura's theory goes beyond that in explaining observational behavior and human uniqueness regulates behavior.

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Bandura on Education

1. Learning can be a direct experience but more so through a model like a teacher. So models should have respect, competence, and power.
2. Teachers can model performance standards, which when met by students are rewarding, if not then punishing.
3. Students require four different processes of attention, retention, production and motivation in order to learn through observation.

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Evaluation

Contributions	Criticisms
Learning does not require direct experience, and is based on vicarious experience.	Theory explains too many phenomena, from learning to societal problems.
Three way interaction of person, environment and behavior (reciprocal determinism).	Reciprocal determinism is not new and can be traced back to philosophical and more modern times.
	Reciprocal determinism defies causal analysis.

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Questions

31. Reciprocal determinism, what is it?
32. Compare Tolman's, Hull's and Bandura's theories of learning.
33. What are the similarities and differences between Kurt Lewin equation $b = f(P, E)$ and Albert Bandura's reciprocal determinism (For a time they both were at University of Iowa).

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