How Learning Happens

Three psychologists, three ways to explain behavior

P.4.8 "Identify key psychologists in the fields of learning and cognition, including Pavlov, Skinner, and Bandura and explain the impact of their contributions."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB In each paragraph, underline the psychologist's name, circle the learning process, write 1 beside evidence from an experiment, and write 2 beside a sentence about the contribution's impact.

Signals, Consequences, and Models

1. In the early 1900s, Russian physiologist Ivan Pavlov noticed that dogs sometimes began to salivate before food reached them. He tested how a sound could become a signal for food. At first, a tone alone did not make dogs salivate, but after the tone repeatedly came just before food, the tone alone triggered salivation. Pavlov called this a conditioned response, a learned reaction to a signal that once meant nothing to the animal. His work on classical conditioning showed that organisms can learn associations between events. It helped psychologists study how everyday cues can trigger automatic responses, including fear.

2. American psychologist B. F. Skinner studied what happens after an action. In one experiment, a rat could press a lever to receive food. When food followed a press, pressing became more frequent. Skinner called this reinforcement: a consequence that increases a behavior. Unlike Pavlov's dogs, the rat acted on its surroundings, and the result shaped what it did next. Skinner's research on operant conditioning helped explain how consequences shape voluntary actions. Teachers and coaches can use this insight to give specific feedback after a desired action, rather than assuming that repeating instructions alone will change behavior.

3. American psychologist Albert Bandura asked whether learning always requires direct rewards or repeated pairings. In his studies, children watched an adult act aggressively toward an inflatable doll. Children who saw this behavior were more likely to imitate it than children who did not watch that model. Bandura's work on observational learning showed that people can learn by watching others, even without practicing the act first or receiving a reward themselves. This finding expanded learning research beyond direct experience. It also influenced how adults think about the examples set by peers, family members, and media figures.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which psychologist showed that a once-neutral signal can trigger an automatic response? Why did that finding matter?

2. Which psychologist studied lever pressing? How can his findings inform the way teachers respond to students' actions?

3. Which psychologist studied children watching an adult? What did his findings add to explanations of learning?

4. How did Skinner's and Bandura's findings each expand on the kind of learning Pavlov studied?

3 YOUR TURN

Your own words

Invent a scene in a school or neighborhood where someone learns a new behavior. In four sentences, identify two psychologists from the passage, explain a different way each would account for the learning, and state one practical use of their ideas.

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PART 1 · READ AND MARK

In each paragraph, underline the psychologist's name, circle the learning process, write 1 beside evidence from an experiment, and write 2 beside a sentence about the contribution's impact. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which psychologist showed that a once-neutral signal can trigger an automatic response? Why did that finding matter?	**Pavlov. His finding showed that organisms learn associations between events, helping psychologists explain how cues can trigger automatic responses.**
2	Which psychologist studied lever pressing? How can his findings inform the way teachers respond to students' actions?	**Skinner. He showed that consequences can increase a voluntary action, so teachers can give specific feedback after a desired action.**
3	Which psychologist studied children watching an adult? What did his findings add to explanations of learning?	**Bandura. He showed that people can learn by observing a model without first practicing or receiving a reward themselves.**
4	How did Skinner's and Bandura's findings each expand on the kind of learning Pavlov studied?	**Pavlov studied associations between signals and events. Skinner showed how consequences shape voluntary actions, while Bandura showed that people can learn by watching others.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

At a community garden, Mira learns to put tools away after each shift. Skinner would explain that praise after she returns a shovel makes that action more likely next time. Bandura would explain that watching an experienced gardener organize the tools gives Mira a model to copy. Together, these ideas suggest that the garden leader should model cleanup and recognize it when Mira does it.

Accept other accurate impacts supported by the passage. For the open task, look for two distinct explanations that fit the invented scene and a practical use consistent with both.