

Tolman



With which prominent psychologist did Tolman work? What two points of view are blended in Tolman's theory? His theory was a blend of Gestalt psychology and behaviorism. What type of behaviors did Tolman study? He believed in studying Molar behaviors - a large segment of behavior that is goal directed and therefore purposive. He dealt with observable environmental stimuli and overt behaviors. What was Tolman's theory called? It was called Purposive behaviorism because he dealt with behaviors that appeared goal directed. What makes behaviors seem goal directed? He claimed that behaviors appear goal directed as long as the animal is seeking something in its environment. What is learned according to Tolman? What leads to what. Signs learning - the animal learns that one thing is a sign for another. What does the animal develop as it explores the environment? Learning the lay of the land. Form a cognitive map that once learned, the animal can use to navigate the environment and find routes to a goal. What is the principle of least effort? The organism will choose the shortest route or the one requiring the least amount of work. According to Tolman, what is the role of motivation in learning? Learning doesn't depend on a need state. Motivation isn't necessary for learning. However, it can determine what one pays attention to in the environment. How does the animal use expectations during learning? Make sure that you discuss hypotheses and confirmation in your answer. During the development of the cognitive map, expectations are utilized by the organism. Early expectations are known as hypotheses. Hypotheses can be tested cognitively. Hypotheses that are confirmed are retained. What is a mean-end readiness? An expectancy that is consistently confirmed; sometimes referred to as a belief.

How does mean-end readiness come about? When an expectation is consistently confirmed, the organism ends up "believing" (stimulus), another sign will follow. When is a learned behavior performed? We may learn many things by exploring our environment, but what we learn doesn't show up in behavior until a need arises. What did Tolman call learning that wasn't immediately illustrated in performance? Latent learning—learning that is not translated into performance. Provide an experimental example that this latent learning occurs. Three groups of rats. One group was always reinforced for running. Second group was never reinforced. Third group was reinforced after the 11th day. Group one's errors go down consistently. Group two is not. Group three does after the eleventh day. Explain latent extinction. How can it be obtained? The animal doesn't have to perform a non-reinforced response in order for extinction. It only needs to be able to observe that reinforcement is no longer available. Put rat in the goal box to show that food is not there. What is place learning? Tolman maintained that animals learn where things are, not responses. Provide experimental examples of place learning that it occurs. Tolman, Ritchie and Kalish—Rats ran from the start areas to the choice point of the maze. Half were reinforced for turning the same the direction on each trial (Response learning); half were reinforced for going to the same place on each trial (Place learning). Place learning learned a lot faster. In the second experiment they first trained rats to complete a maze with a light directly above the goal. After preliminary, rats were tested in a maze with multiple, radial arms. The straight ahead path learned in preliminary training was blocked, however. When the examined the frequency with which different paths were chosen, they saw that the path leading directly toward the light and the goal was chosen most

often. The second most taken was the one that led toward their home cages.

What is reinforcement expectancy? When an animal receives the same reinforce time after time, it comes to expect that reinforce. How does violating reinforcement expectancy affect behavior? Behavior will be disrupted.

Provide an experimental example of reinforcement expectancy. Elliot trained one group of rats to run a maze for bran mush and another to run a maze for sunflower seeds. On the tenth day of training, the group that had been trained on bran mush was switched to sunflower seeds. Switching the reinforcement considerably disrupted performance. What were Tolman's suggestions regarding education? Education should emphasize thinking and understanding. Students should be put into hypothesis testing situations. Teachers should assist with the process and provide confirmation. Learning should take place in small groups. Students should be exposed to a different viewpoints of a topic so that they can form cognitive maps.

What are some contributions that Tolman made to the study of learning? Provided methodology for studying spatial learning and memory. Returned the focus of learning theories to molar behaviors. Paved the way for more cognitively oriented theories, like Bandura's and Bolles'.

What were some criticisms of Tolman's theory? The theory discusses a large number of variables, all of which can't be subjected to experimental scrutiny. His theory isn't widely applicable.