Observational learning incl. insight and latent learning

Observational LearningA person learns by watching the behaviour demonstrated by another.

learning attends to model's behaviour & its consequences and stores a 'mental representation" of itModelsModels are other individuals demonstrating behaviour to an observer.

they can be live (real person) or symbolic (video game, etc)

Model Characteristics- Credibility

- Likability
- Attentiveness
- Prestige
- Relevance
- SimilaritySOCIAL LEARNING THEORYBandura.

Where we learn from people around us, with or without reinforcement.

Bandura 196136 boys and 36 girls aged between 3-6 years old were chosen from a Stanford Nursery.

Independent groups design.

Group 1 - no model

group 2 - aggressive model

group 3 - passive model

Results: Children in group 2 were more likely to imitate the aggressive behaviour. Boys were nearly 3 times more likely than girls to imitate the physically violent behaviour by a male model.

Conclusion: Learning can occur in the absence of reinforcers for the observers. This finding was in direct contrast to Skinner's theory of operant

conditioning. Bandura 1963aSam method as 1961 experiment but with three different conditions.

Group 1 - live aggressive model

Group 2 - video of the aggressive model

Group 3 - aggressive model in cartoon format

Group 4 - live passive model.

Results: The children who saw the adult role model behave aggressively in any of the conditions were more likely to behave aggressively themselves later.

The live role model was the most influential.

The children who saw the aggressive video and cartoon models showed almost twice as much aggression as the children in the control group (group 4).

The results added to findings of the 1961 experiment and demonstrated that learning can happen vicariously and without any reinforcers given to either the model or the observer. Bandura 1963bSimilar to 1963a

But, focus on the influence of consequences of the model

Results:

Children who had observed the aggressive model rewarded showed more imitative aggression and copied their model more than children in the group where the aggressive model was punished. Process of Observational LearningAttention = person must notice the model's behaviour and pay attention to it.

Retention = store a mental representation of the behaviour/skill

Reproduction = have physical/mental capacity to be able to imitate the behaviour/skill

Motivation = desire to replicate the observed behaviour under appropriate circumstances

Reinforcement = likelihood of the learner to reproduce the model's behaviour is strengthened by the presence of a pleasant outcomeVicarous ConditioningWhere the learner observes the model receiving favourable consequences for the behaviour, and will more likely imitate the model's behaviour. INSIGHT LEARNINGA mental process in which a sudden, complete and unexpected solution to a problem is achieved. Kohler ExperimentExperimenting with a chimpanzee called Sultan.

Hung a banana from the ceiling of the room and let Sultan deliberate over how to get it.

Sultan didn't make lots of attempts to get the banana, but after pacing around the room he suddenly pushed a box under the banana and got it. 4 Stages of Insight LearningPreparation - attempts to solve the problem in any way they can think of

Incubation - temporarily gives up and decides to do something else (but the brain keeps trying to solve the problem)

Insight - the 'Aha!' experience when the person suddenly realises how to solve the problem

Verification - the hard work of applying the solution and making sure it works. 2 main characteristics of Insight LearningOnce a problem has been solved by insight, the learning is usually permanent - if problem comes up again, solution is immediate.

Solution is complete when it is first thought of. LATENT LEARNINGrefers to a situation in which learning has taken place but the behaviour has not yet been demonstrated. 5 Characteristics of Latent LearningAttention - pay

attention to the model

Retention - where we store a mental representation of the skill/behaviour observed.

Reproduction - is conditional on having the mental and physical ability to perform the action

(At this stage - learning is Latent as the behaviour has not yet been performed.)

Motivation - where a stimulus will make us want to perform the action. Once we perform the action, it is not longer latent

Reinforcement - If we receive a good result for the behaviour, we will perform it again! Tolman Experiments3 groups of hungry rats and a maze

Group 1 - box of food always full

Group 2 - food box always empty

Group 3 - food box empty for 10 days then full from day 11 onwards.

Group 1 - produced standard learning curve - gradual reduction of time taken to run the maze

Group 2 - showed little variation in time taken over all the days

Group 3 - showed little variation in time taken for the first 10 days but there was a dramatic decrease in the time taken from day 11 onwards

Conclusion: Rats had formed a cognitive map of the maze but until there was good reason (motivation), they didn't show the behaviour to solve the maze.

Cognitive MapA mental representation of the layout of an environment.

linked to hippocampus - involved in consolidation of spatial maps.