Chapter 12: Observational Learning

Lecture Outline

- Observational learning
  - Observational learning in Classical conditioning
  - Observational learning in operant conditioning
  - Observational learning in animals
- Language
  - Attributes of language
  - Theories of language acquisition
  - Language & animals
- Rule governed behavior
  - Definition & characteristics
  - Disadvantages of rule governed behavior
  - Personal rules in self-regulation

Observational Learning

- Observational learning in classical conditioning
- Observational learning in operant conditioning
- Observational learning in animals

Observational Learning

- Classical & Operant learning refer to the direct experience of the animal
- Bandura – learning processes take place vicariously through observation
- Observational learning : acquisition of new behaviors by watching and imitating others (models)

  Example

  > You observe an older sibling studying hard. You observe your sibling's study behavior being reinforced by good grades and parental praise. In this case, your own tendency to study hard might be strengthened.

  NOTE: Reinforcement is experienced by your sibling not you
- Observational learning - extension of Classical & Operant learning

Observational Learning in Classical Conditioning

- Fear acquired through observing fearful reactions in others
- Can be acquired in one of two ways
- Standard conditioning procedure
  - Emotional reactions of others serve as the US

Example 1

Mouse (CS) : Observe fear (US) → Fear (UR)

Mouse (CS) → Fear (UR)

Example 2

Teddy Bear (CS) : Observe happiness (US) → Happy (UR)

Teddy Bear (CS) → Happy (UR)

Observational Learning in Classical Conditioning

- Higher order conditioning
  - Emotional reaction in others serves as the CS
  - Two-step process

Example 2

Step 1

Fear in Others (CS) : Fearful Event (US) → Fear in Oneself (UR)

Fear in Others (CS) → Fear in Oneself (UR)

Step 2

Mouse (NS) : Fear in Others (CS) → Fear in Oneself (UR)

Mouse (CS) → Fear in Oneself (UR)

Observational Learning in Operant Conditioning

- Observational learning in operant conditioning
  - Operant conditioning affects how model's behavior is transformed into observer's behavior
  - Operant conditioning affects *acquisition* & *performance* of the behavior

Example

You observe an older sibling studying hard. You observe that she spends many hours per week reading texts, writing assignments, and attending lectures and tutorials. In this case you have *acquired* the basic information for effective study behaviors. However, until you are old enough to attend university, you will not be able to translate that acquired knowledge into your own academic *performance*.

2 Characteristics of Obs Learning in Operant Conditioning

1. Acquisition - Does the person or animal observe the behavior of the model?

2. Performance - Does the person or animal begin to perform the behavior themselves?

Factors affecting acquisition

1. Attention - watching the situation
    - The behavior of the model – cannot learn from someone if you do not watch them
    - Consequences of model's behavior – (e.g., if model's behavior is reinforced the observer is more likely to attend to the behavior)
2. Reinforcement for paying attention
    - More likely to acquire behavior if reinforced for paying attention
    - e.g., more likely to pay attention to what lecturer is saying (eye-contact) if reinforced (smile, eye-contact)

Factors Affecting *Acquisition*

3. Reproduction
    - Need belief in ability to be able to reproduce the behavior from the mental representation
    - e.g., lecturer demonstrates how to perform structural equation modelling – students less likely to pay attention if they do not believe they can reproduce lecturer's performance
4. Personal characteristics of model
    - Attend to models who are similar to us
    - Attend to model's who we admire (e.g., celebrities)
    - Experts (e.g., lecturers who know SEM rather than students who think they know SEM)