16.1 Conditioning, reinforcement and observational learning: evidence and transfer

Name: _____ Class: _____ Date: _____ **Total: 8 marks**

KEY WORDS negative reinforcement • extinction

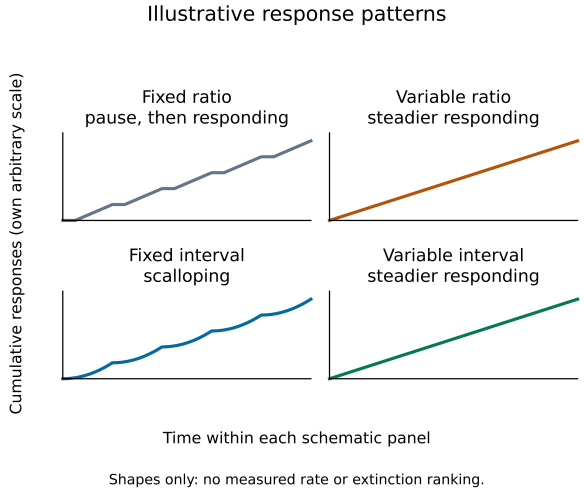
Objective

Distinguish classical from operant conditioning by what is learned; Classify consequences and reinforcement schedules by their effects; Explain observational learning and its requirements. Original practice and authored marking guidance.

1 Key knowledge and worked examples

negative reinforcement : Strengthening a behaviour by removing an aversive stimulus; not punishment. **extinction** : Weakening of a conditioned response when the CS no longer predicts the US or the behaviour is no longer reinforced.

Positive means adding; negative means removing. Reinforcement increases the target behaviour; punishment decreases it. Classify from the observed contingency and subsequent behaviour, not the adult's intention. Ratio schedules depend on responses; interval schedules depend on elapsed time before a response can be reinforced. Extinction means the previously reinforced response or cue no longer receives its former consequence; it is not simply forgetting.



Worked case. Access to a game is removed after interruptions, and interruptions decline. An alarm stops after homework begins, and starting increases. Classify both.

Removing access and decreasing interruptions is negative punishment. Removing the alarm and increasing starting is negative reinforcement. The same word removing occurs in both; the direction of change in the named behaviour separates them. These are descriptions of fictional contingencies, not recommended classroom interventions.

2 Practice

2.1 Taking an aspirin to relieve a headache makes future aspirin-taking more likely. This is: [1]

A. positive reinforcement B. negative reinforcement C. positive punishment D. negative punishment E. classical conditioning

2.2 The highest, steadiest response rate and greatest resistance to extinction come from a: [1]

A. fixed-ratio schedule B. fixed-interval schedule C. variable-ratio schedule D. variable-interval schedule E. continuous schedule

2.3 Revisit the worked case. State one conclusion its evidence supports and one stronger conclusion it does not support. Explain the difference. [2]

3 Exam-style questions

3.1 Rewards follow every fifth response in one task and the first response after varying time intervals in another. Identify the schedules and the condition that earns each reward. Give the interpretation, supporting reasoning, a relevant alternative or limitation, and an appropriate check. [4]

Solutions

2.1 Answer: B. The behaviour increases because an aversive state is removed; that is negative reinforcement. The other options do not satisfy the stated defining conditions.

2.2 Answer: C. Variable-ratio schedules pay after an unpredictable number of responses, sustaining rapid steady responding. Compare the exact process, design or evidence, rather than an associated keyword.

2.3 Use the worked case evidence to support a bounded claim and explain why a causal, universal or stronger claim needs additional evidence. The claim must fit the specific design and observed process.

3.1 Every fifth response is fixed ratio: the count of responses determines reinforcement. The first response after varying intervals is variable interval: time makes reinforcement available, but a response is still required. A response count with variable requirements would instead be variable ratio. A typical response curve is not an absolute law for every task. Award B1 each (authored) for the interpretation, its reasoning, a relevant limitation/alternative and an appropriate check, up to four points. Accept a different justified answer satisfying these demands.