AP PSYCHOLOGY • EXERCISE SHEET

3.9 Social, Cognitive, and Neurological Factors in Learning

Name: _____ Class: _____ Date: _____ **Total: 18 marks**

KEY WORDS cognitive map 认知地图 • insight 顿悟 • latent learning 潜伏学习 • observation 观察 • biological preparedness 生物准备性

Objective

Build the skills to answer exam questions on **observational learning** 观察学习 and cognitive influences.

You must be able to:

- describe **modelling** 示范 and the conditions that make it effective
- explain **latent learning** 潜伏学习 and what a **cognitive map** 认知地图 shows
- describe **insight** 顿悟 learning
- explain **biological preparedness** 生物准备性 and taste aversion

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ Modelling

Behaviour can be acquired by watching another person, without any reinforcement to the observer. Imitation is more likely when the model is similar, admired, or seen to be rewarded.

■ Latent learning

Animals allowed to explore a maze without reward later run it efficiently once reward is introduced. Learning had occurred without performance, which shows that learning and performance are separate.

■ Insight

A solution can arrive suddenly, after a pause rather than through gradual trial and error. This indicates internal restructuring of the problem rather than incremental reinforcement.

■ Biological preparedness

Some associations are learned far more easily than others. A single episode of illness can produce a lasting aversion to a taste, even hours later, while the same delay would prevent most conditioning. Organisms are prepared to learn what mattered to survival.

2 Practice

2.1 State two conditions that make imitation of a model more likely. [2]

2.2 Explain what latent learning shows about learning and performance. [2]

2.3 A person becomes ill hours after eating an unfamiliar dish and avoids it afterwards.

(a) Name the phenomenon. [1]

(b) State why the long delay is theoretically interesting. [1]

3 Exam-style questions

3.1 A child copies an adult's aggressive behaviour after watching it rewarded. This is [1]

- **A** classical conditioning
- **B** observational learning
- **C** latent learning
- **D** insight

3.2 A sudden solution after a pause, without gradual improvement, indicates [1]

- **A** shaping
- **B** insight
- **C** extinction
- **D** generalisation

3.3 Conditioning a rat to fear a tone takes many pairings; a taste aversion needs one.

(a) Name the principle explaining the difference. [1]

(b) Explain why it makes evolutionary sense. [2]

3.4 Applied research task. Children watched an adult either hit an inflatable doll, play gently with it, or ignore it. In a third condition the adult hit the doll and was then praised; in a fourth the adult hit the doll and was then scolded. Children who saw the praised adult imitated most; children who saw the scolded adult imitated least — but when later offered a reward for showing what the adult had done, both groups could reproduce the behaviour equally well.

(a) Name the theory this study supports, and name the researcher. [2]

(b) Name the process by which the children's imitation was affected by what happened to the adult, and explain it. [2]

(c) Explain what the final result — equal reproduction when rewarded — shows about the difference between learning and performance. [2]

(d) Identify **one** ethical concern raised by this study. [1]

Solutions

2.1 any two of: the model is similar to the observer; the model is admired or high status; the model is seen to be rewarded.

2.2 learning occurred during unrewarded exploration but was not shown until reward was introduced, so learning can exist without performance.

2.3 (a) taste aversion. (b) most conditioning fails with such a long gap between stimulus and consequence.

3.1 B. the behaviour was acquired by observation, with vicarious reinforcement.

3.2 B. sudden restructuring rather than incremental improvement indicates insight.

3.3 (a) biological preparedness. (b) illness usually follows food after a delay, so an organism able to link taste to later sickness avoids poisoning and survives.

3.4 (a) **Social learning theory** (or observational learning) (1); **Bandura** (1).
(b) **Vicarious reinforcement** (1) — the observer's own behaviour is affected by the consequences they see the model receive, so seeing the adult praised raised the expectation of reward and seeing the adult scolded lowered it (1).
(c) The scolded-model children had **learned** the behaviour just as well — they could reproduce it on demand (1); what the consequence changed was whether they chose to **perform** it. Learning can therefore occur without being visible in behaviour, which is a problem for a purely behaviourist account (1).
(d) Children were deliberately exposed to aggressive models, with the risk of lasting effects on their behaviour, and young children cannot give informed consent; they may also have been distressed (1).