5.2 The Behaviourist Approach: Classical Conditioning and Pavlov's Research: 30-minute Pack

AQA 7182 · about 30 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions.

1 In a classical conditioning scenario where the sound of a bell becomes associated with food and causes salivation, identify the unconditioned stimulus and the conditioned stimulus. Give one label per mark.

(Total for Question 1 is 2 marks)

2 Give an example in a human context where a previously neutral stimulus might become a conditioned stimulus through association. Explain which stimulus is neutral, what it is paired with, and the expected conditioned response.

(Total for Question 2 is 3 marks)

3 Define 'acquisition' in classical conditioning and give one brief reason why repeated pairings are important for acquisition to occur, referring to Pavlov's work.

(Total for Question 3 is 2 marks)

4 Explain what is meant by 'extinction' in classical conditioning, and state what would be observed in Pavlov's dogs during extinction trials.

(Total for Question 4 is 2 marks)

© Revision Library | revisionlibrary.co.uk

5 Explain stimulus generalisation in classical conditioning and give one brief real-world consequence of generalisation for humans.

(Total for Question 5 is 2 marks)

6 Pavlov used non-human animals in controlled laboratory experiments. Identify two strengths of using controlled laboratory experiments on animals to study classical conditioning, and give one brief limitation of this approach. Each strength and the limitation should be distinct.

(Total for Question 6 is 4 marks)

7 Identify two ethical issues raised by Pavlov's use of dogs in laboratory research and suggest briefly how each issue could be addressed in modern research practice.

(Total for Question 7 is 4 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 5.2 The Behaviourist Approach: Classical Conditioning and Pavlov's Research: 30-minute Pack

Question 1

unconditioned stimulus: the food oe **B1**

conditioned stimulus: the bell after association with the food oe **B1**

Answer: Unconditioned stimulus: the food. Conditioned stimulus: the bell (after it has been associated with the food).

Question 2

gives a plausible human example where a neutral stimulus is paired with an unconditioned stimulus, e.g. smell of hospital corridor paired with pain or illness oe **M1**

identifies the neutral stimulus, the unconditioned stimulus it is paired with, and the resulting conditioned response, e.g. neutral stimulus: hospital smell; paired with: painful treatment; conditioned response: anxiety or nausea when smelling it later oe **A1**

shows the association clearly links the neutral stimulus to a learned response oe **B1**

Answer: Example: the smell of a hospital corridor (neutral stimulus) repeatedly paired with painful medical treatment (unconditioned stimulus). After association, the hospital smell becomes a conditioned stimulus producing anxiety or nausea as the conditioned response.

Question 3

defines acquisition: the initial stage where the neutral stimulus becomes associated with the unconditioned stimulus so that the conditioned response is learned oe **B1**

explains repeated pairings are important because they strengthen the association, making the conditioned stimulus predict the unconditioned stimulus (refers to Pavlov's repeated bell-food pairings) oe **B1**

Answer: Acquisition is the initial stage when the neutral stimulus becomes associated with the unconditioned stimulus so that a conditioned response is learned. Repeated pairings are important because they strengthen the association, so the conditioned stimulus reliably predicts the unconditioned stimulus, as in Pavlov's repeated bell-food pairings.

Question 4

defines extinction: the weakening and eventual disappearance of the conditioned response when the conditioned stimulus is presented repeatedly without the unconditioned stimulus oe **B1**

states that in Pavlov's dogs salivation to the bell would gradually reduce and stop if the bell was rung repeatedly without presenting food oe **B1**

Answer: Extinction is the weakening and eventual disappearance of the conditioned response when the conditioned stimulus is repeatedly presented without the unconditioned stimulus. In Pavlov's dogs, salivation in response to the bell would gradually decrease and eventually stop if the bell were rung without food being given.

Question 5

explains stimulus generalisation: when a conditioned response is produced by stimuli similar to the conditioned stimulus, not just the original stimulus oe **B1**

gives a real-world consequence, e.g. a person conditioned to fear a specific dog may also fear other similar dogs, which can broaden anxiety and avoidant behaviour oe **B1**

Answer: Stimulus generalisation occurs when stimuli similar to the conditioned stimulus also elicit the conditioned response. For example, a person conditioned to fear one specific dog might also feel fear toward other dogs with similar size or bark, which can expand avoidance and anxiety in everyday life.

Question 6

identifies strength 1: high experimental control, allowing reliable measurement of variables such as timing and number of pairings oe **M1**

explains why this matters: control increases internal validity and makes causal claims about association formation stronger oe **A1**

identifies strength 2: objective, quantifiable measures (e.g. volume of saliva) increase reliability and scientific credibility oe **M1**

explains limitation: using animals raises issues over generalisability to complex human behaviour and higher cognitive processes oe **A1**

Answer: Strength 1: high experimental control over timing and pairings, which improves internal validity and supports causal conclusions about associative learning. Strength 2: objective, quantifiable measures such as saliva volume increase reliability and scientific credibility. Limitation: findings from animals may not generalise to complex human behaviour or human cognition.

Question 7

identifies ethical issue 1: potential harm or distress to animals oe **M1**

suggests how to address it: ensure strict welfare protocols, minimise distress, use anaesthesia where needed and provide humane housing and care, with ethical review approval oe **A1**

identifies ethical issue 2: lack of informed consent from animals and use of animals when alternatives might exist oe **M1**

suggests how to address it: apply the 3Rs (replacement, reduction, refinement) and require independent ethics committees to justify animal use and consider alternatives oe **A1**

Answer: Issue 1: animals may experience harm or distress. Addressed by strict welfare protocols, minimising distress, humane care and ethical review. Issue 2: animals cannot consent and alternatives may exist. Addressed by applying the 3Rs, independent ethics approval and justifying animal use over alternatives.

© Revision Library | revisionlibrary.co.uk