4.5 The Two-Process Model: Explaining Phobias via Conditioning

AQA 7182 · about 65 minutes · Write-in edition

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions.

1 Outline social learning theory as a supplementary explanation for phobia acquisition.

(Total for Question 1 is 4 marks)

2 Explain a prevention implication from the two-process model.

(Total for Question 2 is 4 marks)

3 Apply the two-process model to Kwame's wasp fear.

(Total for Question 3 is 3 marks)

4 Apply the models to Amelia's spider fear in two short points.

(Total for Question 4 is 4 marks)

5 Identify a methodological limitation of supporting research.

(Total for Question 5 is 3 marks)

6 Discuss SLT as a supplement to the two-process model.

(Total for Question 6 is 6 marks)

7 Outline and evaluate the two-process model of phobias.

(Total for Question 7 is 16 marks)

8 Explain a diathesis-stress challenge to the two-process model.

(Total for Question 8 is 6 marks)

9 Explain a cognitive critique of the two-process model.

(Total for Question 9 is 4 marks)

Mark scheme · 4.5 The Two-Process Model: Explaining Phobias via Conditioning

Question 1

identifies observational learning: a person can acquire fear by watching someone else show fear towards a stimulus oe	**M1**
identifies vicarious reinforcement: observing another being distressed or punished by a stimulus can make the observer avoid it and learn fear oe	**A1**
gives an applied example, e.g. a child develops fear of dogs after seeing a parent panic at a dog oe	**A1**
states that social learning theory can explain acquisition without direct personal trauma oe	**A1**

Answer: Social learning theory suggests phobias can be learned by observing others show fear and by vicarious reinforcement when avoidance seems to be rewarded; for example a child may fear dogs after watching a parent panic at a dog.

Question 2

identifies an actionable prevention point, e.g. caregivers should avoid pairing neutral situations with fearful responses and should model calm reactions to potentially scary stimuli oe	**M1**
explains why this follows from classical conditioning/social learning: observing calm reduces chance of associating the stimulus with fear or learning fear vicariously oe	**A1**
links to maintenance prevention, e.g. encouraging graded, safe exposure rather than avoidance so that fear does not become reinforced oe	**A1**
concludes why it matters, e.g. reducing initial pairing and avoiding reinforcement reduces the likelihood a child develops a persistent phobia oe	**A1**

Answer: For prevention, caregivers should avoid showing exaggerated fear and should model calm responses to possibly scary stimuli, because classical conditioning and social learning mean children can acquire fear by association or observation. Also encouraging safe, graded contact instead of avoidance prevents negative reinforcement from maintaining fear, reducing risk of persistent phobias.

Question 3

identifies acquisition as classical conditioning: wasp swarm acted as the aversive event associated with the picnic context so parks/outdoor eating become CSs eliciting fear oe	**B1**
identifies maintenance as operant conditioning: avoiding parks reduces anxiety so avoidance is negatively reinforced and the fear persists oe	**B1**
briefly explains each link to the scenario, e.g. screaming during the attack pairs the wasp stimulus with fear and later avoidance prevents unlearning oe	**B1**

Answer: Acquisition: classical conditioning when the wasp swarm at the picnic becomes associated with fear so parks/outdoor eating act as conditioned stimuli. Maintenance: operant conditioning because avoiding parks reduces anxiety, negatively reinforcing avoidance so the phobia continues.

Question 4

acquisition point: identifies observational learning/classical conditioning, e.g. Amelia observed her sister's fearful reaction which either directly associated spiders with fear or led Amelia to adopt the fear by imitation oe	**M1**
gives a clear scenario link, e.g. seeing the sister scream made the spider appear dangerous and produced a fear response in Amelia oe	**A1**
maintenance point: identifies avoidance and negative reinforcement, e.g. refusing to go into the garden prevents anxiety so avoidance is reinforced oe	**M1**
gives a clear scenario link, e.g. lack of exposure prevents extinction so the fear of spiders persists oe	**A1**

Answer: Acquisition: Amelia learned fear by observing her sister's fearful reaction and/or through classical association so spiders became linked to fear. Maintenance: avoiding the garden reduces Amelia's anxiety, negatively reinforcing avoidance and preventing extinction so the fear continues.

Question 5

identifies a genuine limitation, e.g. many classic conditioning studies use animal models or artificial laboratory tasks that lack ecological validity oe	**M1**
explains how this weakens support, e.g. animal conditioning may not generalise to complex human emotional reactions and laboratory tasks may not capture real phobic experiences oe	**A1**
provides a consequence, e.g. the model may overstate the role of simple associative learning in real-world phobia development oe	**A1**

Answer: A limitation is that much supporting research relies on animal studies or artificial lab tasks, so findings may not generalise to complex human phobias; this reduces the strength of empirical support for the two-process model in real-world contexts.

Question 6

states a strength: explains acquisition without direct trauma, e.g. vicarious learning from parents or peers oe	**M1**
explains why this improves the two-process model, e.g. accounts for phobias arising in people without direct conditioning events oe	**A1**
states a second strength: includes cognitive processes such as attention and retention, which can explain why some observed behaviours lead to fear while others do not oe	**M1**
explains how this supplements the two-process model by adding mechanisms for individual differences in learning from models oe	**A1**
states a limitation: SLT still may not account for biological preparedness or innate biases to fear certain stimuli oe	**M1**
explains why this is a problem, e.g. some phobias (heights, snakes) are more easily acquired and SLT does not fully explain this predisposition oe	**A1**

Answer: Strengths: social learning explains how phobias can arise without direct trauma via vicarious learning and adds cognitive processes (attention, retention) that explain individual differences in learning from models, improving on the two-process model. Limitations: SLT still does not explain biological preparedness or innate biases that make some stimuli more likely to become feared, so it does not fully replace the need for explanations that include biological vulnerability.

Question 7

Level 4 Knowledge of the two-process model is accurate and detailed for both acquisition and maintenance. Evaluation is thorough and balanced, covering multiple relevant strengths and limitations, including integration of social learning and biological or cognitive challenges, and considers practical implications and empirical evidence. Precise application of evidence and argument shows insight and the answer is well structured with specialist terminology used accurately.	**13-16**
Level 3 Knowledge of the two-process model is clear with reasonable detail. Evaluation is effective and includes several relevant points, but may lack depth or omission of one important challenge. Some evidence or application is used. The answer is generally organised and uses appropriate terminology.	**9-12**
Level 2 Knowledge is present but limited in detail or partially inaccurate. Evaluation is present but superficial or one sided. Few links to evidence or implications. The answer may lack organisation and specialist terminology is used inconsistently.	**5-8**
Level 1 Knowledge is minimal and the evaluation is very limited or missing. Response may be a list with little coherence and specialist terminology is absent or misused.	**1-4**
Level 0 No creditable content.	**0**

Indicative content:

- AO1 content: Mowrer's two-process model states that phobias are acquired through classical conditioning when a neutral stimulus becomes associated with an aversive event, so the neutral stimulus comes to elicit fear, and are maintained through operant conditioning because avoidance behaviour reduces anxiety and is negatively reinforced.
- AO1 content: give clear examples, e.g. being bitten by a dog leads to fear of dogs (classical conditioning) and avoiding dogs prevents anxiety and maintains the phobia (operant conditioning).
- AO1 content: social learning theory can supplement acquisition by explaining vicarious learning and modelling of fear responses when direct conditioning is absent.
- AO3 strength: explains many real cases where a traumatic encounter precedes phobia onset and provides a parsimonious learning account that links acquisition and maintenance and suggests mechanisms that can be targeted in behaviour change.
- AO3 limitation: diathesis-stress and biological preparedness challenge the sufficiency of conditioning alone, because not everyone who experiences a traumatic event develops a phobia and certain stimuli are more readily feared, suggesting innate or genetic vulnerability.
- AO3 limitation: neglect of cognitive factors, such as catastrophic thinking, attention biases and interpretation of threat, reduces explanatory power; cognitive theories explain persistent fear even in absence of avoidance.
- AO3 evaluation of evidence: point to laboratory conditioning studies and clinical observations that support associative learning, but note methodological limits such as use of artificial tasks or animal models and variability in replication.
- AO3 integration: social learning theory and cognitive approaches can be combined with the two-process model to produce a more complete biopsychosocial account, which has implications for multi-component interventions and prevention strategies.
- AO3 implication: the model's emphasis on avoidance as maintenance explains why preventing avoidance is important, but because treatment considerations such as systematic desensitisation are covered in other topic packs, discussion here should focus on explanatory adequacy rather than treatment detail.

Question 8

identifies the diathesis-stress idea: some individuals have genetic or biological vulnerabilities that make them more likely to develop a disorder after stress oe	**M1**
explains that this implies conditioning alone may not be sufficient to explain why some people develop phobias and others do not after similar events oe	**A1**
provides an example or expansion, e.g. two people bitten by dogs where only the genetically vulnerable person develops a persistent phobia oe	**A1**
explains the implication for the two-process model: it may be incomplete because it ignores biological predispositions that affect susceptibility oe	**M1**
explains why this matters in practice, e.g. treatments based only on behavioural principles might be less effective for those whose phobias reflect underlying vulnerability oe	**A1**
links back by concluding the challenge: diathesis-stress suggests a multi-factorial account is needed beyond simple conditioning oe	**A1**

Answer: The diathesis-stress model says biological vulnerabilities make some people more likely to develop phobias after stressful events. This challenges the two-process model because conditioning alone cannot explain individual differences in who develops persistent phobias. For example, two people bitten by dogs might have different outcomes if one has a genetic sensitivity to anxiety. Therefore the two-process model is incomplete and a multi-factorial account that includes vulnerability factors is needed, which matters for understanding and treating phobias.

Question 9

identifies the limitation: the model focuses on observable behaviour and learning but downplays cognitive factors such as irrational beliefs or misinterpretation of threat oe	**M1**
explains why this matters: cognitive processes can maintain fear by biased attention or catastrophic thinking even without avoidance, so the behavioural account is incomplete oe	**A1**
gives an applied example, e.g. a person may overestimate the danger posed by dogs because of a persistent catastrophic thought pattern even without direct reinforcement oe	**A1**
concludes that effective explanations and treatments may need to address cognition as well as conditioning oe	**A1**

Answer: The two-process model neglects cognitive factors like catastrophic thinking and biased attention. These cognitions can maintain fear independently of avoidance, so the behavioural account alone is incomplete; for example someone might overestimate the danger of dogs due to persistent catastrophic beliefs even without direct reinforcement, implying that cognitive elements should be included in explanations and treatments.