

ASSESSMENT CHECK 18:**5.1–5.2 Approaches – Origins of psychology
& The biological approach (page 205)**

- 1 Introspection is the examination of an individual's mental processes, often done by focusing on one's thoughts and emotions while solving a problem or reaching a decision.
- 2 There are 6 marks available here for outlining the biological approach to explaining behaviour and 6 marks available for the evaluation of it. About 15 minutes should be spent constructing the answer, of which about 7½ minutes should be spent on the outline and 7½ minutes on the evaluation. For the average student this equates to about 150 to 185 words for the outlining and similar for the evaluation.

Probably the easiest way to construct an answer would be firstly to outline the approach and then to evaluate it.

The outline would focus on describing the biological approach, which sees behaviour as being physiologically determined. Marks awarded would depend on the accuracy, relevance and clarity of the descriptions and the degree of elaboration (detail). For instance, by providing descriptive detail of the different biological processes involved, such as genetics, neural structures, biochemistry and evolution.

The evaluation would probably best centre on the level of research support there is for the approach; Gottesman's (1991) twin study of schizophrenia would be a useful study for assessing the influence of genes. Fallon & Nields' (1994) study of neural structures and OCD would be useful for assessing the role of neural structures. Coleman's (1973) study of the role of leptin in eating would be a good study to use for the role of biochemistry, as would Rowe's (2007) study of the thrifty gene and obesity as a means of assessing the role of evolution in behaviour.

Which studies are used would probably be affected by which topics have been studied – most topics will have featured some studies based on the biological approach that could prove useful in answering this question.

Additional evaluation could be achieved by comparison of the approach with other approaches, such as the cognitive approach, but only if this is used to draw out the strengths and weaknesses of the biological approach. Material focused on practical applications, namely therapies based on the biological approach (for example, drug therapies) could also be shaped to the question.

Evaluative material focused on methodological and ethical criticisms, such as the difficulties in generalising from animal to human studies, would be relevant only if focused on the effectiveness of the approach.

It should be remembered that the most effective evaluation is created from a number of evaluative points being woven together to form a sophisticated commentary, rather than being a series of unconnected evaluative points.

- 3 Central nervous system = C
Endocrine system = B
Peripheral nervous system = A
- 4 Evolution sees any behaviour that aids an individual in surviving to sexual maturity as being acted on by natural selection to become more widespread in a population. As intelligence would increase an individual's ability to survive to sexual maturity, it would be acted on by natural selection, with successive generations becoming increasingly intelligent.
- 5 Genotype is the genetic make-up of an individual and phenotype is the result of their genotype's interaction with the environment. Identical (MZ) twins would have identical genotypes, but if they encountered different environments by growing up in different circumstances, then their phenotypes could be different.
- 6 The researchers were justified in reaching this conclusion as the concordance rates for MZ twins were greater than for DZ twins. This means that if one MZ twin had the mental disorder then there was a greater chance of their twin developing the disorder (30 per cent concordance rate) than there was for a DZ twin developing the disorder if their twin had the disorder (15 per cent concordance rate).
- 7 'Discuss' means to outline and evaluate, in this instance biological explanations of behaviour, with the evaluation having to feature comparison with two alternative approaches.

There are 6 marks available here for outlining biological explanations and 10 marks available for the evaluation of them. About 20 minutes should be spent constructing the answer, of which about 7½ minutes should be spent on the outline and 12½ minutes on the evaluation. For the average student this equates to about 150 to 185 words for the outlining and 250 to 310 words for the evaluation.

The wording of the question means that at least two biological explanations must be outlined. So one way to construct an answer would be firstly to outline a biological explanation and then evaluate it, and then to repeat the process for a second biological explanation. If more than two explanations were provided, then less depth would be expected in the descriptions. An alternative way to construct the answer would be to outline the biological approach in general, and then to outline different biological explanations and provide an overall evaluation of these.

The outline should focus on describing how the approach views behaviour, namely that behaviour is a product of physiology, and then on describing at least two separate biological explanations. Marks awarded would depend on the accuracy, relevance and clarity of the descriptions and the degree of elaboration (detail). For instance, by providing descriptive detail of the different biological processes involved, such as genetics, neural structures, biochemistry and evolution.

The question demands that evaluation occur by comparison with other at least two other approaches. This could occur through comparison with the psychodynamic, cognitive and behaviourist approaches, but this would be creditworthy only if used to draw out strengths and weaknesses of the biological approach, such as the biological approach being supported by scientific empirical evidence, while the psychodynamic approach isn't.

Additional evaluation could occur by assessing the degree to which the approach is supported by research evidence. One way to do this would be to assess if biological explanations are better supported than other approaches.

Which studies are used would probably be affected by which topics have been studied – most topics will have featured some studies based on the biological approach that could prove useful in answering this question.

Evaluation based on practical applications could assess whether the explanations lend themselves more or less to practical applications, like effective therapies, than other approaches do.

Evaluative material focused on methodological and ethical criticisms, such as the ethical issue of harm when researching on animals as an alternative to humans, would be relevant only if focused on the effectiveness of the approach.

It should be remembered that the most effective evaluation is created from a number of evaluative points being woven together to form a sophisticated commentary, rather than being a series of unconnected evaluative points.

ASSESSMENT CHECK 19:**5.3 Approaches – Learning approaches (page 217)**

- 1 Social learning theory sees behaviours as acquired through observation and imitation of someone modelling a behaviour if they are seen to be rewarded in some way for their behaviour; this is called vicarious reinforcement. So Johnny observed Spencer getting a tattoo and receiving vicarious reinforcement in the form of praise from everyone at school saying how cool it was, and so he imitated Spencer's behaviour and got one too. Jamie didn't get one, as the mediating process of 'motivation' has a reduced effect on Jamie (as his parents disapprove of tattoos) and therefore he does not imitate Spencer's behaviour.
- 2 There are 6 marks available here for outlining one learning approach and 6 marks available for the evaluation of it. About 15 minutes should be spent constructing the answer, of which about 7½ minutes should be spent on the outline and 7½ minutes on the evaluation. For the average student this equates to about 150 to 185 words for the outlining and similar for the evaluation.

Probably the easiest way to construct an answer would be firstly to outline the approach and then to evaluate it.

The outline should focus on describing a learning approach: either classical conditioning, which sees associations as being formed between stimuli and responses; operant conditioning, which sees learning as occurring due to the positive or negative consequences of behaviour; or social learning theory, which sees behaviour as being learned from the observation and imitation of models. Marks awarded would depend on the accuracy, relevance and clarity of the descriptions and the degree of elaboration (detail), for instance by detailing the behaviourist approach on which the learning explanations are based.

The evaluation would probably best centre on the level of research support there is for the approach. Pavlov's (1902) study on salivation in dogs would be a useful study for classical conditioning, Skinner's (1948) study on learning in animals via a Skinner box would be a useful study for operant conditioning, and Bandura's (1961) Bobo doll study would be a useful study for assessment of social learning theory.

Additional evaluation could be achieved by comparison of the approach with other approaches, such as the cognitive approach, but only if this was used to draw out strengths and weaknesses of the learning approach. Material focused on practical applications, namely therapies based on the learning approach (for example systematic desensitisation), could also be shaped to the question.

Evaluative material focused on methodological and ethical criticisms, such as the difficulties in generalising from animal to human studies, would be relevant only if focused on the effectiveness of the approach.

It should be remembered that the most effective evaluation is created from a number of evaluative points being woven together to form a sophisticated commentary, rather than being a series of unconnected evaluative points.

- 3 Positive reinforcement = B
 Punishment = C
 Negative reinforcement = A
- 4 Skinner showed how learning can occur through operant conditioning. Using rats in puzzle boxes where a lever had to be pressed to get a reinforcement (reward), Skinner showed how through trial and error rats learned that by pressing the lever they would receive a food pellet. This positive reinforcement strengthened the behaviour, making it more likely to occur again. Skinner varied the schedules of reinforcement to show that learning could be affected in different ways. For example, a variable ratio schedule, where a reinforcement is given for a fixed number of responses on average, produced a very high response rate that was resistant to extinction when the reinforcements stopped.
- 5 A phobia of trains could be acquired through classical conditioning by someone who had been in a train crash, a stimulus that would naturally lead to a fear response, learning to associate a neutral stimulus, such as the sight of a train, with the fear response.
- 6 A bar chart needs to be drawn with two columns. One column for the number of late submissions for Group A (62), entitled 'Received no punishment for late submission', and one for the number of late submissions for Group B (21), entitled 'Received punishment for late submission'. The columns should be of the same width with a space in between them (not touching). The title would be 'A bar chart showing the number of late submissions of homework by students receiving no punishment for late submission and students receiving punishment for late submission'. The horizontal x-axis should be labelled 'Result of late homework submission' and the vertical y-axis should be labelled 'Number of late submissions'.
- 7 'Discuss' means to outline and evaluate, in this case learning explanations of human behaviour, with the evaluation having to feature comparison with two alternative approaches. There are 6 marks available here for outlining the learning explanations and 10 marks available for the evaluation of them. About 20 minutes should be spent constructing the answer, of which about 7½ minutes should be spent on the

outline and 12½ minutes on the evaluation. For the average student this equates to about 150 to 185 words for the outlining and 250 to 310 words for the evaluation.

The wording of the question ('learning explanations') means that at least two learning explanations must be outlined. So one way to construct an answer would be firstly to outline a learning explanation and then evaluate it, and then to repeat the process for a second learning explanation. If more than two explanations were provided, then less depth would be expected in the descriptions. An alternative way would be to outline the behaviourist approach in general and then to outline different learning explanations and provide an overall evaluation of these.

The outline should focus on describing how the approach views behaviour, namely that it is a product of learning via environmental experiences, and then to describe at least two separate learning explanations. Marks awarded would depend on the accuracy, relevance and clarity of the descriptions and the degree of elaboration (detail). For instance, by providing descriptive detail of the different learning approaches involved, such as classical conditioning, operant conditioning and social learning theory.

The question demands that evaluation occur by comparison with at least two other approaches. This could occur through comparison with the psychodynamic, cognitive and biological approaches, but this would be creditworthy only if used to draw out strengths and weaknesses of the behaviourist approach, such as the behaviourist approach being supported by scientific empirical evidence, while the psychodynamic approach isn't.

Additional evaluation could occur by assessing the degree to which the approach is supported by research evidence. One way to do this would be to assess if learning explanations are better supported than other approaches.

Which studies are used would probably be affected by which topics have been studied – most topics will have featured some studies based on the behaviourist approach that could prove useful in answering this question.

Evaluation based on practical applications could assess whether the explanations lend themselves more or less to practical applications, like effective therapies, than other approaches do.

Evaluative material focused on methodological and ethical criticisms, such as the problem of generalising from animal studies to humans, would be relevant only if focused on the effectiveness of the treatment.

It should be remembered that the most effective evaluation is created from a number of evaluative points being woven together to form a sophisticated commentary, rather than being a series of unconnected evaluative points.

ASSESSMENT CHECK 20:**5.4 Approaches – The cognitive approach (page 223)**

- 1 Schema = C
Input = A
Output = D
- 2 There are 6 marks available here for outlining the cognitive approach and 6 marks available for the evaluation of it. About 15 minutes should be spent constructing the answer, of which about 7½ minutes should be spent on the outline and 7½ minutes on the evaluation. For the average student this equates to about 150 to 185 words for the outlining and similar for the evaluation.

Probably the easiest way to construct an answer would be firstly to outline the approach and then to evaluate it.

The outline would focus on describing the cognitive approach, which sees behaviour as being a product of an individual's mental processes. Marks awarded would depend on the accuracy, relevance and clarity of the descriptions and the degree of elaboration (detail). For instance, by providing descriptive detail of the different elements of the approach, such as the concept of schema, cognitive representations of people and situations that are formed from experience and the comparison of the mind to the workings of a computer.

The evaluation would probably best centre on the level of research support there is for the approach. Simons & Chabris' (1999) study of inattention blindness would be a useful study, as would Beevers *et al.*'s (2010) study of the role of cognitive control in depression.

Which studies are used would probably be affected by which topics have been studied – most topics will have featured some studies based on the cognitive approach that could prove useful in answering this question.

Additional evaluation could be achieved by comparison of the approach with other approaches, such as the psychodynamic approach, but only if this was used to draw out strengths and weaknesses of the cognitive approach. Material focused on practical applications, namely therapies based on the cognitive approach (for example cognitive behavioural therapy) could also be shaped to the question.

Evaluative material focused on methodological and ethical criticisms, such as the artificial nature of the laboratory studies that the approach is built on, would be relevant only if focused on the effectiveness of the approach.

It should be remembered that the most effective evaluation is created from a number of evaluative points being woven together to form a sophisticated commentary, rather than being a series of unconnected evaluative points.

- 3 Cognitive psychology involves the study of the mind and mental processes, with an emphasis on the mind working in a similar fashion to a computer in processing information. Cognitive neuroscience, on the other hand, combines cognitive psychology with cognitive science, which studies the biological processes involved in mental processes, giving cognitive neuroscience a more scientific basis than cognitive psychology.
- 4 The cognitive approach would explain Joey's lack of confidence with girls as being due to his irrational thought processes. This is shown by reference to the negative triad. Firstly the component of the 'Self' is involved, as Joey doesn't believe girls are attracted to him. Also the component of the 'Future' is involved, as he doubts he will ever find a girlfriend.
- 5 'Discuss' means to outline and evaluate, in this instance how well the theoretical and computational models can be applied to humans, with the evaluation having to feature comparison with two alternative approaches.

There are 6 marks available here for outlining the theoretical and computational models and 10 marks available for the evaluation of them. About 20 minutes should be spent constructing the answer, of which about 7½ minutes should be spent on the outline and 12½ minutes on the evaluation. For the average student this equates to about 150 to 185 words for the outlining and 250 to 310 words for the evaluation.

Probably the best way to construct an answer would be firstly to outline one of the models, for instance the theoretical model, then evaluate it, and then to repeat the process for the second model. An alternative way would be to outline the cognitive approach in general, then to outline the two models and provide an overall evaluation of these.

The outline should focus on describing how the models function, namely how the theoretical and computational models are used to explain and make inferences about mental processes. Marks awarded would depend on the accuracy, relevance and clarity of the descriptions and the degree of elaboration (detail). For instance, by providing descriptive detail of how the models see mental processes as a form of information processing.

Evaluation could assess the degree to which the models are supported by research evidence. One way to do this would be to assess if the models, as part of the cognitive approach, are better supported than other approaches. Simons & Chabris' (1999) study of inattention blindness would be a useful study, as would Beevers *et al.*'s (2010) study of the role of cognitive control in depression.

Which studies are used would probably be affected by which topics have been studied – most topics will have featured some studies based on the cognitive approach that could prove useful in answering this question.

Evaluation based on practical applications could assess whether the models lend themselves more or less to practical applications, such as effective therapies, than other approaches do.

Evaluative material focused on methodological and ethical criticisms, such as the reliance on artificial laboratory-based experiments, would be relevant only if focused on the validity of the models.

It should be remembered that the most effective evaluation is created from a number of evaluative points being woven together to form a sophisticated commentary, rather than being a series of unconnected evaluative points.

- 6 Internal validity (the degree to which a study investigates what it claims to investigate) is reduced by investigator effects, such as the age or gender of the researchers. This could affect the degree to which participants give full and honest answers about what they are thinking while playing roulette, thus reducing validity. Demand characteristics could also occur where participants, as they are aware they are taking part in an investigation, give answers about what they're thinking that they think the researchers want to hear, and not necessarily their true answers. This too could reduce internal validity.
- 7 'Discuss' means to outline and evaluate, in this instance the cognitive explanations of human behaviour, with the evaluation having to feature comparison with two alternative approaches.

There are 6 marks available here for outlining the theoretical and computational models and 10 marks available for the evaluation of them. About 20 minutes should be spent constructing the answer, of which about 7½ minutes should be spent on the outline and 12½ minutes on the evaluation. For the average student this equates to about 150 to 185 words for the outlining and 250 to 310 words for the evaluation.

Probably the best way to construct an answer would be firstly to outline a cognitive explanation of human behaviour, then evaluate it, and then to repeat the process for a second cognitive explanation. An alternative way would be to outline the cognitive approach in general, then to outline two cognitive explanations and provide an overall evaluation of these.

The outline should focus on describing how the cognitive explanations function, namely how the explanations are used to explain and make inferences about mental processes. Marks awarded would depend on the accuracy, relevance and clarity of the descriptions and the degree of elaboration (detail). For instance, by providing

descriptive detail of how the explanations see mental processes as a form of information processing.

The question demands that evaluation occur by comparison with other at least two other approaches. This could occur through comparison with the psychodynamic, biological and behaviourist approaches, but this would be creditworthy only if used to draw out strengths and weaknesses of the cognitive approach, such as the cognitive approach being supported by scientific empirical evidence, while the psychodynamic approach isn't.

Additional evaluation could assess the degree to which the approach is supported by research evidence. One way to do this would be to assess if the models, as part of the cognitive approach, are better supported than other approaches. Simons & Chabris' (1999) study of inattention blindness would be a useful study, as would Beevers *et al.*'s (2010) study of the role of cognitive control in depression.

Which studies are used would probably be affected by which topics have been studied – most topics will have featured some studies based on the cognitive approach that could prove useful in answering this question.

Evaluation based on practical applications could assess whether the explanations lend themselves more or less to practical applications, such as effective therapies, than other approaches do.

Evaluative material focused on methodological and ethical criticisms, such as the reliance on artificial laboratory-based experiments, would be relevant only if focused on the validity of the explanations.

It should be remembered that the most effective evaluation is created from a number of evaluative points being woven together to form a sophisticated commentary, rather than being a series of unconnected evaluative points.