



Mark Scheme (Results)

November 2021

Pearson Edexcel

GCE Psychology 9PS0/01

Paper 1: Foundations in Psychology

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Social Psychology

Question Number	Answer	Mark
1 (a)	AO1 (2 marks) Up to two marks for a description of prejudice, to include an example. For example: <ul style="list-style-type: none"> • Prejudice is a preconceived opinion of another person that is often based on stereotypes (1) for example a belief that your wife should be responsible for the domestic tasks at home (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
1 (b)	AO1 (1 mark), AO3 (1 mark) One mark for identification of a way personality could affect prejudice (AO1). One mark for justification of the way personality could affect prejudice (AO3). For example: <ul style="list-style-type: none"> • Someone with an authoritarian personality may be more likely to consider groups as 'us and them' and be prejudice towards people of a different social or ethnic group (1) as Adorno et al. (1950) found that those with an authoritarian personality were more likely to be hostile to people not in their group who are considered to be of an inferior status (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
1 (c)	<p style="text-align: center;">AO1 (1 mark), AO3 (1 mark)</p> <p>One mark for identification of a way culture could affect prejudice (AO1). One mark for justification of the way culture could affect prejudice (AO3).</p> <p>For example:</p> <ul style="list-style-type: none"> • Cultural distinctions between individualistic and collectivist cultures suggest that collectivistic cultures may result in more prejudice towards other groups (1). Al-Zahrani and Kaplowitz (1993) found that in a comparison of Saudi (collectivist) and American (individualist) people, Saudis tended to show more out-group-derogation (1). <p>Look for other reasonable marking points.</p>	(2)

Question Number	Answer	Mark
2	<p style="text-align: center;">AO2 (4 marks)</p> <p>Up to four marks for a description of realistic conflict theory in relation to the scenario.</p> <p>For example:</p> <ul style="list-style-type: none"> • Winning the dance competition would be considered a limited resource as it brings status that both dance teams are in conflict over (1). When Francis joined his new dance team he formed a group, with Jason being part of a different dance group (1). The negative social media comments made by Francis are signs of intergroup conflict between him and Jason on the opposing team (1) and the retaliation by Jason shows bias towards Francis in an out-group indicating Jason considers himself the in-group (1). <p>Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.</p>	(4)

Question Number	Indicative Content	Mark
3	<p style="text-align: center;">AO1 (4 marks), AO3 (4 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> • A questionnaire is a method for gathering self-report data from respondents or their peers related to prejudice attitudes. • Closed-ended questions can be used to gather quantitative data, such as Likert scales to find out about self-rated prejudice scores. • The use of open questions in a questionnaire enable participants to expand on their answers about why they follow certain instructions. • Questionnaires can be easily replicated once created so all respondents receive the same set of standardised questions about prejudice. <p>AO3</p> <ul style="list-style-type: none"> • Self-reported data may be subject to social desirability whereby respondent may falsely present their views on prejudice or authority in a way that makes them appear more favourable. • Adorno et al.'s (1950) F-scale scores how far respondents agree with statements to reach an objective score for authoritarian personality levels which can be retested to check for consistency. • In-depth answers contain rich detail about why individuals may hold their beliefs about others increasing the validity of the data gathered by social psychology researchers. • Cohrs et al. (2012) used standardised questionnaires to test personalities such as Right Wing Authoritarianism (RWA) increasing the reliability of the data in their research. <p>Look for other reasonable marking points.</p>	(8)

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks)		
Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Cognitive Psychology

Question Number	Answer	Mark
4 (a)	AO2 (2 marks) Up to two marks for a description of reconstructive memory in relation to the scenario. For example: <ul style="list-style-type: none"> • Saima will have an existing schema for a classroom that included a clock based on her prior knowledge of classrooms she has been taught in (1), so when recalling her History classroom she filled in gaps in her recall with expected items based on her schema therefore believing a clock was present in the room (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
4 (b)	AO2 (2 marks), AO3 (2 marks) One mark for identification of a strength and a weakness of reconstructive memory in relation to the scenario (AO2) One mark for justification of each strength and weakness (AO3) For example: Strength <ul style="list-style-type: none"> • Brewer and Treyens (1981) supports why Saima recalled the calendar in the classroom, finding that an 'office schema' significantly affected the accuracy of participant recall for objects in an office (1), therefore when Saima made mistakes in her recall of the calendar from the History classroom it demonstrates that she had actively reconstructed her memory based on her prior expectations of a classroom (1). Weakness <ul style="list-style-type: none"> • Saima's errors in recall could be a result of not rehearsing all the items in her History classroom to memorise them as she was paying attention to the teacher not the room rather than her schema for a classroom (1). The multi-store model of memory (Atkinson and Shiffrin, 1968) suggests Saima needs to use rehearsal to transfer information from her STM to her LTM or it would be lost, so mistakes in recall are due to items not being stored and not her prior expectations (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
5 (a)	<p style="text-align: center;">AO2 (2 marks)</p> <p>Up to two marks for a description of gathering a stratified sample in relation to the scenario</p> <p>For example:</p> <ul style="list-style-type: none"> • Ken would determine the strata for the high school student population demographic across the city he has chosen (1) and then select student participants to meet each strata, such as the proportions of gender for each year group (1). <p>Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.</p>	(2)

Question Number	Answer	Mark
5 (b)	<p style="text-align: center;">AO2 (2 marks)</p> <p>Up to two marks for an explanation of an appropriate choice of test and reasoning.</p> <p>For example:</p> <ul style="list-style-type: none"> • Ken would use a Wilcoxon signed ranks test (1) because he is looking for a difference between morning and afternoon memory processing speed (1). <p>Look for other reasonable marking points.</p>	(2)

Question Number	Indicative Content	Mark
6	<p style="text-align: center;">AO1 (4 marks), AO3 (4 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> The sensory register (SR) acts a buffer for sensory input from the five senses using modality specific encoding for this information. The short-term store (STS) has a limited capacity of 5-9 items and limited duration of up to 30 seconds. Atkinson and Shiffrin (1968) suggested that the STS encodes information acoustically. The long-term store (LTS) stores unlimited information indefinitely using semantic encoding. <p>AO3</p> <ul style="list-style-type: none"> The multi-store model of memory can be considered reductionist as it views human memory merely as a system of information processing that is over simplified into three distinct stores. Peterson and Peterson (1959) found correct recall of the trigrams began to drop rapidly between 15-18 seconds, supporting the idea that, without rehearsal, decay occurs in STM within 30 seconds. Baddeley and Hitch (1974) argue that the STM can actively process information using acoustic, visual and spatial information and so is not the basic system proposed in the MSM. Bahrack et al. (1975) found that identification of names from a high school year book remained accurate for up to 48 years, supporting that the LTM can store information indefinitely. <p>Look for other reasonable marking points.</p>	(8)

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks)		
Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Biological Psychology

Question Number	Answer	Mark																																																												
7 (a)	AO2 (4 marks)	(4)																																																												
	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 12.5%;">Personality score</th> <th style="width: 12.5%;">Rank 1</th> <th style="width: 12.5%;">Attitude to recreational drug use score</th> <th style="width: 12.5%;">Rank 2</th> <th style="width: 12.5%;">d</th> <th style="width: 12.5%;">d²</th> </tr> </thead> <tbody> <tr><td>2</td><td>1</td><td>3</td><td>1.5</td><td>-0.5</td><td>0.25</td></tr> <tr><td>8</td><td>6</td><td>9</td><td>7</td><td>-1</td><td>1</td></tr> <tr><td>5</td><td>3</td><td>6</td><td>4</td><td>-1</td><td>1</td></tr> <tr><td>6</td><td>4.5</td><td>7</td><td>6</td><td>-1.5</td><td>2.25</td></tr> <tr><td>9</td><td>7.5</td><td>10</td><td>8</td><td>-0.5</td><td>0.25</td></tr> <tr><td>3</td><td>2</td><td>3</td><td>1.5</td><td>0.5</td><td>0.25</td></tr> <tr><td>6</td><td>4.5</td><td>6</td><td>4</td><td>0.5</td><td>0.25</td></tr> <tr><td>9</td><td>7.5</td><td>6</td><td>4</td><td>3.5</td><td>12.25</td></tr> <tr> <td colspan="5" style="text-align: right;">Total:</td> <td>17.5</td> </tr> </tbody> </table> <p>One mark for working out column d One mark for calculating column d² One mark for substituting into equation $1 - \frac{6 \times 17.5}{8 \times (64 - 1)}$ One mark for calculating Spearman's rank correlation coefficient 0.792 Look for other reasonable marking points.</p>	Personality score	Rank 1	Attitude to recreational drug use score	Rank 2	d	d ²	2	1	3	1.5	-0.5	0.25	8	6	9	7	-1	1	5	3	6	4	-1	1	6	4.5	7	6	-1.5	2.25	9	7.5	10	8	-0.5	0.25	3	2	3	1.5	0.5	0.25	6	4.5	6	4	0.5	0.25	9	7.5	6	4	3.5	12.25	Total:					17.5	
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9	7.5	6	4	3.5	12.25																																																									
Total:					17.5																																																									

Question Number	Answer	Mark
7 (b)	AO2 (2 marks)	(2)
	<p>Up to two marks for determining the lowest level of significance that could be used</p> <p>For example:</p> <ul style="list-style-type: none"> • To be significant P=0.025 is the lowest level of significance Oscar can use for a one-tailed test (where N=8) (1) as Oscar's calculated value (0.792) will still exceed the critical value (0.738) at this level (1). <p>Look for other reasonable marking points.</p>	

Question Number	Answer	Mark
8	<p style="text-align: center;">AO1 (2 marks), AO3 (2 marks)</p> <p>One mark for identification of a strength and a weakness (AO1) One mark for justification of each strength and weakness (AO3)</p> <p>e.g. Heston (1966)</p> <p>For example:</p> <p>Strength</p> <ul style="list-style-type: none"> • The 47 participants born to schizophrenic mothers were carefully matched with a control group on sex, type of eventual placement, and length of time in child care (1) which meant that Heston (1966) could be more confident that having a schizophrenic mother was the only difference affecting the participants and controls (1). <p>Weakness</p> <ul style="list-style-type: none"> • Heston (1966) only found a 10.6% concordance rate which does not provide cause and effect conclusions for genetic predisposition and schizophrenia rates for adopted children (1) as there are other variables, such as drug use, that could have influenced the mental health of the children who were adopted away from their birth family (1). <p>Look for other reasonable marking points.</p>	(4)

Question Number	Indicative Content	Mark
9	<p style="text-align: center;">AO1 (4 marks), AO2 (4 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> • Hormones are produced by the endocrine system in glands across the body to transmit information that results in behaviours. • Testosterone is a hormone produced in the adrenal gland in females and high levels have been associated with aggression. • Cortisol is produced when faced with stressors and low levels of cortisol have been associated with aggression. • Adrenaline is a hormone linked to a 'flight or fight' reaction to a stimuli that triggers a need to be physically fast or strong. <p>AO2</p> <ul style="list-style-type: none"> • There may be an imbalance in the hormones, such as adrenaline or testosterone, produced by Rachael resulting in her history of aggressive tendencies and abusive behaviours. • Rachael would not be able to control excessive testosterone in her body, which would explain why she feels unable to manage her levels of aggression. • She may not be producing sufficient cortisol to combat her feelings of stress explaining why she continues to feel angry at people around her. • An increase in adrenaline may have triggered Rachael's 'fight' response where she pushed the other prisoner over rather than reasoning with that person. <p>Look for other reasonable marking points.</p>	(8)

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer		
	0	No rewardable material
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments, but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures) (AO2)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Learning Theories

Question Number	Answer	Mark
10 (a)	AO2 (2 marks) One mark for each statement in relation to the scenario. For example: <ul style="list-style-type: none"> • Zoë would have used the minimum number of squirrels and mice needed for her to achieve accurate results (1). • She would have had to ensure that the squirrels and mice were accommodated in appropriate cages (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
10 (b)	AO2 (2 marks) One mark for a partially operationalised directional (one-tailed) experimental hypothesis Two marks for a fully operationalised directional (one-tailed) experimental hypothesis For example: <ul style="list-style-type: none"> • The mice will complete the maze quicker than the squirrels (1) • The mice will take less time in seconds to complete the maze than the squirrels will take to complete the maze (2). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
10 (c)	<p style="text-align: center;">AO2 (1 mark), AO3 (1 mark)</p> <p>One mark for identification of a strength in terms of reliability in relation to scenario (AO2) One mark for justification of the strength (AO3)</p> <p>For example:</p> <ul style="list-style-type: none"> • The maze is the same for each animal so using positive reinforcement is the only variable affecting the time it takes to complete the maze (1). The results would not be skewed by differences in the complexity of the maze, giving Zoë reliable findings about operant conditioning (1). <p>Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.</p>	(2)

Question Number	Answer	Mark
10 (d)	<p style="text-align: center;">AO2 (1 mark), AO3 (1 mark)</p> <p>One mark for identification of an improvement in terms of validity in relation to scenario (AO2) One mark for justification of the improvement (AO3)</p> <p>For example:</p> <ul style="list-style-type: none"> • The squirrels and mice could be trained to complete a more real-life behaviour such as finding their way between two points in a woodland area of trees (1), which would improve the validity of the findings about the effectiveness of positive reinforcement in conditioning animal behaviour as their behaviour would be more natural (1). <p>Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.</p>	(2)

Question Number	Indicative Content	Mark
11	<p style="text-align: center;">AO1 (4 marks), AO3 (4 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> • Watson and Rayner (1920) aimed to see if they could condition an emotional reaction in an infant aged between 9 and 11 months old through classical conditioning. • They initially tested Little Albert to see what he was naturally afraid of as a baseline measure of his phobic responses. • Little Albert was presented with a white rat and when he went to touch it they hit a metal bar with a hammer to cause an unconditioned fear response to a loud bang. • Watson and Rayner (1920) found that Little Albert showed a conditioned fear response to the white rat when it was presented without the loud bang of the hammer on the metal bar. <p>AO3</p> <ul style="list-style-type: none"> • Little Albert was the only infant studied so the findings may not be representative of other children or the adult population. • There is some debate about whether the level of placid behaviour Albert showed was that of a fully healthy baby so the results may not be a valid outcome for conditioned reactions. • There were strict controls during the experiment, such as the timing of hitting the metal bar, so the study could be replicable in order to retest the results for reliability. • The findings about conditioning emotional reactions can be used to help develop therapies to treat phobias by pairing a phobic object with a relaxation response. <p>Look for other reasonable marking points.</p>	(8)

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks)		
Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Issues and Debates

Question Number	Indicative Content	Mark
12	<p style="text-align: center;">AO1 (4 marks), AO2 (4 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> • Practical issues impact on choices that researchers make when selecting measures in their research to meet the aims of a study. • Gathering a sample, such as random, volunteer or opportunity, would depend on the access a researcher has to the target population. • Deciding what apparatus or materials to use in a study could be an issue that depends on the time or money available to a researcher. • Ethical issues such as gaining fully informed consent would need to be considered against potential for causing demand characteristics that impact on the findings. <p>AO2</p> <ul style="list-style-type: none"> • The questionnaire about personality and obedience was designed using items from the F-scale to increase the reliability of our measures of personality. • We used an opportunity sample as each student took five questionnaires home to family members as we did not have access to a range of ages within college. • The questionnaire was piloted with two teachers to check understanding of the items as our deadline for the work did not allow us time to ask more than two. • To meet ethical guidelines we included an explanation of the questionnaire and how the data would be used so our family members could read this and decide whether or not to complete the questions. <p>Answers must relate to the social practical of a questionnaire to gather both qualitative and quantitative data.</p> <p>Look for other reasonable marking points.</p>	(8)

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer		
	0	No rewardable material
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments, but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures) (AO2)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Question Number	Indicative Content	Mark
13	<p style="text-align: center;">AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> • Cognitive psychology can explain how individuals process, store and retrieve information in short and long term memory to understand individual differences in memory functioning. • Reconstructive memory shows how new information may be assimilated into existing memories and result in changes that cause individuals to incorrectly recall events and experiences. • Social learning theory provides knowledge about the influence of identifying with role models to show why individuals replicate some of the behaviours they observe. • Operant conditioning demonstrates how positive reinforcement can be used to reward desired behaviours to encourage that behaviour to be repeated again. <p>AO2</p> <ul style="list-style-type: none"> • Understanding processes in working memory can be applied in practical solutions, such as 'cogmed' interventions that help people with Dyslexia improve their processing speed. • Police questioning techniques have improved to prevent leading questions manipulating the memory trace of witnesses to crimes and increase accuracy of testimonies. • The media can limit access to unsuitable role model behaviours such as aggressive behaviours, through age restricted content, such as film classifications or computer game ratings. • Institutions such as schools can utilise concepts of reward through merit systems, house points, or certificates to encourage desired behaviour in their students in the school setting. <p>AO3</p> <ul style="list-style-type: none"> • Dunning et al. (2012) showed that verbal working memory was improved in children who used working memory tasks and computer programs, so cognitive psychology can be applied well to improving educational attainment. • Yuille and Cutshall (1986) found that eye witnesses to real life crimes were more accurate than laboratory experiments suggest, so cognitive research into memory accuracy may not be useful if it does not reflect real life situations. • Eron et al. (1972) measured the level of violence in television programmes watched by seven to eight year olds and measured their aggressiveness, finding a positive correlation between the two, so this helps society tackle issues of aggression in the media. • It could be considered unethical to manipulate the behaviour of vulnerable individuals such as children through the use of systems aimed at the modification of behaviour without the individuals being fully aware of this manipulation, limiting how well learning theories can be utilised in society. <p>Look for other reasonable marking points.</p>	(12)

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application vs evaluation/conclusion in their answer.		
	0	No rewardable material.
Level 1	1-3 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	4-6 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	7-9 Marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques & procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	10-12 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)