Examiners' Report
June 2019

GCE Psychology 9PS0 01

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk.

Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

ResultsPlus

Giving you insight to inform next steps

ResultsPlus is Pearson's free online service giving instant and detailed analysis of your students' exam results.

- See students' scores for every exam question.

- Understand how your students' performance compares with class and national averages.

- Identify potential topics, skills and types of question where students may need to develop their learning further.

For more information on ResultsPlus, or to log in, visit www.edexcel.com/resultsplus.
Your exams officer will be able to set up your ResultsPlus account in minutes via Edexcel Online.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk.

Introduction

The examination structure provided a range of question types over five sections, with the final extended responses requiring candidates to address issues and debates. Many candidates demonstrated good psychological knowledge and understanding in this examination, and centres have clearly covered the required content in sufficient depth which has benefitted candidates.

Candidates have worked hard throughout this paper, with many candidates making attempts at all questions, which was very positive to see. However, some candidates did not respond to the later essay questions and may benefit for future series in practising timing.

Strengths were seen in the understanding of some elements of biological psychology in the issue and debate question of science, however the responses were not well linked to the underlying concepts of science.

Application remains a general area for improvements for the AO2 questions, although this has developed since the 2018 examination, some candidates are giving generic responses that are not applied to the context, for example failing to draw on the study by Fuchsia in Q1a, Q1b and Q1c and giving generic answers, or simply including her name without any relevant application of their knowledge and understanding to the study she was conducting.

There is an improvement in candidate understanding of the taxonomy of questions, with many able to meet the demands of questions more consistently. Further development would benefit candidates when responding to 'explain' questions, where often the justification of their point is not fully developed. This was evident particularly in question 1c where a strength or weakness was often given but was not justified or exemplified to any degree to achieve the AO3 mark.

Candidate responses to the cognitive key question were mixed where most candidates seemed to be aware of their key question for society and could give facts and information about it, but they struggled to make the links between the key question and relevance to society, sometimes giving substantial theory/concepts/research about their key question, but only weakly demonstrating their knowledge and understanding of the relevance of the key question itself.

Candidates completed the mathematical calculations well, however there remains some confusions with regards the determination of significance from statistical tests.

The remainder of this Examiner Report will focus on each individual question and specific examples with the aim of highlighting areas of good practice and some common errors which can be used to help prepare candidates for future 9PS0/01 examinations.

Question 1 (a)

This was an AO2 question where candidates were required to describe how Fuchsia could use a volunteer sampling technique. Candidates were required to apply their understanding of the sampling technique to the stimulus material to achieve marks on this question. Common strong answers utilised features of the scenario, such as local towns, to give a description of using volunteer sampling in relation to the study. Where candidates did not achieve well, they often defined a volunteer sample, muddled volunteer and opportunity sample or gave a generic response without consideration of the stimulus given.

1 Fuchsia was interested to see whether location affected prejudice. She is planning to visit three towns in her area and ask participants questions to judge how prejudiced they are.

(a) Describe how Fuchsia could recruit her participants using a volunteer sampling technique.
(2)

Fuschia could put up a poster in each of the three towns on with a phone number on for volunteers to contact. Her sample should then be taken from these people who volunteer

ResultsPlus
Examiner Comments

This candidate achieved two marks.

They have fully applied their response to gathering a volunteer sample from the locations required for the study.

Question 1 (b)

This was an AO2 and AO3 question where candidates were required to explain one strength and one weakness of using a thematic analysis in relation to Fuchsia's data about the effect of location on prejudice. Often candidates gave generic responses regarding a thematic analysis and did not access the four marks available here. A common confusion in responses was to give answers related to content analysis rather than thematic analysis. Where candidates achieved well, they were able to relate this choice of methodology to the data gathered by Fuchsia and justify how or why this was a strength or weakness for her data analysis.

(b) Fuchsia intends to use thematic analysis to analyse her data.

Explain **one** strength and **one** weakness of Fuchsia using thematic analysis to analyse her data.

(4)

Strength

Makes the data quantitative instead of qualitative meaning she can conduct analysis a lot easier when looking at t the effect of location on prejudice.

Weakness

It may lead to a loss of detail and unique data if she has issues assigning responses to categories. This may affect the internal validity.

ResultsPlus
Examiner Comments

This candidate achieves one mark.

They have identified a strength for the AO2 mark here, but this is not justified for AO3.

The weakness is generic and appears to be a content analysis rather than a thematic analysis.

Question 1 (c)

This was an AO2 and AO3 question where candidates were required to explain an improvement that could be made to the questions shown in Figure 1. A number of candidates responded to this question by first giving a weakness, then giving an improvement, rather than giving an improvement and justifying how or why this was an improvement, and often only accessed the AO2 mark. Some candidates gave improvements for the study overall rather than addressing the questions they were presented with in Figure 1. Some candidates suggested using a close question, rather than improving the actual questions they were presented with.

(c) Fuchsia has drafted some open-ended questions that she plans to use, which are shown in **Figure 1**.

> *My prejudice questions*
>
> 1. *If someone called you a racist, what would you say?*
>
> 2. *What do you think about people different to yourself?*
>
> 3. *Research has indicated that people who have social dominance orientation and right-wing authoritarianism may be more prejudiced than people who score higher in openness, and agreeableness. What do you think about this?*

Figure 1

Explain **one** improvement Fuchsia could make to the questions she has drafted shown in **Figure 1**.

(2)

One improvement that Fuchsia could make is that she could make one of her questions a rating scale rather than an open question. for example, Question 2 could be changed to "do you have a negative or positive opinion about people different to yourself, 1 being strongly negative and 5 being strongly positive" - this will allow for qualitative results whilst still gaining an opinion on prejudice

(Total for Question 1 = 8 marks)

This candidate achieved zero marks.

The response is not an improvement to the open-ended questions Fuchia has drafted, it is a change of question type to a closed-ended question.

Question 2

This was an AO1 and AO3 question where candidates were required to give an extended response to evaluate social impact theory as an explanation of obedience. Most candidates responded well to this question attempting to evaluate the theory using supporting evidence and contrasting explanations of obedience giving a good evaluation and demonstrating strong understanding of the theory and points for and against this as an explanation of obedience. Where candidates struggled it was often with the AO1 skills, giving underdeveloped points that were not always accurate or detailed knowledge and understanding of the theory. Some candidates also gave research studies in isolation, without making any link as to how or why these particular studies supported or went against and of the concepts of social impact theory and failed to make it clear what these were being used to evaluate, and at times this was presented in as almost 'list like' selection of research evidence with no links to the theory or chains of reasoning, therefore only demonstrating the skill of AO1 knowledge and understanding without the AO3 evaluation.

2 Evaluate social impact theory as an explanation of obedience.

social impact theory states the obedience is dependent on the 'strength' of someone (how much authority they have), 'immediacy' (how close in proximity is the source to target), and the 'number' of sources to targets.

Milgram's follow up studies into obedience found that only 48% of participants (ppts) were obedient when the study investigating whether a ppt would administer electric shocks to another person if ordered by an authority figure, took place in a rundown office block, compared to the original 65%. This meant that when there was little 'strength' the ppts were not as obedient, supporting social impact theory.

~~However social impact theory does not explain why the remaining 52% wer not 100% of~~ However Milgram's studies used an artificial task of providing electric shocks to confederates if they answered a question wrong when asked by an authority figure. This means that the study lacks mundane realism as we would not perform this task in the real world. Therefore Milgram's study

lacks ~~internal~~ external validity and the findings that normal people can cause harm to another person when asked to cannot be confidently generalised beyond the research setting. So Milgram is not a useful study to support social impact theory.

To conclude there is empirical evidence by Milgram to support the theory but it lacks external validity. Overall social impact theory is a good theory at explaining obedience. Social impact theory also uses the term 'sources' to describe those with authority.

Question 3

This was an AO1 question where candidates were required to describe 'semantic memory' (Tulving, 1972). Most candidates achieved well here, with many gaining two marks. Where candidates achieved one mark it was often due to limited descriptions making only one point, usually about memory for factual information, without any additional content in the answer. Errors were rare here, usually seen when confusing 'semantic memory' with 'episodic memory'.

> **3** Tulving (1972) proposed an explanation of long-term memory.
>
> Describe what Tulving (1972) meant by 'semantic memory'.
>
> (2)
>
> Semantic memory is memory of facts, irrespective of time or place. e.g. the capital of France is Paris.

ResultsPlus
Examiner Comments

This candidate achieved two marks for a full description.

Question 4 (a)

This was an AO1 question where candidates were required to state two findings of the classic study by Baddeley (1966b). Candidates could use the results and/or conclusions from any of the three experiments conducted in the 1966b research. Most candidates were able to access marks on this question, with a number achieving the full two marks here. Where candidates did not achieve marks, their responses lacked accuracy in terms of the findings and were simplistic statements.

4   During your course you will have learned about the classic study by Baddeley (1966b).

(a) State **two** findings of Baddeley (1966b).

(2)

Finding one

He found that people recalled better √ acoustically dissimilar sounding words from a list.

Finding two

He also found that semantically similar words were better recalled by participants.

ResultsPlus
Examiner Comments

This candidate scored zero marks.

There is a lack of clarity in the response and the findings stated are unclear.

Question 4 (b)

This was an AO1 and AO3 question where candidates were required to explain two weaknesses of the classic study by Baddeley (1966b). Many candidates achieve marks on this question, with a number giving well considered weaknesses that were specific to the study. The AO1 mark was awarded for each of the candidate's identifications of a weakness of the study and the AO3 marks were awarded for the justification of each weakness.

Most candidates showed understanding of the study and this was pleasing to see, however some candidates gave answers that were not specific to the study and were generic responses that could be applied to 'any' laboratory experiment. Candidates are reminded to identify a specific weakness from the study itself. Some candidates showed muddled understanding of validity in this question, especially when discussing the task itself. Many candidates did not justify the weakness they had given, often making basic and rote learned statements such as 'so it is not ecologically validity' without any exemplification of how or what it is that is not ecologically valid.

(b) Explain **two** weaknesses of Baddeley (1966b).

(4)

Weakness one

Recalling word lists is was an artificial task which therefore as it does not represent an everyday activity. This suggests the theory lacks mundane realism therefore presenting low validity.

Weakness two

The sample was only 72 participants which is reasonably small when investigating the different conditions. This presents generalisability issues as the wider population was not represented.

ResultsPlus
Examiner Comments

This candidate achieves two marks.

They have identified two weaknesses for each AO1 mark.

Neither weakness has been fully justified for AO3 marks.

ResultsPlus
Examiner Tip

Generalisability reflects the representativeness of a sample rather than the size of a sample, many candidates confuse this point.

Question 5

This was a discuss AO1 knowledge and understanding and AO2 application of theory, concepts and/or research to the key question of relevance to society from cognitive psychology. Many candidates struggled to present their AO1 for the key question, often not engaging with content such as how the key question is relevant for today's society, how the key question is likely to affect individuals in society or how the key question is likely to affect society as a whole. This limited a number of responses to lower marks. The AO2 use of theory, concepts and/or research was stronger, with a range of theories from the specification content used to explain the key question. A key question needs to be of relevance to society, and there were some responses seen that were not appropriate key questions, thus the candidates were unable to achieve well with those responses.

Common key questions seen included;

- Can knowledge of working memory inform interventions for Dyslexia? This was generally well answered, with candidates able to distinguish between AO1 and AO2, giving relevant information about the impact of dyslexia on individuals and society with particularly strong links to educational achievement and the features of Dyslexia, then and linking this well to AO2 in order to explain Dyslexia and treatments and interventions using working memory model.

- How reliable is eye witness testimony? This was generally mixed, with candidates being able to give some relevant information about the impact of unreliable eye witness testimony on individuals and on wider society with links to court hearings and police interviewing techniques, this element of AO1 was often the weaker aspect to answers. This was often well linked to concepts from cognitive psychology, most often reconstructive memory.

- Can knowledge of cognitive psychology help with treatment for Dementia? This was generally mixed, with candidates being able to give relevant information about the impact of Dementia in society, to the individuals and how it affects people, AO1 in these responses was often the strongest part of an answer. This was often not well linked to concepts from cognitive psychology, making the AO2 element to these answers limited.

In terms of AO1, the following could be considered:

- How is the key question relevant for today's society?

- How is the key question likely to directly affect individuals in today's society?

- How is the key question likely to affect society as a whole?

- Are there any relevant examples which could help show knowledge of the key question?

  In terms of AO2, the following could be considered:

- What theories can be used from the specification content to explain the key question?

- How can the theories explain how the key question developed in today's society?

- How can the theories explain how to reduce or possibly eliminate the impact of the key question on today's society?

- Are there any concepts from the specification content that can explain the key question in today's society?

5 Cognitive psychology has been used to explain key questions of relevance to today's society.

Discuss the key question for society you have studied using concepts, theories and/or research from cognitive psychology.

(8)

Key question

IS Eye Witness Testimony too Unreliable to trust?

Eyewitness testimony referes to the speech given to a jury by ~~any witness~~ a witness of a criminal act. It is regarded as evidence ~~against the~~ for he crime, it is very important that it is accurate because it influences the guilty or not guilty verdict made by the jury.

Furthermore, accuracy of eyewitness testimony is important to society because if it is inaccurate then there will be criminals out in society committing more crimes and putting people at risk. Also if the wrong person is convicted then this will be very negative for them and more money will have to be spent of funding appeals. Moreover, Bartletts theory of reconstructive memory states that memory is an active process and not passively stored like a tape recorder or video. Therfore when we recall memories they are reconstructed using or Schemas, which are stored parcels of knowledge about a specific event or object. Bartletts theory would suggest that eye witness testimony is unreliable because when we recall information we use schemeas to aid us, which

does not give us an accurate representation of the memory its self as it is reconstructed.

In addition to this Loftus and Palmer conducted a labatory study which concluded that misleading information in the form of leading questions effects memory recall. They asked participants to estimate speeds of a car from watching a video of a car crash, but the verbs used to describe the speed of the car was changed verbs used were "collided, bumped, hit, smash and crash". The participants who were given the verb Smashed were more likely to say they saw smashed glass even though there was none. This study suggests that memory can be changed, if leading questions are asked to an eye witness making it unreliable.

In conclusion, eyewitness testimony has many weaknesses to it such as how we use schemas to aid our recall leading to inaccurate recall. However, the evidence from Loftus and Palmer can be counter argued with Yullies and Cutshall's finding, where they discovered that real life situations lead to accuracy in recall, even when given a leading question

This candidate achieved four marks.

AO1 is level 2, most accurate knowledge and understanding of the key question is given.

AO2 is level 2, with some application of relevant theories and concepts to the key question.

Question 6

This was an AO2 question where candidates were required to describe how hormones could account for the behaviour demonstrated by Charles in the scenario. Common strong answers often included more than one hormone that may account for Charles' behaviour, often testosterone, cortisol and serotonin. Some candidates utilised features of the scenario, such as shouting insults, fighting, breaking classroom equipment and his age, to give a description of the role hormones may have in those behaviours, however that was not seen in a significant number of responses. As such, many candidates did not achieve well, they often described one or more hormones and a link to aggression in general but did not apply to the scenario of Charles, giving a generic response without consideration of the stimulus given and scoring zero marks.

---

6 Charles is 14 years old and has been displaying aggressive behaviour.

Recently he has shouted insults at other students and broken classroom equipment in his science lessons. Charles has also been in a fight with the football captain after Charles let in an important goal during the last match of the season.

Describe how hormones could account for Charles's behaviour.

(3)

Charles is a boy meaning that he has higher levels of the androgen tesosterone hormone meaning he is more physically aggressive leading him to shout insults at other students.
Charles is also 14 years old therefore meaning he is going through puberty which is where tesosterone levels peak leading to him breaking classroom equipment.
Tesosterone can cause cell growth of the hypothalamus and amygdala and lead to competitive aggression explaining why charles is getting into fights with football

(Total for Question 6 = 3 marks)

captain as Charles wants to be seen as the best player and better than the captain

Question 7 (a)

This was an AO2 question where candidates were required to state the research hypothesis for their biological practical. The biological practical must be a correlational study and focus on attitudes to drug use or aggression. In a number of cases, candidates gave a hypothesis for the wrong practical investigation. Where candidates did achieve well, they were able to give a clear, well-structured correlational hypothesis with fully operationalised variables. A number of candidates struggled with the correlational nature of the hypothesis, referring to causal IV and DV 'differences', rather than a 'relationship' or 'correlation' between co-variables.

There were some practical hypothesis stated here that were unethical, and centres are reminded that the practical research exercises must adhere to ethical principles in both content and intention. Please review the specification requirements to aid this.

> **7** As part of your psychology course, you were required to carry out a practical investigation when studying biological psychology.
>
> (a) State the research hypothesis for your practical investigation in biological psychology.
>
> (2)
>
> There will be a positive correlation between aggression levels and self-reported stress levels.

ResultsPlus
Examiner Comments

This candidate achieves one mark.

ResultsPlus
Examiner Tip

For two marks, candidates should fully operationalise the variables in a hypothesis.

Question 7 (b)

This was an AO2 question where candidates were required to describe the results of the statistical test carried out on the data gathered in their biological practical investigation. For the biological practical, this should be a Spearman's test, and a number of candidates appeared to give descriptions of a variety of other statistical tests or at times described measures of central tendency/dispersion. Candidates could state the results from the statistical test itself, or the correlation in terms of strength and direction.

(b) As part of your practical investigation when studying biological psychology, you were required to carry out a statistical test.

Describe the results of the statistical test you carried out for your practical investigation in biological psychology.

(2)

We used Mann Whitney U as it was an independent groups design and a test of difference to see how height impeeted aggression. Which used ordinal data.

ResultsPlus
Examiner Comments

This candidate scored zero marks.

The biological practical is a correlation and so a test of difference is an incorrect statistical test.

Question 7 (c)

This was an AO2 and AO3 question where candidates were required to explain one strength of their biological practical investigation about aggression or attitudes to drug use. Often candidates gave generic responses regarding the use of a questionnaire or sampling technique and did not demonstrate links to their own practical. Where candidates achieved well, they were often able to make clear identifications of a strength from their own biological practical, commonly this was an ethical consideration, and justify how or why this was a strength in relation to the nature of the biological practical investigation.

> (c) Explain **one** strength of the practical investigation you carried out when studying biological psychology.
>
> (2)
>
> A strength of our practical investigation was that we kept the aim of our study concealed to reduce the risk of demand characteristics being shown.

ResultsPlus Examiner Comments

This candidate scored zero marks for a generic response.

ResultsPlus Examiner Tip

Candidates should be able to give the specific details of their practical investigation.

Question 7 (d)

This was an AO2 and AO3 question where candidates were required to explain one improvement to their biological practical investigation about aggression or attitudes to drug use. Often candidates gave generic responses and did not make it clear what the improvement was in terms of the practical, nor the AO3 of how or why this would be an improvement to achieve the justification/exemplification marks, regarding the use of a questionnaire or sampling technique and did not demonstrate links to their own practical. Candidates often misunderstood the requirements for generalisability, stating that simply finding a bigger sample would improve this, rather than that a more representative sample would improve generalisability.

(d) Explain **one** improvement you could make to the practical investigation you carried out when studying biological psychology.

(2)

Using a more for more varied sample, e.g. people from different locations, uses and levels of education. This would make the sample more representative of the wider population therefore findings can be generalised globally.

ResultsPlus
Examiner Comments

This candidate scored zero marks as their response is generic.

Question 8

This was an evaluate AO1/AO3 question where candidates were required to evaluate the classic study by Raine et al (1997). Candidates were required to demonstrate knowledge and understanding of the study and evaluate the specific elements of the study. There were some strong evaluations of Raine et al (1997) in a number of answers seen, but many candidates gave responses that consisted of generic points, for example an evaluation of a PET scanning method without any link as to how this made the study itself strong. There were a number of candidates demonstrating misconceptions with regards the study, for example references to incorrect sample group, representativeness of the sample, inaccurate ethical evaluations and many believing the task was conducted during the PET scan rather than prior. The inaccuracies often limited the awarding of higher marks on the question for a number of candidates.

8 During the course you will have learned about the classic study by Raine et al. (1997).

Evaluate the classic study by Raine et al. (1997).

(8)

Raine et al (1997) aimed to investigate whether the structure of the brain of a murder was different to that of a non murder. Raine used a laboratory experiment to investigate this. Laboratory experiments have low levels of ecological validity and are often open to demand characteristics that can be shown by participants. For example in Raine et al 1997 murders they could have behaved in a way that they thought was deemed of them. This therefore questioning the reliability of the findings in the study.

Additionally Raine carried out a procedure where he used a brain scan technique of a PET scan to investigate brain activity. He injected the patients with a glucose tracer FDG (fluorodeoxyglucose) which when used up with the positrons releases gamma rays which are picked up on a computer. After injecting them with the glucose tracer they carried out a 32 minute CPT (continuous performance task), and the results were recorded on a computer device. Raine has been criticised for his use of PET scans as they are invasive on the participants. However it can be argued that a PET scan is an objective standardised procedure that would produce results that are valid and reliable. This therefore improving the validity and reliability of the study Raine carried out.

Furthermore Raine found in his results that Murders had a lower activity in the prefrontal cortex than in non-murders and also found that in the amygdala there was asymmetric activity so murders had higher activity in the right hand side of the amygdala and lower in the left when compared to non-murders. The amygdala is part of the limbic system that controls emotions and is known as the 'aggression centre' in the brain. The prefrontal cortex is known for controlling social interaction. Therefore if these are dysfunctional it offers strong biological evidence that aggression could be caused by the structure of the brain. However Raine used matched pairs ~~independent groups~~ design and also used 2 groups of 41. So one control group of non-murders and another group of murders. These groups each consisted of 39 males and 2 females. This meaning the research Raine carried out is androcentric and highly gender bias. This therefore questioning the extent to which he can apply his findings to other members of the population such as females. Raine also carried his research out in the University of California, this also mening that research cannot be representitive of other cultures as it was only conducted or ~~to~~ murders in the US so is culturally bias.

To conclude, the investigation Raine carried out has a a highly ~~standard~~ standardised procedure and is not open to subjective opinion. However his research cannot yet be applied to other cultures or genders within society.

(Total for Question 8 = 8 marks)

ResultsPlus
Examiner Comments

This candidate achieved seven marks

AO1 is level 4, with accurate and thorough knowledge of the study.

AO3 is level 3, with logical chains of reasoning and a developed evaluation.

Question 9 (a)

This was an AO2 question where candidates were required to identify the observation type from the scenario. Many candidates achieved well on this question, identifying covert, non-participant or naturalistic as a correct response.

9   Malik carried out an observation in a local cinema to investigate which films males and females watch. Malik stood near two screen entrances where he could not be seen and tallied whether males and females entered the screen to watch either a horror film or a comedy film.

(a) Identify the type of observation that Malik used in this study.

(1)

Covert observation

ResultsPlus
Examiner Comments

This candidate achieved one mark for a correct identification.

Question 9 (b)

This was an AO2 mathematics question where candidates were required to construct a bar chart to represent that data for those who viewed a horror film. Many candidates achieved well here. Where errors were seen, it was candidates who often used data for both the horror and comedy film. Some candidates lost a mark for an inaccurate axis label.

(b) **Table 1** shows the number of males and females who watched either a horror film or a comedy film at the local cinema.

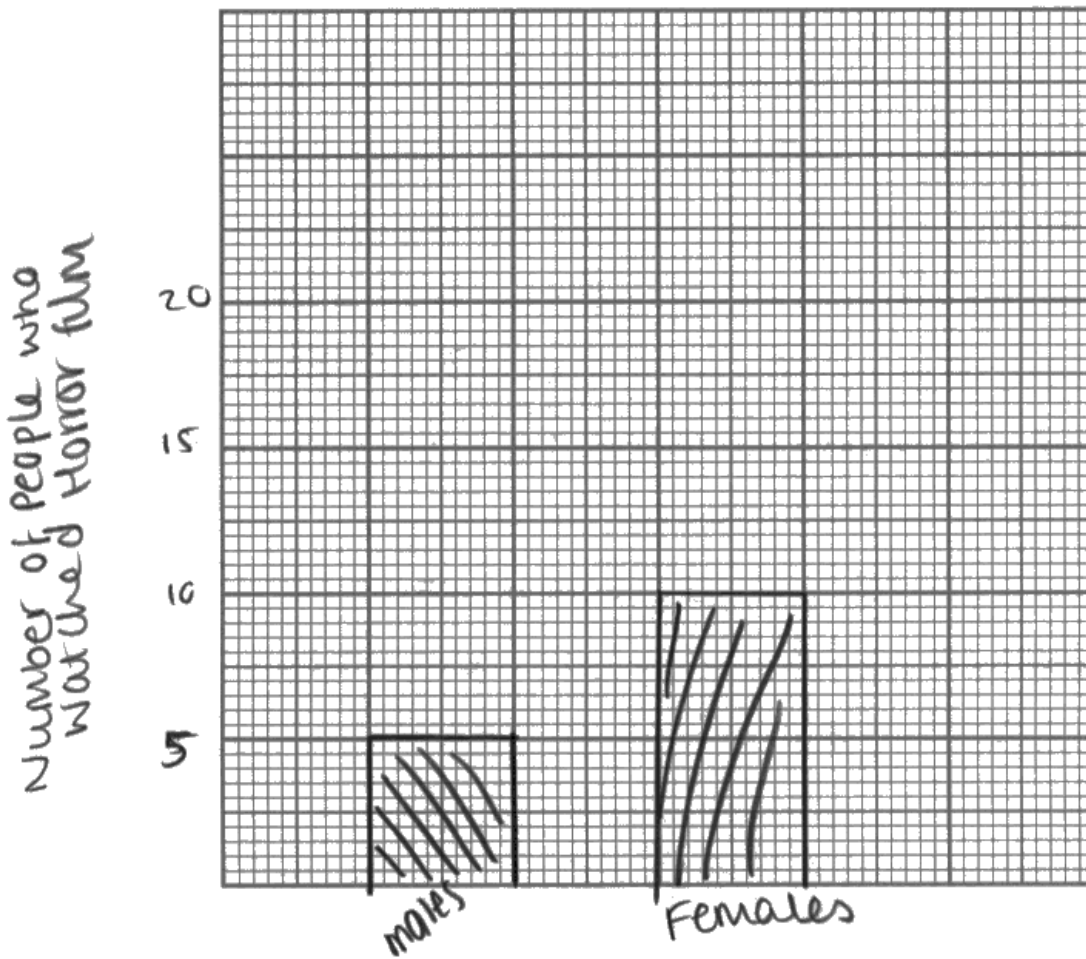|	**Comedy Film**	**Horror Film**
Males	### ### //	### 5
Females	### //	### ### 10

Table 1

Using the data from **Table 1**, draw a bar chart to represent the number of males and females who watched a horror film.

(3)

Title

A Bar Chart to Show the Number of Males and Females who ~~watched~~ watched a Horror Film

Male & or Female — PpT Gender

Question 9 (c) (d)

This was an AO2 mathematics question where candidates were required to calculate the chi-squared to two decimal places and then determine significance. Most candidates achieved well here. Errors were seen occasionally in giving the chi-squared to more than two decimal places or a miscalculation of the final column. More blank responses were seen on this question compared to others, suggesting candidates would benefit from further practice on statistical tests. Where errors were seen in the determination of significance it was usually as a result of either taking the critical value from the wrong column, or misreading the instruction at the bottom of the chi-squared table at the front of the paper and muddling the requirement to exceed the critical value for significance, stating instead less than the critical value for significance.

(c) Complete **Table 2** to calculate the chi-squared test for Malik's study to **two** decimal places.

(4)

		Observed	Expected	O-E	(O-E)^2	(O-E)^2 /E
Males	**Comedy Films**	12	9.5	2·5	6·25	0·66
	Horror Films	5	7.5	−2·5	−6·25	−0·83
Females	**Comedy Films**	7	9.5	−2·5	−6·25	−0·66
	Horror Films	10	7.5	2·5	6·25	0·83

Chi-squared = 2·98

Table 2

SPACE FOR CALCULATIONS

Chi-squared (X^2) 2·98

(d) Malik had a two-tailed (non-directional) hypothesis with df = 1 and used p=0.05 as his level of significance.

Determine whether there is a significant difference between male and female film choice.

(1)

There is ~~no~~ a significant diffrence.

This candidate achieved four marks for the chi-squared test calculation to two decimal places.

They did not achieve a mark for their determination of significance as there was no use of the critical value or observed value to make this determination.

Question 9 (e)

This was an AO2 and AO3 question where candidates were required to explain one weakness of Malik using quantitative data. Some candidates were able to identify the weakness, but many gave a generic weakness of quantitative data rather than in relation to the scenario given. Justification and exemplification for AO3 was a factor limiting many candidates achieving two marks, with a number being unable to give depth for their AO3 marks here.

(e) Malik used quantitative data for his study into film choice at the local cinema.

Explain **one** weakness of using quantitative data for Malik's study.

(2)

it does not allow rich data to be gained, meaning the data is less detailed and cannot have as much detailed results as the qualitative data.

ResultsPlus Examiner Comments

This candidate achieves zero marks for a generic answer.

ResultsPlus Examiner Tip
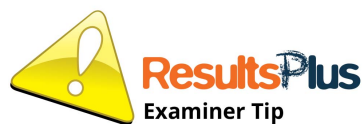
Candidates should draw upon the scenario when answering application questions.

This is indicated in the question stem 'for Malik's study' to help direct candidates to the scenario and context.

Question 10

This was an AO1 and AO2 discuss question that required candidates to demonstrate an equal emphasis between knowledge and understanding of Social Learning Theory and application to the scenario of Holly in their answer. Many were able to make links to the process Holly would have experienced when learning to use the fork through social learning theory, but AO1 was often weak in answers with limited underpinning knowledge or understanding shown about the processes and steps in social learning theory. Some candidates muddled vicarious reinforcement with direct reinforcement, and few went beyond the points of attention, retention, reproduction and motivation.

10 Tom has a daughter called Holly who is 18 months old. Tom is trying to teach Holly how to use a fork by demonstrating to her how he holds it. He also shows Holly how to use the fork to pick up food and says "well done" to her every time she uses the fork correctly. Holly smiles and laughs each time she picks up some food with the fork.

Discuss how social learning theory could account for Holly using a fork on her own. You must make reference to the context in your answer.

(8)

[handwritten margin note: ARRM role model vicarious reinforcement]

social learning theory explains learning through observation.

Firstly, Holly learning to use a fork can be explained by the fact that her dad Tom will be a role model to her, she is close to him and if he shows her how to hold and eat with her fork she will be more likely to copy him as he is a role model to her. Holly has paid attention to the role model observing the behaviour she wishes to copy.

Secondly Holly has retained this information of what she has observed so that she can copy the behaviour. When Holly reproduces the behaviour Tom says 'well done' which provides her with motivation to continue to repeat this behaviour. This is known as vicarious reinforcement as Tom provides positive reinforcements to encourage the behaviour, as she does this she is learning to repeat the behaviour.

Thirdly, Holly understands that eating with the

fork is correct and smiles and laughs each time she does it as Tom has provided her with an observation and has motivated her to continue to eat with a fork as she he praises her each time. which shows that social learning theory can account for Holly eating with a fork on her own.

However, once Tom stops praising Holly she may stop eating with a fork if she doesn't observe others doing it as she will be demotivated as there is no reinforcement. But by observing others eat with a fork Holly is more likely to do so as she will see them being praised for doing so, which is also an example of vicarious reinforcement such as when Bandura's children observed others acting aggressively to-wards the bobo doll without punishment they felt able to do so. Holly will copy the behaviour that will produce rewards.

In conclusion, social learning theory explains how Holly can observe behaviour and by being praised continues the behaviour.

This candidate achieved five marks.

AO1 is level 2, with mostly accurate knowledge and understanding.

AO2 is level 3, with application of relevant points to Holly.

Question 11

This was an AO1 and AO3 assess question drawing on the issues and debates concept of ethics. Candidate responses tended to rely very heavily on Milgram and HM in the answers, and did not develop the points about ethical considerations especially well. This often limited the engagement with the wider debate of ethical issues and ultimately limited the assessments that could be made and judgements reached about ethical considerations across social and cognitive psychology. In an issues and debates question, candidates should draw from a range of content to address the question presented to demonstrate a broader range of understanding and assessment.

11 There are many considerations that need to be taken into account when conducting research with human participants.

Assess how far research from social and cognitive psychology could be considered ethical.

(8)

The extent to which research can be considered ethical refers to how well the research adheres to the BPS (2014) ethical guidelines, which outline what considerations should be made by researchers e.g. Social responsibility, distress at participants etc. ~~R~~ Ultimately, a participant should not be more at risk than they would be in everyday life.

Research in social psychology into obedience can be considered highly unethical. Milgram ~~76~~(1963) a volunteer sample 40 males to take part in a study stated to be related to learning/recall at Yale University, Connecticut. The procedure subjected participants to significant distress, requiring them to deliver shocks to an innocent, and in pain confederate. ~~Test~~ Participants were given a test shock at 45v to ensure they knew the pain they were causing, and increased the voltage ~~delivere~~ delivered to the confederate (acting as a learner) each time they answered a question incorrectly. This study can be considered highly unethical as it breaches the ethical guideline 'protection from harm', evidenced by the fact that clear strain was observed in participants and 2/40 experienced seizures. This, in addition to the deception used, however necessary it was, clearly renders the study as unethical.

In contrast, research in cognitive psychology e.g. Baddeley 1966b can be considered highly ethical. ~~Partici the~~ 72 participants (men and women from Cambridge Applied Psychological research unit) had fully informed consent to participate in a study asking them to learn

and recall: acoustically similar/dissimilar and semantically similar/dissimilar word lists. The only instance in which the study could be considered unethical was deception as to the occurence of a surprise learning trial.

~~It can be argued however that one studies into~~

To conclude, ~~the bias~~ research undertaken in social psychology into obedience is highly unethical. Though milgram may not have foreseen the distress of participants, this justification cannot account for his many variation studies e.g. (exp 10 -rundown office block) and its replications. Even Burger 2008's replication that aimed to amend Milgrams ethical breaches maintained its methodological issues, as clear moral strain/distress was observed in participants. In contrast research within cognitive psychology is largely ethical. Though it could be argued the lack of privacy regarding high profile case studies into brain damaged patients (e.g. Henry molaison and clive wearing) resulted in psychological distress as a result of lack of anonymity/protection from harm. ~~Social~~ Research in social psychology therefore is clearly unethical to a greater extent.

Question 12

Candidates were directed to draw on biological psychology in order to present the extent to which this can be considered scientific. Many candidates were able to give components of biological psychology that they considered scientific, but over emphasis was seen on Raine et al (1997) and psychodynamic explanations as the basis of their arguments. Few candidates fully demonstrated understanding of the nature of science, and what constituted scientific theory or research. Where some candidates had grasped the nature of science, they were able to give this information well and provide developed AO3 to elaborate on how biological psychology was or was not scientific. Unfortunately, this was not common in responses. Blank answers were seen here, and candidates may benefit from guidance on exam timing and structure to aid their balance across the paper.

12 To what extent is biological psychology scientific?

(12)

Objective measures are scientific as they are not open to interpretation and so are not prone to researcher bias. In Raine et al; PET scans were used to ~~see the~~ ^compare^ brain scans of convicted criminals and a control group to see how ~~braine dysfunction may~~ areas of the brain associated with brain activity may differ. The PET scans are objective measures and so ~~it~~ it increases the scientific status of the study; supporting the ~~false that~~ scientific status of biological psychology. However, researchers analyse the brain scan images produced and so this ~~may not~~ decreases the scientific status of ~~the~~ ^the^ approaches. It is open to interpretation and different researchers may come to different conclusion ~~from~~ the ^interpreting^ same scan image, reducing reliability.

The evolutionary ~~argument~~ ^explanation^ suggests that men have evolved to be aggressive for survival and women have developed nurturing qualities. This explanation maybe seen as less scientific as the theory has been developed to fit the factors. Furthermore, the environment for evolutionary adaptation is not accessible so it's not possible to test this explanation making it less scientific.

The hormonal explanation of aggression can be seen as highly scientific as it used animal experiments to identify cause + effect. The rats were castrated and then compared to a control

group of rats to see how testosterone affects behaviour. This is scientific as the the use of a control group allows the researcher to identify a cause reddat cause + effect between testosterone and the behaviour of rats. Furthermore the rats can be bred so they have identical genes and so this the eliminates participant variable e affecting the
affecting
behaviour, making biological psychology scientific.

Freud explains that we have 2 innate drives ie Thanatos + Eros and these together form the ID and that if the ego + superego are not developed properly, we the ID takes dominance and causes e us to behave in an aggressive way. As This Theory is unscientific as Freud based most of his ideas idea on his own introspection which is highly subjective. Furthermore, the explanation is not testable and the terms ID, superego are hard to measure as they are internal mental po states, making it unscientific.

Biological psychology involves much lab experiments, there control extraneous variables to see the effect of the IV on the DV. An example is Raine; He et made sure the participants were medication free 2 weeks prior to their scan so that the effect of
PET
medication do not affect the seen brain activity, making it easier for him to identify cause + effect + ø by eliminating extraneous variable. The scans can also be replicated to test for reliability, increasing the scientific status of the approach. Twin studies and adoption studies are used; these may be considered as less scientific as the purpose of the studies

are able to see whether certain characteristics are due to nature or nurture. However it may be difficult to see the effect of genes on the a characteristic (aggression) because there are too many extraneous variables to control. For example; the twins have shared a prenatal environment. so it difficult even if they are adopted straight after birth it difficult to see whether certain traits are due to nature or nurture due to the having a shared prenatal environment, making it harder to identify cause + effect decreasing the scientific status of the approach.

To conclude, biological approach that developed to be more scientific. In the past trepanning and phrenology were used which are pseudo scientific and over the years due to developments in technology it has become more scientific.

Paper Summary

Based on performance on this paper, candidates are offered the following advice:

- Some candidates may still benefit from practising their timing and balance of content in responses. Many candidates did not appear to draw on the question size to aid in their examination timing, giving more detail than required in short-answer questions.

- Candidates should clearly apply their understanding of psychology to the context in a given scenario, they should not just give a name or single word as this is insufficient as an application skill.

- Generic points should be avoided. Candidates should be able to give specific responses that are clearly linked to the question content and taxonomy, for example when giving a strength of a practical, it should be explicit how the point made relates to the practical.

- Where candidates are expanding their points, the use of evidence and supporting/contesting concepts could aid them in exemplifying their knowledge and understanding as appropriate, but this must be clearly connected to the concept they are evaluating or expanding.

- Candidates should consider their key question of relevance to society and have a clear focus about how or why this key question is of relevance to society.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx