



Examiners' Report June 2022

GCE Psychology 9PS0 01

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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.

For some candidates their use of the Advanced Information was beneficial to provision of focused responses in answer to the questions, however this was not always the case and at times the depth of understanding in answers was limited, for example Q05 on working memory model was superficial at times.

- Many candidates demonstrated some good psychological knowledge and understanding in this examination.
- Most candidates made attempts at all questions, which was very positive to see. However, some candidates did not respond to the methodology essay question in the Biological Psychology section and the final Issues and Debates essays and so it may benefit candidates for future series in practicing exam timing.
- Application remains a general area for improvements for the AO2 questions, particularly Q07c where many candidates did not apply their strength to the scenario given that resulted in many generic answers, and for Q01a and Q01b where errors were seen in a few of the responses about the Social Psychology practical where some candidates gave generic answers.
- There was some evidence of confusion with regards to the 8-mark essays where Discuss was used, with a number of candidates presenting an 'Evaluate' response here giving AO3 rather than the AO1/AO2 requirements, it would benefit candidates to understand the requirements of the taxonomy words and question types.
- Where studies were assessed in the Evaluate essays for Q06 and Q11 candidates often gave excessive amounts of largely 'descriptive' content of the study with some providing over a page of knowledge without any evaluation points, thus limiting any subsequent evaluations either in the depth provided (often just one strength and one weakness), or ultimately being a generic use of GRAVES, which was unlinked to the study itself; or both.
- Most candidates completed the mathematical calculations well, and this was a positive across the paper.

One final concern was the number of candidates who answered outside the line space, often using white space; answering earlier questions on the last few pages of essay line space; and using the blank pages to answer questions. Centres are reminded that candidates should not write outside the lines or continue answers in spaces provided for alternative questions. Should candidates require additional space to answer any question they must use an additional answer booklet and not write their answers in various other spaces on the exam paper itself.

The remainder of this Examiner Report will focus on each individual question 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 question was an AO2 question requiring candidates to describe how they gathered qualitative data in their social psychology practical investigation. Most candidates achieved at least one mark here, with a number achieving both marks for good application of how they gathered qualitative data. Errors were seen in candidates who discussed how they analysed rather than gathered this data, and for some where their answers did not achieve marks it was often generic or an incorrect practical research method was given, for example using an interview or observation instead of a questionnaire to investigate a social psychology topic. Centres are referred to the specification point 1.5: In conducting the practical research exercise, students must: design and conduct a questionnaire to gather both qualitative and quantitative data to look for a difference in the data. Several candidates wrote outside the line space on this question, and at times they 'switched' answers to Q01b using arrows or an asterisk, candidates should be reminded that these should be on additional paper and not outside of the line space given on the paper.

Question 1 (b)

This question was an AO2 question requiring candidates to describe how they gathered quantitative data in their social psychology practical investigation. Most candidates achieved at least one mark here, with a number achieving both marks for good application of how they gathered qualitative data. Errors were seen in candidates who largely gave generic descriptions of what ranked, or closed-ended questions are or they had given an incorrect practical research method, for example using an interview or observation instead of a questionnaire to investigate a social psychology topic. Centres are referred to the specification point 1.5: In conducting the practical research exercise, students must: design and conduct a questionnaire to gather both qualitative and quantitative data to look for a difference in the data. Several candidates wrote outside the line space on this question, and at times they 'switched' answers to Q01a using arrows or an asterisk, candidates should be reminded that these should be on additional paper and not outside of the line space given on the paper.

(b) Describe how you gathered quantitative data in your social psychology practical investigation.

(2)

Gathered quantitative data by asking rank scale questions such as 'on a scale of 1-10 how obedient would you be if a police officer asked you to pull over?' I also asked closed questions such as 'would you obey a teachers instruction' yes/NO and made a tally chart of those who answered yes or NO.



Two marks

One mark for the use of rank scale questions which has been applied through the use of an example. One mark for the use of closed questions which has been applied using an example.



Where candidates are asked about their practical investigations, they should ensure that all their points are applied and related back to their investigation clearly and throughout the answer.

Question 1 (c)

This question was an AO2/AO3 question requiring candidates to explain one improvement they could make to their social psychology practical investigation. Some candidates achieved at least one mark here, but a number achieved zero marks as they struggled to give an improvement, often giving a weakness of their practical rather than an improvement. Many gave generic responses to this question with no link to their Social Psychology practical, some gave incorrect responses stating that increasing a sample size would improve the representativeness of a sample, rather than correctly stating that improving the sample demographic spread, such as age, gender, social class, culture and so on would be required for representativeness. The AO3 development was often limited to basic statements of 'this would increase generalisability/validity/reliability' without any actual development of this justification with how or why that would be the case.

(c) Explain **one** improvement you could make to your social psychology practical investigation.

(2)

I could've used stratified sampling to collect my sample of participants to investigate the effect of gender on obedience. This would've been ~~been~~ collected a more representative sample than my opportunity sampling did because it would've ~~ident~~ allowed me to identify different subgroups in the target population and gather a sample of ppts in proportion to how frequently they appeared in the target population, increasing the generalisability of my findings about gender and obedience.

(Total for Question 1 = 6 marks)



Two marks

One AO2 mark for the improvement of using stratified sampling for a more representative sample in the practical about gender obedience.
One AO3 mark for justification that this will improve generalisability of the findings about gender obedience as it will include subgroups of the target population.

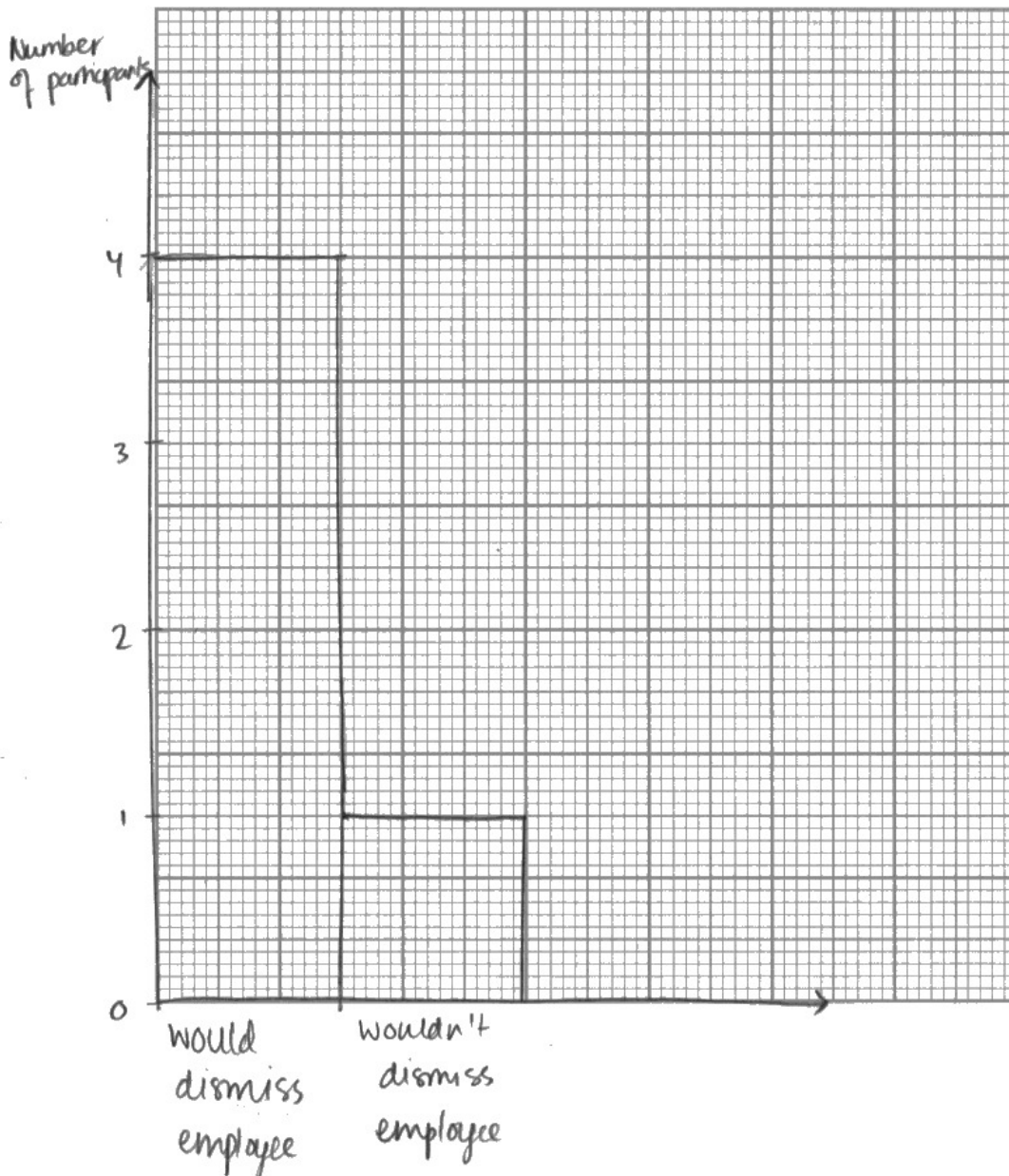
Question 2

This question was an AO2 maths question requiring candidates to draw a bar chart. Most candidates were able to plot the bars accurately, with some also able to label the axis of the bar chart. A few were able to achieve the marks for the title, however this was often where errors were seen. Some candidates plotted all the data from the table rather than just the data of high scores for authoritarian personality as required by the question.

Draw a bar chart to show the number of participants with high scores for authoritarian personality who would and would not dismiss the employee.

(3)

Title The number of participants with high scores for authoritarian personality who would or wouldn't dismiss the employee





Two marks

One mark for an accurate title for the bar chart, one mark for accurate axis numbering and labels.



Bar charts for discrete data should be plotted with space between the bars.

Question 3

This question was an AO1/AO3 extended essay question requiring candidates to assess how far culture can influence prejudice. There were a range of responses to this question, with some candidates achieving well here by presenting a range of cultural factors that could impact on prejudice. Where answers were less well developed, there was often confusion between prejudice and discrimination, and many candidates gave realistic conflict theory and/or the classic study by Sherif et al. (1954/1961) as evidence for cultural difference, despite the study being of one cultural group. There were some candidates who effectively used these as a counter argument for culture as a factor to demonstrate that conflict within culture occurs over resources, and where this was done it was well argued by the candidates. Misunderstanding was seen in collectivist and individualistic cultures, and very little supporting evidence was presented to support assessments. Some candidates did not go beyond collectivist and individualistic cultures and so did not present a developed range of cultural factors.

3 Assess how far culture can influence prejudice.

(8)

Culture can be described as the specific customs and behaviours of a group of people. Collectivist cultures, such as Japan or China, tend to emphasise the importance of the group as a whole, which may lead to intergroup conflict and prejudice. On the opposite side of the spectrum, individualistic cultures tend to emphasise the role and the importance of the individual. Often, this may lead to interpersonal conflict as these cultures, such as the USA or UK, do not see themselves as a whole. Cultures often hold stereotypes about other cultures, which can lead to negative out group bias towards another group. This could be supported by Katz and Brady's research on American students about stereotypes. The students were asked to pick from a list of 84 words which words 5 words best suited certain minority groups such as black people and Jewish people. The students selected words fitting with national stereotypes, for example the students decided to describe black people as ~~can~~ superstitious and lazy, and Jewish people as sneaky and cunning. This research suggests that nations or cultures may share prejudiced views of out groups, which may help to explain events such as the Holocaust. However, this research may lack validity as the students may have been acting towards social desirability bias and how they believe the questions should be answered. So Tajfel & Turner's Social Identity Theory may help to explain influences of prejudice, as their research suggested that the mere presence of another group can lead to prejudice and conflict. This is due to

members of the group associating their personal identity and self esteem with the social identity of the group. This may help to explain prejudice between cultures, as the mere existence of another culture threatens the social identity of that culture leading to negative out group bias and in group favouritism, especially if that group or culture legitimises prejudicial practices. However, Sherif's research may suggest that culture has less influence over prejudice. Sherif's 1954 experiments participants included boys all of the same age of 11, from similar white, protestant backgrounds and of similar educational capabilities. Despite this, negative functional interdependence still occurred, and the boys, of all relatively similar culture, showed signs of prejudice towards the other group. This research may not be generalisable however to adults or females and how prejudice they are towards another group.

To conclude, caution should be taken when looking at the findings of such research, as culture can't account for individual differences, such as those who have a naturally authoritarian personality and are more prejudiced to certain groups.



Eight Marks

The AO1 here displays a well-developed and logical assessment of the cultural factors that may influence prejudice through logical chains of reasoning and clear points. For AO3 the candidate can demonstrate an awareness of the significance of competing arguments and factors that play a role in prejudice using strong arguments and relevant supporting evidence, presenting a balanced judgement overall throughout their response.

Question 4 (a)

This question was an AO2 question requiring candidates to state the fully operationalised independent variable (IV) and dependent variable (DV) for the scenario given. Most candidates achieved at least one mark here, often for the IV, with some achieving both marks, although where answers did not achieve both marks, they usually failed to operationalise the DV. A few candidates muddled the IV and DV or were unable to identify one or both correctly.

(a) State the fully operationalised independent variable (IV) and dependent variable (DV) in Lei's investigation.

(2)

Independent variable (IV)

Whether the ¹⁴ words learned in 30 seconds are monosyllabic or polysyllabic

Dependent variable (DV)

The number of monosyllabic or polysyllabic words recalled correctly out of 14; indicating short-term memory capacity.



Two marks

Both the IV and DV are correct and operationalised.

Question 4 (b-c)

Question 4b

This question was an AO2 maths question requiring candidates to calculate the Mann-Whitney U for the results of Lei's investigation. Most candidates achieved the full four marks here for their calculation of the statistical test, and they should be commended for their strong mathematical skills shown in this question. Errors were often seen in the substitution into the formula which led to partial marks.

Question 4c

This question was an AO2 maths question requiring candidates to determine whether Lei's data were significant. Most candidates achieved the mark here for their determination of significance from the statistical test, and again candidates should be praised for these skills. Where errors were seen they were often in misunderstanding the critical values tables and thus giving an incorrect statement of significance.

(b) Complete **Table 2** and calculate the Mann-Whitney U for the results of Lei's investigation.

(4)

Condition A: monosyllabic words		Condition B: polysyllabic words	
Number of words recalled correctly	Rank	Number of words recalled correctly	Rank
9	16.5	5	5
8	13.5	7	11
9	16.5	6	8
7	11	5	5
10	19	6	8
9	16.5	9	16.5
7	11	3	2
6	8	5	5
8	13.5	4	3
11	20	2	1
Total	145.5	Total	64.5

Table 2

SPACE FOR CALCULATIONS

$$10 \times 10 = 100$$

$$\frac{10(10+1)}{2}$$

$$\frac{110}{2} = 55$$

$$100 + 55 = 155$$

$$155 - 145.5 = 9.5$$

$$155 - 64.5 = 90.5$$

$$U_a = 9.5$$

$$U_b = 90.5$$

$$U = 9.5$$

(c) Using the Mann-Whitney U value that you calculated for 4(b), determine whether Lei's data were significant at $p \leq 0.05$ for a directional (one-tailed) hypothesis.

(1)

The data Mann-Whitney U value has significance as its value 9.5 is less than the critical value of 27 at $p < 0.05$ in which we can reject the null hypothesis

(Total for Question 4 = 7 marks)



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Four marks for Q04b

One mark for Q04c



ResultsPlus
Examiner Tip

Candidates should give clear judgements of significance that draw on the correct use of the critical values tables to make their statements of significance in questions such as these.

Question 5

This question was an AO1 question requiring candidates to describe the working memory model (Baddeley and Hitch, 1974). Most candidates achieved marks in this question. Where lower marks were awarded, it was often due to underdeveloped and poor descriptions of the three systems of working memory, with many candidates providing a 'list' of the features without much in the way of description. Tautological responses were seen quite often in the VSS with candidates often stating this was visual and spatial without giving any descriptions of how or what these are. Most were able to describe the phonological loop in more detail than in other components. Many candidates included the episodic buffer which is not a feature of the 1974 model. Very few muddled this model with other models of memory overall, however some confusion was seen with the multi-store model and episodic and semantic memory.

5 Describe the working memory model (Baddeley and Hitch, 1974).

Baddeley and Hitch thought the multi-store model was oversimplistic and did not depict its dynamic function, so the working memory model was proposed to combat this. In this model, short-term memory is split up into several smaller stores, namely the phonological loop for auditory and linguistic processes, the visuo-spatial sketchpad for visual processes, the episodic buffer as a way for data to pass between the stores, and the central executive to manage the use of the 'slave' systems. However, it has been argued that the links between the stores are not explained, and that the CE has no real function. (Total for Question 5 = 3 marks)



One mark

None of the features of working memory model are described in sufficient depth here to gain independent marks. However, the candidate has given sufficient basic knowledge of the three systems to demonstrate that they know what the working memory model consists of as a structural model of memory. A mark was awarded where candidates give basic, underdeveloped responses that included all three correct components of working memory model. It should be noted that the 1974 working memory model did not include the episodic buffer.



When describing concepts, to achieve marks candidates must go beyond tautological statements that simply repeat the question or concept terminology. For example, stating that the visuo-spatial sketchpad processes visual and spatial information.

Question 6

This question was an AO1/AO3 extended essay question requiring candidates to evaluate their chosen contemporary study from cognitive psychology, which includes Schmolck et al. (2002), Steyvers and Hemmer (2012), and Sebastián and Hernández-Gil (2012). Some strong answers were seen here with some comprehensive evaluations giving a range of strengths and weaknesses. However, many responses were often excessively descriptive, with large proportions of the answers (often full pages or more) giving knowledge of the chosen study without then sufficiently evaluating the study as directed by the question. Where any evaluation was included, it was quite often very brief and largely generic statements of GRAVES points therefore only meeting the lower levels of the levels-based mark bands. While some of these responses gave comprehensive and strong AO1 understanding, they were often ineffective in answering the question given.

Candidates who had studied **Sebastián and Hernández-Gil (2012)** were often able to give very strong answers, but there was some confusion with the nature of the study with some candidates answering about words rather than digits and a few gave answers related to dementia patients rather than the children.

Candidates who had studied **Steyvers and Hemmer (2012)** were able to give good knowledge, but many struggled with the evaluative points and confused the nature of the investigation in terms of ecological validity in particular.

Candidates who had studied **Schmolck et al. (2002)** were often able to provide strong knowledge of the study, but confused the nature of some components, for example stating that the brain scanning was undertaken as part of the study rather than data gathered from elsewhere, thus the evaluations from this were often then inaccurate.

Question 7 (a)

This question was an AO2 question requiring candidates to describe how Tabitha could use a volunteer sampling technique to gather participants for her investigation. Most candidates achieved some marks for this question, mainly for the application of advertising the study to the appropriate target population. Few then included how people would actually volunteer, such as a phone number or place to turn up. Many of the responses seen for this question were generic answers that were not applied to the scenario.

7 Tabitha wanted to investigate whether there is a difference in brain activity when people are exposed to aggressive stimuli and non-aggressive stimuli. She decided to gather a sample of female participants aged between 20 years old and 30 years old.

(a) Describe how Tabitha could use a volunteer sampling technique to gather participants for her investigation.

(2)

Volunteer sampling is where requests are posted publicly for anyone to add themselves to the potential sample. To achieve this, Tabitha could post an ~~ad~~ advertisement in a newspaper or online blog.



Zero marks.

The candidate has given a generic response rather than applying their answer to the scenario and the question of gathering participants for this investigation.

7 Tabitha wanted to investigate whether there is a difference in brain activity when people are exposed to aggressive stimuli and non-aggressive stimuli. She decided to gather a sample of female participants aged between 20 years old and 30 years old.

(a) Describe how Tabitha could use a volunteer sampling technique to gather participants for her investigation.

(2)

Tabitha could put an ad in a newspaper asking for female volunteers aged between 20 and 30 years old to take part in an investigation into brain activity. She could also include how to get in touch if the people who see the ad fit the requirements and would like to take part.



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Two marks

A well applied response that relates directly to the scenario content.

Question 7 (b)

This question was an AO2 question requiring candidates to describe how Tabitha could use a PET brain-scanning technique for her investigation. There were a range of responses to this question, however many candidates gave largely generic answers. Where application was seen it was usually through the understanding that an aggressive and non-aggressive stimulus would be used, and some of these responses then went on to develop that application with what those may be.

(b) Tabitha decides to use a PET brain-scanning technique for her investigation.

Describe how Tabitha could use a PET brain-scanning technique for her investigation.

(3)

Tabitha could use a pet scan to see which parts of her participants brain was most active when viewing aggressive stimuli and non-aggressive stimuli. She could show her participant images of violence and images of nice things such as puppies whilst the PET scan is taking place. The PET scan uses a radiotracer such as radioactive glucose to see the brain activity. She will then be able to see if areas of the brain linked with aggression, such as the amygdala, are active during seeing the violent images. This area would show up as red/yellow as it's using the most radiotracer. She can then compare the different areas of the brain that are most active when viewing aggressive and non-aggressive pictures.



Three marks

This response is applied throughout to the use of a PET brain scanning technique in the investigation. There are strong links referring to the use of an aggressive and non-aggressive stimuli, what these may be in a PET scan context along with the use of the images for comparison between aggression and non-aggression.

Question 7 (c)

This question was an AO2/AO3 question requiring candidates to explain one strength of Tabitha using a PET brain-scanning technique for her investigation. Overall, a significant proportion of candidates gave generic responses that did not relate to the stimulus material and had no link to the investigation that Tabitha had undertaken. Where other errors were seen it was often in the understanding of a strength of a PET scan, with several candidates stating what a PET scan does, such as providing images of brain activity or showing brain activity in colour, rather than explaining what a strength of this method may be.

(c) Explain **one** strength of Tabitha using a PET brain-scanning technique for her investigation.

(2)

One strength of Tabitha using a PET scanner is that the scanner is very scientific by ~~showing~~ having a standardised procedure, giving the study high internal validity as the conditions would be the same for each participant.



Zero marks

The response is firstly generic as there is no link to the strength of the PET scanning technique being used in terms of the specific investigation by Tabitha. There is also little understanding of PET scanning techniques shown, neither 'scientific' nor 'standardised procedure' are linked in anyway to a PET scanning technique.



Candidates must apply their responses to the scenario for AO2 marks.

Question 7 (d)

This question was an AO2/AO3 question requiring candidates to explain one improvement that could be made to Tabitha's choice of participants. Most candidates achieved marks for this question by expanding the participant sample to include males and/or to include a broader age range to increase the representativeness of the participant sample. Few developed this for the AO3 to justify how or why their identification point would improve the study. Where errors were evident it was often in generic responses or incorrect improvements such as sample size in relation to representativeness or improvements not related to the choice of participants.

(d) Explain **one** improvement that could be made to Tabitha's choice of participants.

(2)

The exam gains a sample of males and females aged 20-30 years old, instead of only females, so that the results on non aggressive and non aggressive stimuli effect brain activity can be representative of males aged 20-30 as well as females, which would make the results more generalisable about the effect

(Total for Question 7 = 9 marks)

of aggressive / non aggressive stimuli on brain activity and any difference was caused.



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Two marks

One AO2 mark for identifying the improvement of including males and one AO3 mark for justification of how and why this is an improvement. The response is well applied throughout.

Question 8

This question was an AO1/AO2 extended essay question requiring candidates to discuss how Jinal could use a correlational research method for her investigation. This question was often limited with several candidates not fully understanding correlational research, for example confusion over control groups, independent and dependent variables and data gathering. Some candidates struggled in meeting the taxonomy of 'Discuss' for AO1 and AO2 skills and often evaluated the methodology instead.

8 Jinal wants to find out about recreational drug use and early childhood experiences. She has decided to focus on nicotine as the recreational drug.

She intends to see how often people use nicotine and find out about any negative life experiences they had experienced during early childhood.

Jinal believes that the more negative life experiences a person has, the more nicotine they will use.

Discuss how Jinal could use a correlational research method for her investigation.

You must make reference to the context in your answer.

(8)

Jinal would want to operationalise the co-variables that will be investigated. Jinal could measure recreational drug use by how many times per week the participants take recreational drugs, specifically nicotine. Furthermore, Jinal could operationalise the negative early life experiences by interviewing the participants and carrying out thematic analysis, counting how many times themes of negative life experiences come up.

These co-variables then can be compared in the way of testing the direction of their relationship. This can be done by plotting a scattergraph with number of times nicotine is taken per week on the Y axis, and the number of ~~times~~ themes of negative life experiences come up in the interview. Jinal will then plot a line of best fit. This line of best fit will indicate the ~~star~~ direction of the relationship. If it shows the number of times nicotine is used per week goes up alongside the increase in amount of themes of negative life experiences, this will display a positive

correlation between the two co-variables.

Furthermore Jinal could study the strength of the relationship between the two co-variables. This could be done by finding the line of best fit and its angle. The closer the result is to ± 1 , the stronger the relationship between recreational drug use and negative early life experiences is.

Finally Jinal would use Spearman's rank correlation coefficient to find out the significance of the results. If Jinal used 20 participants and found a value of greater than 0.612, the relationship between recreational drug use and negative life experiences would be significant.



Seven marks

This demonstrates accurate knowledge and understanding for the AO1 although there are some areas less thoroughly developed than they could be, so level 3 for AO1. The AO2 displays a well-developed and logical balanced discussion about how Jinal would undertake her correlational research using logical chains of reasoning. The candidate demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence to the scenario.

Question 9

This question was an AO2 question requiring candidates to describe why Ruhee works hard to receive the points using operant conditioning. Most candidates could apply their responses here and often achieved a mark for the understanding of positive reinforcement for the behaviours in the scenario being the reward points. However, there was confusion at times with what the positive reinforcer actually was, with some candidates incorrectly identifying this as the snack at breaktime, which was not the direct desired consequence of her behaviour. Where the snack was identified as a primary reinforcer exchanged for the secondary reinforcer of points, candidates could usually describe this sufficiently well for marks. Some candidates also drew upon their understanding of schedules of reinforcement and token economy which were also creditable where accurately applied.

secondary reinforcer

SECTION D: Learning Theories

- 9 Ruhee receives reward points at school when she behaves extremely well, helps other students, and does extra research for her homework tasks. When she has 25 points, she can get a free snack at break time from the canteen. Ruhee always works hard to receive the points.

*Fixed ratio
positive reinforcement*

Using operant conditioning, describe why Ruhee works hard to receive the points.

Operant conditioning is learning through reward and reinforcement. Ruhee has learned that when she behaves well she receives reward points which acts as a secondary reinforcer because when she reached 25 points she can exchange the points for the primary reinforcer which is a free snack at break time.



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Two marks

One AO2 mark for the understanding of the reinforcement of Ruhee's behaviour through the points and a second AO2 mark for the development into exchanging for the primary reinforcer of the snack.

Question 10 (a)

This question was an AO2 question requiring candidates to describe why Victor may no longer want to go to the restaurant, using classical conditioning. Most candidates could apply their responses well here and some strong answers with well applied concepts were seen by candidates. Where limitations were evident, this was often inaccurate understanding of classical conditioning and the processes involved, while this quite often limited the marks accessible, most candidates were still able to access some credit for an initial identification of a UCS and UCR from the scenario.

- 10** Victor went to a local restaurant for a meal with friends. He ate pasta with a fish sauce but shortly afterwards he felt very poorly and was sick.

Two weeks later Victor walked past the restaurant and could smell the same fish sauce, which made him feel sick, so he hurried past. When his friends invited him to the restaurant again, Victor said he did not want to go.

- (a) Using classical conditioning, describe why Victor may no longer want to go to the restaurant.

(4)

When Victor went to the restaurant, he ate pasta that had fish sauce, this was the Unconditioned Stimulus (UCS) that caused the ~~UCR~~ Unconditional Response (UCR) of him feeling poorly and ^{being} sick. The restaurant acted as the Neutral Stimulus (NS), and with the pairing ~~and~~ of the ~~UCS~~ UCS, the fish sauce and NS, the ~~restaurant~~ restaurant, Victor associated the 2 and this led to ~~an~~ the Unconditioned Response of sickness. Before this incident, Victor would not have had an issue going to the restaurant, but now the restaurant, after pairing became the Conditioned ~~Stimulus~~ Stimulus producing the Conditioned Response of sickness, so he doesn't want to go anymore as he thinks the restaurant will make him sick.



Four marks

The candidate has applied all the processes of classical conditioning throughout their response logically to the scenario of Victor.

Question 10 (b)

This question was an AO1/AO3 question requiring candidates to explain two weaknesses of classical conditioning as an explanation of human behaviour. There were a good range of responses to this question, with some candidates providing two good weaknesses with justifications to achieve the AO3 marks here. Common answers included reductionism, ignoring nature aspects of behaviour, and the use of animal research behind the theoretical concepts. Where misunderstandings were seen, these often related to a misconception that all research in classical conditioning was animal based. Some candidates struggled to make the links to the theory with their weaknesses, often making statements such as 'it is reductionist' without actually saying what 'it' was in classical conditioning, therefore resulting in some generalised responses that did not reflect weaknesses of this particular theory specifically. A few candidates gave weaknesses of research studies within classical conditioning instead of weaknesses of the theory. There were some candidates who inaccurately attempted to use methodological points, such as ethics, as a weakness of classical conditioning.

(b) Explain **two** weaknesses of classical conditioning as an explanation of human behaviour.

- Pavlov

- individual

(*) for example Pavlov's experiment with the dog, to see if he could classically condition them to salivate to sound of a bell (4)

1 Research into classical conditioning is usually done on animals in a lab experiment. This ~~is~~ makes it much harder to generalise the theory to humans as humans have more ^{complex} social interactions and complex brain structure it's difficult to know whether they would also learn behaviour through association. As lab experiments it also lacks ecological ^{validity} so cannot be applicable to everyday activities.

2 Classical conditioning doesn't consider individual differences as a factor. Some phobias are generated and formed from past experiences. For example Murnjack found that hay people developed a phobia ^{of driving} because they experienced a traumatic event in the car. However the other hay didn't develop a phobia though they experienced car accidents. This suggests that individual differences may a role in learning behaviour and it's hard to simplify or theory to just people forming associations. (Total for Question 10 = 8 marks)



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Four marks

Both weaknesses have clearly identified accurate weaknesses of classical conditioning for their AO1 marks, and then gone on to justify how or why these are weaknesses to gain the AO3 marks.

Question 11

This question was an AO1/AO3 extended essay question requiring candidates to Evaluate Bandura's (1965) Bobo doll experiment with vicarious reinforcement. Several candidates evaluated the wrong variation study here, with others mixing the studies by Bandura together and therefore not reaching the higher levels for their responses to this question. Similarly, to Q06, many responses were often excessively descriptive, with large proportions of the answers (often full pages or more) giving knowledge of Bandura's research, whether correctly or incorrectly, without then sufficiently evaluating the study as directed by the question. Where any evaluation was included, they were very brief and largely generic statements, with many only giving ethical issues and generalisability with little development beyond this.

Question 12

This question was an AO1/AO3 extended essay question for the issues and debates section which required candidates to assess how far learning theories can be considered reductionist. Some candidates provided clear and strong understanding of reductionism, with some developed understanding of the nature of reductionism, different forms of reductionism and the relative merits and demerits of reductionism both theoretically and methodologically. The links to learning theories were sometimes strong, however many candidates merely stated features of the three theories within learning theories and/or one or two pieces of research without addressing the question. The skills of demonstrating an awareness of the significance of competing arguments and/or factors in the debate of reductionism in relation to learning theories were not always evident in answers.

12 Assess how far learning theories can be considered reductionist.

(8)

Classical conditioning is a learning theory that assumed learning of a behaviour is done through association. Which helps explain the acquisition of phobias which is through association. However it is quite reductionist as it doesn't account for phobias that aren't learnt through association but are already formed. For example having a fear of heights even though you've never fallen from a great height. This makes classical conditioning within ~~a~~-learning theories reductionist to some extent.

However, it could be argued that other areas of learning theories is less reductionist. For example, social learning theory by Bandura, which takes into consideration the cognitive steps (processes) that have to occur in each individual for learning to occur. This is done through observing (attention), retaining information, the ability to reproduce the behaviour and having the motivation to do it. And unlike classical and operant conditioning it considers different mental processes that have to occur. Making social learning theory not reductionist to a great extent.

in terms of research, learning theories could be considered reductionist as it had to isolate the factors of learning and remove extraneous variables to show true cause and effect. This was evident in skinner's research into operant conditioning in which he simplified both rats and pigeons behaviour into simple measurable and observable factors. By doing this and simplifying behaviour down into variables that can be measured he made his research quite reductionist. In order to allow his research to have cause and effect (internal validity).

In conclusion learning theories can be considered reductionist to a great extent as it simplifies behaviour and learning down into measurable components meaning you don't get a very holistic real world application of learning. Which Bandura tried to create with his social learning theory. Meaning overall learning theories can be considered to be reductionist to a great extent.



ResultsPlus
Examiner Comments

Six marks

The knowledge and understanding here is demonstrated largely through accurate knowledge of learning theory although there is little understanding of reductionism evident. The assessment is largely superficial, with limited development.

Question 13

This question was an AO1/AO3 extended essay question for the issues and debates section which required candidates to determine the extent to which nurture influences cognitive and biological psychology. Many responses to this question were unable to pick out features of either cognitive and/or biological psychology that demonstrated the influence of nurture. Where this was evident it was often related to reconstructive memory and episodic memory in cognitive psychology, and to twin studies and Freud in biological psychology. There were some candidates able to draw upon brain damage, evolutionary theory, genetics, twin, and adoption studies effectively, but this was not often seen. Many candidates stated that in either or both approaches nurture was not a feature and all components of the two approaches were nature, and while the nature debate would provide strong competing arguments for this question, it was not often presented as an argument.

13 To what extent does nurture influence cognitive and biological psychology?

case studies evolution

(12)

Memory is explained by nurture to a certain extent. Bartlett's reconstructive memory theory looks at the influence of our experiences and schemas ~~affecting~~ affecting our memory. For example, Allport ~~and~~ and Postman's study showed participants a video of a scuffy white man attacking a well dressed black man. This was in the 1950s, when racism was still a large problem in society. So when the participants were asked to recall the video, many of them switched it around so the black man was apparently scuffy and attacked a well dressed white man. Due to their socialisation, which is nurture, their schemas affected their memory of the video. This shows the influence of nurture on memory. Another study that supports this is Bartlett's war of the Ghosts. This is where participants changed details of a story to be more in line with Western views, ~~so they were~~ influencing their recollection of the story. This shows the role of culture in memory. However, to a certain extent memory is biological. ~~Clive~~ Clive Wearing suffered brain damage which affected his memory. For example,

he could still play the piano but couldn't remember learning it. This shows the separate memory stores of procedural memory and episodic memory. This shows the influence of nature and brain structure on memory.

Biological psychology can also be explained by nature to a certain extent. For example, situational variables can affect a person's addiction to recreational drugs. A study by Alexander had rats in either a boring rat park or a luxury rat park with lots of distractions and food. When presented with a dopamine pedal, the rats in the luxury rat park used it far less than the other rats, showing the influence of situation and nurture on drug addiction. As well as this, soldiers in the Vietnam war tended to stop using heroin when they returned to the US, showing the influence of nurture on drug addiction.

In terms of aggression, ~~many~~ a study by ~~Capri~~ Capri showed that many with the MAOA gene didn't become aggressive if they didn't have a turbulent childhood, showing the influence of nurture on aggression.

However, nature does explain aggression in several ways. For example, a very high number

of ~~these~~^{men} in jail for violent crimes had high levels of testosterone compared to those who did non-violent crimes, for example money laundering. Males are also more aggressive from the ages of 15 to ~~20~~ 25, when testosterone levels are highest, showing the influence of hormones, a biological factor, on aggression.

~~Evolutionary Theory~~ Evolutionary Theory is another example of biology on aggression. ~~For~~ For example, our ancestors tended to become aggressive through partner jealousy, which is evident in today's society. However, evolutionary theory ~~is~~^{is not} falsifiable and is a post-hoc argument, so may not be reliable.

In conclusion, psychology may explain biological and cognitive psychology to an extent, but these are both topics which are mainly determined by biology.



Ten marks

The candidate demonstrates accurate knowledge and understanding which at times is thorough with depth in their knowledge. They display a well-developed and logical argument about nurture in both topics, using mostly logical chains of reasoning and demonstrate an awareness of competing arguments and presents a balanced response. This is not always as well developed as it could be, with the links to nurture and competing arguments of nature not always thoroughly explored.

Paper Summary

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

- Candidates would benefit from practicing the timing on the paper.
- Application to the scenario material must go beyond a 'name' and link very clearly to the stimulus provided.
- AO3 content in essays requires clear links to the study/theory/concept being evaluated as per the levels-based mark bands.
- Research methods were not always well expressed and candidates would benefit from a stronger understanding of research methodology.
- If additional space is required, candidates must use additional booklets for their responses.

Grade boundaries

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

<https://qualifications.pearson.com/en/support/support-topics/results-certification/grade-boundaries.html>

